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THE HISTORY AND PROSPECTS OF THE SOCIAL SCIENCES

LESTER FRANK WARD

1841—1913

THE HISTORY AND PROSPECTS OF THE SOCIAL SCIENCES

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To

LESTER FRANK WARD

Who first clearly envisaged the importance
of the social sciences in
determining the destiny of man and society

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by HARRY ELMER BARNES

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sional schools, all in intimate contact with city life. Only in such an atmosphere and in such an environment is the seeker after truth in touch with the most progressive thought and with the most persistent presentation of the problem of human relations.

In spite of the fact that the complicated nature of the present social order has put an end to the age when competent direction of society might be expected from the metaphysical and rhetorical idealist or the intuitive and enthusiastic social reformer, the obstacles to a consistent, candid and objective development of the social sciences are becoming progressively more numerous and menacing. Those who feel that they are bound to lose by any changes in social organization are becoming alert to the threat against their thorough domination of contemporary society which is potential in any honest and competent investigation of the existing social and economic order. The fact that change has been the rule of history does not impress them, and so they futilely prefer stupid and unreasoning conservatism, inviting ultimate revolution, waste and confusion, to the intelligently conceived, gradual, and comparatively safe transformation of social life which is the chief aim and justification of the social sciences. Therefore, we are faced with the somewhat disconcerting fact that at the very time when we most need a consciously coöperative development of research and instruction in the social sciences, the opposition of the vested interests to such progress is becoming more comprehensive and better organized than ever before in modern history.

The dominant interests of society always determine the type of intolerance which prevails in any era. This intolerance is certain to be directed chiefly against those thinkers who most directly challenge the controlling groups. In the middle ages man was chiefly interested in the scheme of salvation in the world to come, and intolerance was mainly concentrated upon those who pursued original work and gave evidence of independent thinking in the fields of theology and philosophy. Today man is largely absorbed in material culture and pecuniary gain. Hence, twentieth century intolerance is for the most part directed against the social scientist, for he inevitably discovers defects in contemporary economic and social institutions, and consequently is led to suggest what seem to him to be desirable and possible methods of altering and improving these institutions. But whatever the opposition, there is bound to be an ever increasing number of scholars who have come to see with President Scott that the only hope of a successful and efficient utilization of the remarkable contributions of science and technology to human society lies in a per-

sistent and organized effort to develop those social sciences which alone can serve to guide man toward an ever more safe and adequate exploitation and control of the increased power which natural science and technology have placed at his disposal.

Fortunately, there are also a few unusually intelligent contemporary citizens of large means who believe that stupid resistance to change is the most fatuous of all possible attitudes for the wealthy and poor alike, and who are therefore inclined to support research organizations and institutions of learning, in the hope that the development of the social sciences, with the resulting intelligent control of social processes, may proceed with sufficient certainty and thoroughness to ward off revolution and confusion. In other words, they prefer to put their trust in education as against deferred catastrophe. Among the radicals, on the other hand, there are many who are coming to realize that spontaneous and intuitive programs of social and economic reconstuction are likely to be as disastrous to the proletarian as to the capitalist. Certain groups of such enlightened radicals, well represented by the management of the Amalgamated Clothing Workers of America, are making ever greater use of technically trained economists and sociologists. It is on this co-operation of social scientists with intelligent citizens from all classes that we must found our hope of leading society out of its present perplexities.

To the editor and collaborators in the present enterprise it seemed that the first step in this cultivation of the social sciences should consist in a frank and candid assessment of the past development and present status of these subjects. Such a work, endeavoring to trace in a brief but clear fashion the developments of social science in the past, with an indication of the forces which conditioned or determined such progress, would seem the most reliable point of departure for future progress in these various subjects. One can only indulge in imperfectly controlled guesses as to what the ultimate future of the social sciences is to be, but one can certainly know their past, their present state and their immediate outlook. It is to achieve the above aims that the present volume has been produced.

In the choice of authors the editor has been guided solely by the desire to obtain collaborators who possess a competent knowledge of the subjects discussed, and an undoubted capacity for a frank and fearless statement of the facts at their command. Neither the editor nor any of the authors writes as a special propagandist of any narrow theory of society or social reform. The effort has been made in every chapter to set forth the cogent and relevant facts with clarity and

candor, however distasteful or pleasing they may be to Judge Gary, William Z. Foster or John S. Sumner. If there is any fundamental unity of view among those who have produced this volume, it lies primarily in the feeling that only through the encouragement of intellectual honesty and fortitude, and the destruction of all types of human intolerance, can saving knowledge in the social sciences be arrived at. Fanaticism in the social sciences is to be deplored from whatever source it is motivated or subsidized.

While the chief purpose of the editor and co-authors has been to advance the general cause of social science, it is also hoped that the volume may have specific value and interest for those readers and teachers who have become interested in recent years in the so-called "social studies." The present volume will place at their disposal a more comprehensive and compact survey of the nature and growth of these social studies than has hitherto been available in any published work.

In conclusion, the editor desires to express here his thanks for the enthusiastic coöperation which has been shown by those who have collaborated with him in an enterprise which is mainly a labor of love and a serious intrusion upon the time of active scholars.[1]

[1] When the present work was planned some two years ago it was hoped by the editor that it would be supplemented by other works dealing more specifically and thoroughly with other important aspects of the development of social science. The editor is glad to be able to state that this aspiration is already being realized by books actively in preparation. Professor E. C. Hayes is bringing out a composite volume which will deal much more thoroughly than the present work with the progress in the several social sciences in the last half century. Professors W. F. Ogburn and A. A. Goldenweiser are editing another coöperative work which will deal thoroughly with the interrelation of the various social sciences. The editor has published a book which will endeavor to indicate the relation of the various social sciences to the new synthetic or dynamic history. Finally, there is now under active consideration the project of an encyclopedia of the social sciences which will aim to do for these subjects something like that which was achieved for the natural sciences by Diderot and his associates in *La Grande Encyclopédie* of the last half of the eighteenth century.

CHAPTER I

HISTORY

By Harry Elmer Barnes

I. THE NATURE AND PURPOSE OF HISTORY

As a considerable portion of this chapter will be devoted to a review of the development of historical writing, and will, therefore, inevitably indicate the various conceptions of history which have prevailed through the successive periods of the growth of the subject, it will be unnecessary at this point to analyze with any thoroughness the diverse views of what history is or should be.

There are two prevalent but very different meanings which are given to the term "History." One refers to the sum total of past events and achievements, the other to the record, written or unwritten, of such activities. In this chapter we are, of course, concerned wholly with history as a record of past human experiences and achievements, though it is true that history is not necessarily limited to the activities of humanity, as is demonstrated by the existence of such subjects as historical geology and historical biology.[1]

Many have looked upon history as the precious record of the sacred things from our past, and the past seems to have what is for many a mysterious and potent power of spontaneous sanctification, so that men and events, which in their own day were regarded as highly commonplace and secular, later take on a unique and mystical significance.[2] It is this situation which has made it so very difficult to preserve an objective attitude towards that past upon which the historian must concentrate his attention and efforts. Closely related to this view is that which conceives of history as a sort of divine drama—a *Commedia*—in which there is to be found the expression and clarification of divine will and purpose, often not towards man-

[1] J. T. Shotwell, *An Introduction to the History of History*, Chaps. i, xvii; G. L. Burr, "The Freedom of History" in *American Historical Review*, 1917. Cf. E. Perrier, *The Earth before History*.

[2] J. H. Robinson, *The New History*, Chap. viii; *Mind in the Making*, Chaps. vii–viii.

kind as a whole, but with respect to the communicants of a particular faith, the members of a definite race, or the citizens of a particular state.[3] It need scarcely be pointed out that such a view of history is not conducive to independence, originality or objectivity on the part of the recorder or interpreter of the past. Another attitude towards the nature of history, and one of the oldest, most persistent and popular of them all, is that which contends that history is a branch of literature and should be richly laden with romance and adventure.[4] Stylistic power and unchastened imagination are the chief prerequisites of the historian of this type. While a writer who adheres to this viewpoint need not be rigidly bound by loyalty to creed, race or party, yet there are obvious forces and temptations operating which make it extremely difficult for him to keep close to factual accuracy and reality.[5] In entire harmony with this variety of history, in fact a dependent phase or branch of it, is that view which conceives of history as collective biography: a literary account of the more striking and dramatic episodes in the lives of the leading gentlemen of the past—generals, statesmen, politicians and diplomats.[6] The literary and biographical historical attitudes and technique lend themselves admirably to the forwarding of another school of history, in its modern form called the nationalistic or patriotic, whose exponents contend that it is the chief function of history to instill the love of country and a reverence for the past institutions and leading figures of the national state.[7] Such an attitude has inevitably tended to put undeviating patriotism and its inculcation ahead of truth and candor in history, especially in dealing with the relations between the home country and its enemies or riv...

The first great advance which came in the writing of history in the nineteenth century was the abandonment of all attitudes towards history which put any aim or purpose in the writing of history beyond, or in conflict with, the calm and dispassionate exposition of the facts in any particular situation, in so far as they may be obtainable.[8] History, to this group of writers, became a severely crit-

[3] Robinson, *The New History*, pp. 29–31; *Shotwell*, op. cit., Chaps. xxiv–xxvii; H. O. Taylor, *The Freedom of the Mind in History*, Chaps. i, viii.

[4] Robinson, *The New History*, pp. 27–8; see also G. M. Trevelyan, *Clio: a Muse.*

[5] H. M. Stephens, *History*, pp. 85–92.

[6] H. L. Stewart, "Carlyle's Conception of History," in *Political Science Quarterly*, December, 1917.

[7] H. E. Barnes, "History: Its Rise and Development," in *Encyclopedia Americana*, Vol. 14, pp. 234–43; J. F. Scott, *Patriots in the Making.*

[8] Barnes, loc. cit., pp. 243–50; C. Becker, "Detachment and the Writing of History," in *Atlantic Monthly*, October, 1910.

ical discipline, which frequently went so far in its reaction against the literary tradition as to make many historical works of this type extremely repulsive in style and expression, and difficult to peruse and master. Other defects were noticeable in this mode of historical work; attention was given primarily to what had actually happened in the past and little was devoted to explaining why things had taken place as they did. Again, only a very small portion of the events and achievements which had actually occurred were surveyed by such historians, namely, those connected with political, military and diplomatic activities.

Accepting the view of the critical and objective school that the truth must be sought in every case, but rejecting its limited range of interests, there has developed a group of historians who contend that history must include within its scope the explanation of the development of culture and civilization in all of its aspects—the growth of ideas, the accumulation of traditions, the history of æsthetic achievement, the rise and advances of natural science, the progress of material culture, and the development of the various forms of economic, social and political groupings and institutions.[9] This type of history has sometimes been called by its exponents the "new" or "synthetic" history. In general, it will be the point of view of this chapter that this latter group has approximated more closely than any other to the desirable objective of historical endeavor, and that no type of history can be said to possess significance, other than literary, which does not help us better to understand how our present culture, attitudes, institutions and problems have developed or aid us to some slight degree in working more intelligently to plan for a better future.[10]

II. SOME LEADING PHASES OF THE DEVELOPMENT OF HISTORICAL WRITING

1. PRE-LITERARY HISTORY

A generation or so ago, when geologists and archæologists were first revealing the hitherto unsuspected antiquity of man on the planet the term "prehistoric" enjoyed a wide currency and popularity. It was soon perceived, however, that this term was in reality a misnomer. History includes every record of any human activity

[9] Robinson, *The New History*, Chaps. i, iii, v.

[10] Robinson, *Mind in the Making;* and *The Humanizing of Knowledge;* F. S. Marvin, *The Living Past.*

in whatever age. Therefore, nothing can be known about man which is prehistoric. In the place of this adjective has come the term "pre-literary history" to describe the record of human activities and achievements which is embodied in something earlier than written or printed documents. Pre-literary history takes the form of the most diverse types of archæological records, human and juxtaposed animal bones, caves and other early habitations, petrified grains and fruits, and human artifacts of every kind. In view of the fact that man has existed on the planet for about half a million years and the art of writing does not go back further than six or seven thousand years, it is evident that pre-literary history covers a period of human existence compared with which the duration of written history is most insignificant indeed.[11] And the record of cultural development which has been reconstructed in the shape of pre-literary history is one of which historians may well be proud.[12] While no anecdotes passed between individuals have been preserved and there is no record of political, military and diplomatic episodes, there has been worked out a most thorough reconstruction of the evolution of material culture, and, by the aid of comparative methods in the hands of anthropologists and psychologists, of social institutions and mental patterns and traits, as well. A book like Osborn's *Men of the Old Stone Age* or MacCurdy's *Human Origins* is as truly a contribution to history as Stubbs' *Constitutional History of England* and much more significant in content. In archæology, then, we find the true threshold of formal or written history.[13]

2. THE ORIENTAL ORIGINS OF HISTORICAL WRITING

The development of the art of writing was apparently a slow and gradual process, requiring for its perfection several thousand years. The progress from crude pictorial symbols to the alphabet is an interesting story which cannot be recounted here. Suffice it to say that writing seems to have had some five independent sources of origin, Egypt, Crete, Mesopotamia, China and Central America. It

[11] Robinson, *The New History*, pp. 236–40; H. G. Wells, *The Outline of History*, Books I–II.

[12] A. C. Haddon, *A History of Anthropology*, Chap. viii.

[13] See the admirable summary in M. and C. H. B. Quennell, *The Old Stone Age;* and *The New Stone, Bronze and Early Iron Ages;* cf. also H. H. Wilder, *Man's Prehistoric Past*. A good bibliography of this subject is contained in H. F. Osborn, *Men of the Old Stone Age;* and J. M. Tyler, *The New Stone Age in Europe*. The most imposing syntheses are those by Déchelette, *Manuel d'Archéologie;* and MacCurdy, *Human Origins*.

appears clear that Professor Breasted has proved the priority of the Egyptian solution of the problem, though there is little evidence of the imitation of the Egyptian characters in these other areas.[14] With the invention of the art of writing the physical basis was provided for literary history, but several thousand years actually intervened between the early origins of the art of writing and the appearance of consciously planned and systematically executed historical literature.[15]

The Egyptians have left more than any other antique people in the way of materials upon which modern historians may work to reconstruct the story of Egyptian development, but there were no native Egyptian historians.[16] The same may be said with respect to historical writing in ancient Mesopotamia.[17] A few myths and legends and some crude annals and chronicles are all that have come down to us, and there is no reason to suppose that any notable historical work was produced in this area and subsequently lost. The only early Oriental people who produce what may be called a real historical narrative of reasonable accuracy were the Hebrews of Palestine. In the so-called "Jahvist" sources of the Pentateuch, Joshua, and Samuel, written by several authors and brought together by one master hand about 900 B. C. one encounters the earliest example of true historical literature, which rises to its supreme height in 2 Samuel ix–xx.[18] The remaining historical works in the canon of the Old Testament are of indifferent historical merit, but the first Book of Maccabees rivals the work of "the Great Jahvist" as an example of historical narrative. Josephus, the national historian of the Jews, possessed better than average stylistic powers and was reasonably accurate in dealing with events near his own time, but tended towards compensatory exaggeration of Jewish culture, wealth and power in the "heroic" period of Hebrew development.[19] While recognizing these very real anticipations of creditable historical narrative in the Oriental period, it must be conceded that formal historical achievement and tradition began only with the Attic Greeks following the sixth century B. C.

[14] J. H. Breasted, *Ancient Times*, pp. 39–45; Shotwell, op. cit., Chap. iii; the best book on the whole subject of the history of writing is W. A. Mason, *A History of the Art of Writing*.

[15] Shotwell, op. cit., Chaps. iii–vi.

[16] Ibid., Chap. v; J. H. Breasted, *Ancient Records of Egypt*.

[17] Shotwell, op. cit., Chap. vi; R. W. Rogers, *Cuneiform Parallels to the Old Testament*; A. T. Olmstead, *Assyrian Historiography*.

[18] Shotwell, op. cit., Chaps., vii–ix; J. Bewer, *The Literature of the Old Testament*.

[19] Shotwell, op, cit., Chaps. ix–xi.

3. HISTORICAL LITERATURE DURING THE GREEK AND ROMAN PERIOD

Though there were some significant origins of historical writing among the Hellenic peoples before the fifth century, in the way of criticism of current myths and legends, the construction of somewhat dubious genealogies for Greek nobles, and some narrative history,[20] the real beginning of Greek historical prose is usually assumed to date from the *History of the Persian War* by Herodotus (480–425 B. C.). The chief merits of the work of Herodotus are the keen and sympathetic analysis of human nature and personal traits, his appreciation of cultural factors in history, which came out in his historical contrast of the civilizations of Persia and Hellas, and his interesting and compelling style. The most notable defect is his discursiveness and long digressions. Formerly it was also believed that he had been guilty of gross credulity and exaggerations in his history and description of Oriental civilization, but modern investigation has tended to substantiate the general outlines of his account.[21] The defects most notable in the History of Herodotus were absent from the *History of the Peloponnesian War* by Thucydides (465–396 B. C.). He insisted upon the strictest accuracy, vital relevance and cogency in the material included, and complete subordination of essential details to the clear and orderly movement of the narrative. Yet he fell short of being a truly great historian. He devoted his voluminous treatise almost wholly to the insignificant military and diplomatic phases of what was relatively a petty conflict, compared with the major wars in classical antiquity. He also failed almost completely to provide a survey of the rise and nature of Spartan and Athenian culture or to consider economic and geographical factors and other impersonal causes operating in the affairs of mankind.[22] Polybius (198–117 B. C.) in turn freed himself from some of the more obvious shortcomings in the work of Thucydides. In his *History of Rome* he recognized the necessity of taking into account impersonal factors in historical causation, particularly the geographical setting. He further anticipated the

[20] J. B. Bury, *The Ancient Greek Historians*, Chap. i; Shotwell, op. cit., Chap. xii.

[21] Bury, op. cit., Chap. ii; Shotwell, op. cit., Chap. xii; J. Wells, *Studies in Herodotus;* G. B. Grundy, *Herodotus and His History.*

[22] Bury, op. cit., Chaps. iii–iv; Shotwell, op. cit., Chap. xiv. Perhaps the best appreciation in English is G. B. Grundy, *Thucydides and the History of His Age;* and the best critique F. M. Cornford, *Thucydides Mythistoricus.* Shotwell's estimate is judicious and forward-looking.

most modern of historians by insisting that it is not enough to know that a series of events have taken place, but, to make "history fruitful," it is also necessary to know why they came about as they did. Finally, even more than Thucydides, he emphasized the possible pragmatic value of history as "philosophy teaching by example." Book twelve of his History is regarded, in short, as the first important discussion of the province and methodology of history, and Polybius may easily claim the distinction of being the most scientific of antique historians. Yet his inferiority to Herodotus and Thucydides as a stylist prevented him from becoming an important and popular figure in classical literature and has condemned him to the lonely admiration of the few technical students of classical history and the history of history.[23] Even earlier than the time of Polybius classical historiography began to wane before the assaults of rhetoric, and from the time of Isocrates elegance of form and statement came to be more highly esteemed than accuracy and profundity of content. Though some of the greatest of Roman historians rose above the more fatal effects of this influence, it was generally destructive of a high level of historical achievement.[24]

As in other aspects of her cultural development Rome depended upon Greece for her models of historical writing. Sallust (86–34 B. C.) openly declared his admiration for Thucydides and, as far as we are able to judge from the small portion of his works which have been preserved, made a respectable approximation to the level of his distinguished Hellenic prototype.[25] Livy (59 B. C.–17 A. D.) provided the great national history of the Roman Republic. Frankly admitting that his purpose was to arouse enthusiasm on the part of the Roman youth for his country's greatness and expansion, he produced a remarkable example of vivid historical literature, which showed how gods and men had conspired to bring about the Roman world-state. It was marred, however, by a distinct patriotic bias and a general theory of supernatural causation, and the material on the period before the fourth century B. C. was largely mythical or legendary, a fact which was recognized as early as the period of Humanism by Lorenzo Valla.[26] The strictly historical works of Tacitus (55–120 A. D.) dealing with the first century of the imperial era, while distorted by a dislike and distrust of the political tendencies

[23] Bury, op. cit., Chap. vi; Shotwell, op. cit., Chap. xvi.

[24] Bury, op. cit., Chap. v; Shotwell, op. cit., Chap. xv. The standard work on this matter, as on classical historiography in general, is Hermann Peter, *Wahrheit und Kunst.*

[25] Bury, op. cit., Chap. vii; Shotwell, op. cit., Chaps. xviii–xx.

[26] Shotwell, op. cit., Chap. xxi.

of his age and an over-appreciation of a somewhat misunderstood Roman Republic, possessed the highest stylistic excellence to be found in Latin historical literature, and almost unrivaled power in the delineation of personalities. More significant for historical writing, however, was his *Germania*, which presented an over-idealized picture of the semi-barbarous Germanic life of his day, which he believed to reproduce the pristine virtues of the Roman citizenry of the early Republic and to contrast sharply with the doings of the "effete" Romans of his day. His roseate view of these Germanic peoples was later eagerly seized upon by nationalistic German historians and equally vigorously attacked by their French opponents and critics.[27] One thing, in particular, which should be pointed out concerning classical historiography as a whole is that it was primarily contemporary history. Except for myth and legend, these historians can scarcely be said to have "discovered" the past. Again, as to their handling of the detailed technique of historical investigation and documentation, it must be said that they in no sense approximated to the level of present scholarship in any field of endeavor. These are matters which must be kept in mind when one is confronted by frequent statements that men like Thucydides and Tacitus were equal, if not superior, to the best of our own historians.[28]

4. CHRISTIANITY AND HISTORICAL WRITING

The coming and triumph of Christianity was an event of as revolutionary a character for historiography as for theology. In the first place, it caused a great shifting of intellectual interests on the part of scholars. The leading intellects of Greece and Rome had been chiefly interested in mundane and secular affairs—with the problems of life rather than those of death. Henceforth, the problem of the salvation of the soul loomed uppermost in men's minds. The supernatural and spiritual superseded earthly interests and activities as the most worthy of human investigation and absorption. The "way to salvation" appeared plain in the revealed directions to be found in the New Testament. Yet this revelation would be given dignity and strength by investing it with a long and glorious past of history and prophecy. This was found in the history of the Jews, as recounted in the Old Testament. This not only furnished the historical background of Christianity but also the prophecy which was fulfilled by the coming of Christ, whose divine origin was thus proved

[27] Ibid., Chap. xxii.
[28] Cf. J. F. Rhodes, *Historical Essays*, Chap. i.

and vindicated. These circumstances led the Christians to invest Jewish history with a unique importance, quite in contrast with the slight space assigned to it by pagan historians. It was made the central path of human evolution over which was traced the progress of mankind from the original creative act in Eden. The chronology which was elaborated to form the framework of Jewish history was also made the foundation of the chronology of universal history. The leading events in the history of the four great pagan monarchies—the Babylonian, Persian, Macedonian and Roman—were artificially synchronized with those of Jewish history, the latter being regarded as the unique and well-verified basis. In this way the Jewish history was assigned an importance which quite dwarfed that of its pagan competitors, and "ancient history" was thereby hopelessly distorted for a thousand years. Professor Shotwell has concisely summarized this momentous psychological and cultural revolution brought into historical writing by Christianity:

> The sacred scriptures of the Jews had replaced the literature of antiquity. A revolution was taking place in the history of History. Homer and Thucydides, Polybius and Livy, the glory of the old régime, shared a common fate. The scientific output of the most luminous minds the world had known was classed with the legends that had grown up by the campfires of primitive barbarians. All was pagan; which meant that all was delusive and unreliable except where it could be tested in the light of the new religion or where it forced itself by the needs of life into the world of common experience. There is no more momentous revolution in the history of thought than this, in which the achievements of thinkers and workers, of artists, philosophers, poets, and statesmen were given up for the revelation of prophets and a gospel of worldly renunciation.[29]

With salvation from eternal torment the dominant human interest, and the drama of the scheme and process of salvation given a definite historical setting, it was inevitable that the Christian philosophy of history should assume a realism and detail quite foreign to anything known to paganism. Taking largely from the Persians, and from Jews strongly influenced by Persian ideas, the notion of the cosmic and historic processes as one long duel between the powers of good and evil, the Christians gave to history a vital significance, and no event was too unimportant to be viewed in its relation to this majestic cosmic struggle. "Idle curiosity" with respect to historical data was thereafter out of the question. It need hardly be added that this historic dualism became, for practical mat-

[29] Shotwell, op. cit., Chaps. xxiv, xxvi.

ters, identified with the conflict between paganism and Christianity.[30] Historical methodology, as well as historical philosophy, was revolutionized by Christianity. Divinely inspired Scripture contained many inconsistencies, divergent accounts of the same episode, and statements which seemed preposterous or impossible. To get around these difficulties Origen and other Fathers took over from Philo and others the allegorical method of interpretation. According to the allegorical exegesis every passage had a deeper and spiritual meaning quite different from the literal statement. Hence, inconsistencies and impossibilities existed only in the external and superficial text; these were easily removed when one sought the divine meaning which God had intended his faithful readers to detect. Such an attitude rendered textual criticism both impossible and undesirable. Circumstances and events which appeared to be in violation of the observed laws and manifestations of nature were explained on the hypothesis of the miraculous, which was one more, and a sufficient, proof of their divine origin and instigation. It is obvious that with the dual acceptance of the allegorical technique in exegesis and the hypothesis of miraculous events, a skeptical or critical attitude towards historical documents and events was quite out of the question, especially when these concerned the history of the Christian Church in any way whatever. Credulity became a major Christian virtue.[31]

The leading historical works of the Patristic period well illustrate these major changes of attitude towards historical material which were introduced by Christianity. Julius Africanus, Eusebius and Jerome worked out the accepted Christian chronology in their "Chronicles" which made Jewish history the skeleton with which pagan history was synchronized, regardless of the condensation and distortion necessary.[32] Orosius, in his *Seven Books of History against the Pagans*, supplied the narrative of "ancient history" by gathering a carefully selected collection of the most diverse calamities which had occurred prior to the coming of the Christian dispensation, and contrasting these horrors with a highly imaginative picture of the calm, peaceful, happy and prosperous world which had developed since the Christian era.[33] The history of the Chris-

[30] G. Santayana, *The Life of Reason: Reason in Religion*, Chap. vi.

[31] Shotwell, Chap. xxv; H. E. Barnes, "The Historical Background of Medieval Intellectual Interests," in *Pedagogical Seminary*, June, 1922; H. O. Taylor, *The Classical Heritage of the Middle Ages.*

[32] Shotwell, op. cit., pp. 306–308; A. D. White, *History of the Warfare of Science with Theology*, Vol. I, Chap. vi.

[33] C. J. H. Hayes, *An Introduction to the Sources Relating to the Germanic Invasions*, pp. 106–18. An English translation of Orosius by Ogden is promised.

tian Church was executed by Eusebius of Cæsarea (260–340) in the most erudite product of Patristic historical literature, the accuracy of which was not as seriously impaired by supernaturalism and ecclesiastical bias as that of Orosius. His work was carried on by Socrates, Sozomen and Theodoret, and their combined product was worked over and condensed in the standard mediæval manual of church history by Cassiodorus and his assistants in their *Historia Tripartita*.[34] That remarkable record of miracle and martyrdom, the lives of the Christian saints, was begun by Jerome, Athanasius and others, and illustrates the supreme form of the capitulation of Christian historiography to supernaturalism and credulity.

5. Historical Literature in the Mediæval Period

The attitudes and basic guiding principles of the historical writers of the Middle Ages were those which have been described as characteristic of the Patristic period. Not until the Humanists began to revive an appreciation of the value of mundane and secular interests, as a result of their study of the pagan classics, and the Rationalists initiated their assault upon the Christian Epic, did the hold of supernaturalism, allegory, and credulity upon historians lessen to any notable extent. The difficulties of writing history in the mediæval period can scarcely be exaggerated. There were few or no libraries and no collections of documents. There was no possibility of formal instruction in historical methodology, other than that which came incidentally from the warping inculcation of theological dogmas. There was little intercommunication or coöperation among scholars. Therefore, while historical writing down to men like Matthew Paris and Commines was, in general, of a very inferior type, it was due to cultural circumstances as a whole and not to a lack of native ability on the part of the writers. The chief cause for surprise should be that they were able to do so well with the inferior methods, equipment and materials which were at their disposal.[35]

The great majority of the mediæval historians were churchmen, for the very obvious reason that this group was practically the only educated class during the Middle Ages. The secular clergy, from

[34] Shotwell, op. cit., pp. 303–13. The best summary in English of Christian literature in the Patristic period is P. de Labriolle, *The History and Literature of Christianity from Tertullian to Boethius*.

[35] J. Jeudwine, *The Manufacture of Historical Material;* M. Ritter, "Die christlich-mittelalterliche Geschichtschreibung," in *Historische Zeitschrift*, 1911, pp. 237–305.

the archbishop to the parish priest, were absorbed chiefly in administrative or pastoral duties, so that the literary activities of the churchmen were carried on chiefly by the regular clergy, or the monks, who had the leisure essential to consistent study and writing. The scholarly and literary tradition in monasticism had been originated chiefly by Cassiodorus and his co-workers in the sixth century. There were a number of systematic historical works produced in the early Middle Ages, such as Gregory of Tours' *History of the Franks*, Bede's *Ecclesiastical History of the English Nation*, and Paul the Deacon's *History of the Lombards*, but these should be looked upon as the last products of the passing classical historiography and not as characteristic mediæval products.[36] The first form of truly mediæval historical literature was the Annal, one of the most primitive types of historical writing. At first it consisted of little more than marginal notations on the monastic tables of Easter dates, describing the most notable event of the year just past. Ultimately it developed into a voluminous record of events in the neighborhood or region, recorded chronologically year by year. The annalistic form of writing was not given up by historians until after the period of Humanism.

The most highly developed form of historical writing common to the Middle Ages was the Chronicle, which grew naturally out of a combination of several annals. The chronicler would visit a number of monasteries, copy off their annals, and combine this material into a more or less comprehensive and coherent history of the region as a whole, usually narrated in the annalistic fashion. The history of the locality dealt with was linked up with universal history and carried back to Adam by prefixing as the introduction to the local chronicle Jerome's condensed version of Eusebius' *Chronicle*. The more important mediæval chroniclers were Otto of Freising (1114–1148), historian of Frederick the First of Germany; Villehardouin (1160–1213), the historian of the Fourth Crusade; Commines (1445–1511), the historian of Louis XI; and Matthew Paris (d. 1259), the historian of England in the middle of the thirteenth century. Historical biographies of relatively high merit were produced, such as those of Charlemagne by Einhard and of Saint Louis by Joinville.[37] Far superior to the Christian historical writing of the mediæval period for poise, objectivity and appreciation of secular interests

[36] Hayes, op. cit., pp. 184–198; Masson, Balzani and Gairdner, *Early Chroniclers of Europe.*

[37] *Early Chroniclers of Europe;* Wattenbach and Lorenz, *Deutschland's Geschichtsquellen im Mittelalter;* B. Croce, *History: Its Theory and Practice,* Part II, Chap. iii.

was the historical literature of the Muslims, but it had little influence on Western Christian historiography.[38]

6. THE INFLUENCE OF HUMANISM UPON HISTORICAL LITERATURE

While we no longer accept the exaggerated views of Burckhardt, and especially of Symonds, with respect to the importance of the so-called Renaissance for the development of modern civilization, yet the contributions of Humanism to the improvement of historical research and literature were by no means negligible. The Humanist historians carried over some of the defects of the mediæval writers, for they by no means divorced themselves from supernaturalism, but the theological spell was notably reduced in its influence. They also added some new weaknesses, such as excessive deference to that rhetorical style which had done so much to weaken classical historiography from Isocrates onward, and subservience to some patron prince or municipality. Yet these deficiencies were more than offset by the freedom which the Humanists succeeding in securing for themselves from the biased interpretation of the pagan past, particularly that of Greece and Rome, which had characterized European historical philosophy from the days of Augustine and Orosius. The Humanists were noted above all else for their extreme appreciation of the literature of Greece and Rome, and it was inevitable that they should be affected by the philosophy of that age which was interested far more in life than in death, and prized mundane and secular interests and activities. Hence, the pagan past was no longer regarded as preëminently belonging to the City of Devil, whose products should be sedulously avoided by the faithful. Its culture came to be highly esteemed, and its eminent figures were regarded as divinely inspired. One of the most eminent of Humanists suggested that Saint Socrates and Saint Cicero were not inappropriate designations. This change of attitude gave an infinitely more sane and accurate historical perspective.[39]

The historical work of the Humanists lay in two chief fields, the recovery and editing of manuscripts, chiefly those of Greek and Latin authorship, and the execution of creditable historical narratives. The search for new manuscripts, and the collection, comparison and critical editing of newly discovered or extant manuscripts constituted a most

[38] R. Flint, *History of the Philosophy of History* (1894), pp. 78–87, 158–72; R. A. Nicholson, *A Literary History of the Arabs*.

[39] Croce, op. cit., Part II, Chap. iv; E. Fueter, *L'Histoire de l'historiographie moderne*, pp. 10–19.

important contribution not only to historical documentation, but also to the beginnings of the utilization of the sciences auxiliary to history, such as diplomatic and palæography. The historical literature of the Humanists falls into two types, by no means always sharply separated, namely, the critical and erudite type of work which savors more of antiquarian research than of finished historical literature, and the polished narrative. Of the erudite history the most notable examples were Blondus' *History since the Decline of the Power of the Romans;* Vadianus' *History of Saint-Gall;* Camden's *Annals of English and Irish History in the Reign of Elizabeth;* Scaliger's work on historical chronology, the first scientific discussion of the subject by an historian; and Zurita's *History of Aragon.* Blondus, in particular, is significant as having been perhaps the first historian to develop a somewhat adequate and historical conception of the mediæval period.

The best of the examples of polished historical narrative coming from the Humanist school were the histories of Florence by Machiavelli and Guicciardini; Pufendorf's works on German and European history; Grotius' *History of the Netherlands;* Clarendon's *History of the Rebellion and Civil War in England;* Mariana's *History of Spain;* and Thuanus' history of France in the last half of the sixteenth century. With such works as those of Guicciardini, Mariana and Clarendon historical writing had easily regained once more the level attained by Thucydides and Tacitus.[40] Coming also from this period was the first important treatise on the methodology and interpretation of history, by the French scholar, Jean Bodin, which in many ways anticipated the views later expressed by Montesquieu and Buckle.[41] Unfortunately, the secular and tolerant trends in Humanistic historical literature were obstructed by the intense supernaturalism and religious bigotry that accompanied the Protestant Reformation and the Catholic Counter-Reformation, which set in even before Humanism had run its full course. Not until the time of the skeptic Gibbon did historians regain the urbanity of Humanism.

THE SIGNIFICANCE OF THE PROTESTANT REFORMATION AND THE CATHOLIC COUNTER-REFORMATION FOR HISTORICAL WRITING

The Protestant Reformation and the Catholic defense in the Counter-Reformation produced a notable, and to historical writing, a

[40] Fueter, op. cit., Livres I–II, especially pp. 78 ff., 128 ff., 178, 203, 215, 267, 277, 290.

[41] A. Meuten, *Bodin's Theorie von der Beinflussung des politischen Lebens der Staaten durch ihre geographische Lage;* and E. Fournol, *Bodin, prédécesseur de Montesquieu.*

most disastrous recrudescence of supernaturalism, diabolism, bigotry and intolerance. Christendom was divided against itself and Protestant and Catholic endeavored to prove the other diabolically inspired and guided. The healthy Humanistic appreciation of mundane culture and the joy of living was speedily discouraged, and in its place was substituted the pious gloom of Calvinism and Puritanism, on the one hand, and the savage zeal of the Jesuits, on the other. The only positive intellectual contributions of the period were the disunity introduced into western Christianity, with the resulting increase of the difficulty in repressing critical and independent thought, and the intensified enthusiasm in the search for pertinent documents in the field of ecclesiastical history, which would enable one side to demonstrate the falsity of the doctrine and practices of the other. Particularly notable in this latter aspect was the work of Baronius in bringing forth much new material which had hitherto been hidden away in the Vatican Library.[42]

The more voluminous contributions by the Protestant and Catholic historians were, for the most part, extremely biased. The most notable of the Protestant efforts was the compilation by Matthias Flacius Illyricus and his associates of the so-called *Magdeburg Centuries*, which surveyed the history of the Church to 1300 by centuries, with the aim of proving the growing divergence of Catholicism from Apostolic Christianity and finding at the same time Apostolic and historical sanction for the Lutheran cause. The answer came in the *Ecclesiastical Annals* of Cardinal Baronius who exploited the hitherto unexplored resources of the Vatican Library to refute the charges against Catholicism. There was but one relatively objective work of permanent value produced in this period, namely, Sleidanus' *Commentaries on the Political and Religious Conditions in the Reign of the Emperor Charles V*. The work of a moderate Protestant, it anticipated the most accurate present-day interpretation of the Reformation as more in the nature of a political secession of Protestant princes than a purely theological and spiritual rebellion and defection.[43] The controversies initiated at this time have not ceased even at the present day, it still being difficult for a devout Protestant or Catholic historian to deal in a fair and open-minded way with the religious and ecclesiastical history of Europe.[44]

[42] Preserved Smith, *The Age of the Reformation*, pp. 579–88, 699–750.

[43] Fueter, op. cit., pp. 305–360.

[44] Cf. P. Schaff, *History of the Christian Church*, Vol. VI, with J. Janssen, *History of the German People*.

8. THE EXPANSION OF EUROPE, THE RISE OF MODERN SCIENCE AND THE GROWTH OF SECULAR AND RATIONALISTIC HISTORICAL LITERATURE

The researches and interpretations of the more progressive and original historians during the last generation have tended to produce a novel and more convincing conception of the forces creating and shaping modern society. Instead of assigning the causes of the rise of the new order to the Renaissance or Reformation, as was once the practice, they have found the only adequate group of causes for the appearance of modern times in the great movement of the expansion of Europe, and the multifarious economic, commercial, psychological, scientific and cultural innovations and influences growing out of it.[45]

It has long been recognized by anthropologists and cultural historians that the contact of cultures is far the most effective force in breaking down stagnation, repetition, localism and provincialism in the civilization of any people.[46] Most of those changes and innovations which separate modern from mediæval Europe have been due to the contact of western Europe with the culture of other lands. The process began in the Crusades and has been continued to the national imperialism and colonialism of the present day. The Crusades had brought Europe into contact with the science and culture of the East, and had done much to promote the growth of the towns, the development of commercial prosperity, and the appearance of the new learning connected with the rising universities.[47] When Europe began her world-wide expansion at the close of the fifteenth century this process was repeated on a far greater scale and with immensely more significant results. The contact with new peoples, some on a higher and some on a lower level of civilization than the Europeans, aroused great curiosity and stimulated the spirit of scientific inquiry, as well as furnishing much new concrete scientific, historical and ethnographic data.[48]

The strange lands and novel customs of these newly discovered peoples tended to lessen the interest in supernatural affairs and to

[45] W. R. Shepherd, "The Expansion of Europe," in *Political Science Quarterly*, 1919; J. R. Seeley, *The Expansion of England*, Part I, Lecture V.

[46] C. Wissler, *Man and Culture*, especially Chap. ix; W. F. Ogburn, *Social Change*, Part II; F. J. Teggart, *The Processes of History;* W. H. R. Rivers, *History of Melanesian Society*, Introduction.

[47] G. B. Adams, *Civilization during the Middle Ages*, Chaps. xi–xii; C. H. Haskins, *Studies in the History of Medieval Science*, Chaps. i–vii.

[48] J. E. Gillespie, *The Influence of Oversea Expansion on England*, Chaps. ii, viii–ix; W. C. Abbott, *The Expansion of Europe;* J. B. Botsford, *English Society in the Eighteenth Century.*

make the scholars more concerned with mundane and secular phenomena. They came to write about culture, customs, social institutions and their geographical setting, thus broadening and secularizing the field of historical interests most notably. The scope of the historian's horizon was, of course, extended not only with respect to the range of subjects considered, but also with regard to the geographical extent and setting of their data. Historical writing ceased to be wholly local or national in its orientation, and for the first time became to a certain extent world history. Of the works reflecting these new interests, and most directly influenced by the expansion movement, the most important were Gómara's *General History of the Indies;* Barros' work on the Portuguese explorations in Asia; Hakluyt's *Principal Navigations, Voyages and Discoveries of the English Nation;* Raleigh's *History of the World;* Charlevoix's *History and General Description of New France;* and Raynal's important attempt to assess the significance of the early movement of discovery and expansion for European culture in his *Philosophical and Political History of the Settlements and Trade of Europeans in the East and West Indies.*[49]

Even more important were the works of the historians who wrote not merely under the direct influence of the expansion movement, but also under that of the resultant rise of the new science and critical philosophy. The geographical discoveries had undermined and discredited the old myths with respect to the nature of the earth and the marvels and terrors to be found in the unexplored regions. The development of astronomy and celestial mechanics from Copernicus to Newton had shown the falsity of the old views with respect to the unique composition, the arbitrary motion and theological significance of the heavenly bodies, had proved the conformity of their movements to uniform law, and had shown our universe to be heliocentric rather than geocentric.[50] On the basis of these scientific discoveries there developed a new critical philosophy which was best exemplified by Bruno, Bacon, Descartes, Locke and Hume. These writers made an attack upon subservience to theological authority, the old deductive and logical methods of ascertaining "truth," and the grosser forms of supernaturalism. They made at least a rhetorical plea for the free play of the human intellect upon the more important problems of existence and experience.[51]

Their point of view was appropriated for theology and social philos-

[49] Fueter, op. cit., pp. 361–80.

[50] Sedgwick and Tyler, *A Short History of Science,* Chaps. x–xiii; F. S. Marvin, *The Living Past,* Chap. viii; A. E. Shipley, *The Revival of Science in the Seventeenth Century.*

[51] H. Höffding, *A History of Modern Philosophy,* Vol. I.

ophy by the Deists, who proclaimed God to be a law-making and law-abiding being, declared against the unique nature of Christianity by their hypothesis of a natural religion which had been common to all men in all ages and lands, and defended the decency and importance of man as man.[52] The supernaturalistic cast in the world outlook of mediævalism, and to a lesser degree of Humanism, along with its related philosophy of miracles and wonder-working, were challenged, not only by the new natural science and critical philosophy, but also by the growth of Biblical criticism in the work of Hobbes, Spinoza, Astruc and Reimarus.[53] As a result of the advances in critical thought there developed, particularly in England and Holland, a greater toleration of diversity of opinion, which made originality in philosophy and history far safer and more general.[54] A new interest was also aroused in the improvement of the mundane aspects of human existence. Montaigne contended that the chief end of philosophy should be to teach men how to live and not how to die. Bacon was particularly interested in the Kingdom of Man rather than in the Kingdom of Heaven, and laid great stress upon the possible improvement of man through the developments and applications of science.[55] Finally, the gloomy Christian eschatology, which had for more than a millennium restricted the conception of the future of the race held by philosophers and historians, was gradually replaced by the more dynamic and optimistic notion of human and social progress, which was first set forth in the writings of Bacon, Vico, Turgot, Kant, Godwin and Condorcet.[56]

The most important historical works of the Rationalist School were those by Voltaire, Hume, Robertson and Gibbon. In his *Century of Louis XIV* Voltaire produced one of the first examples of an attempt to survey the history of a state during a definite era as a cultural unity. His *Essai sur les Mœurs* was, perhaps, the first truly universal history in the modern sense of that term. Hume's position as a philosopher and essayist is far higher than the one which he occupies as an historian, and his *History of England* is the least enduring of the leading works produced by this group. Of a far different nature were William Robertson's *History of Scotland, History of America,*

[52] Gillespie, op. cit., Chap. vii; A. C. McGiffert, *Protestant Thought before Kant*, Chap. x.

[53] A. Duff, *A History of Old Testament Criticism*, pp. 129–46; W. E. H. Lecky, *The Rise and Influence of Rationalism in Europe*, Chap. ii.

[54] Lecky, op. cit., Chap. iv, Part ii; J. B. Bury, *A History of the Freedom of Thought*, Chaps. v–vi.

[55] Robinson and Beard, *The Development of Modern Europe*, Chap. ix; E. R. Turner, *Europe, 1450–1789*, Chaps. xxiii–xxiv.

[56] J. B. Bury, *The Idea of Progress*,

and *History of the Reign of the Emperor Charles V.* By many competent critics they are regarded as the most scholarly and erudite products of the Rationalistic historical literature. Though Gibbon was not a greater scholar than Robertson, his *Decline and Fall of the Roman Empire* has enjoyed the widest and most enduring popularity of any historical work of the eighteenth century. This was due in part to his urbanity and his dignified but interesting style, and in part to the hold which the Roman Empire and the Middle Ages have achieved over the imagination of the readers of history. His work has been edited by typical scholars such as Milman and Bury in later generations, and is still regarded as valuable and generally reliable as an exposition of the major outlines of the transition from classical to mediæval history.[57]

9. THE IMPORTANCE OF THE ROMANTICIST MOVEMENT IN PHILOSOPHY AND LITERATURE FOR HISTORY

The Rationalistic movement in thought and philosophy which had developed during the seventeenth and eighteenth centuries was sharply challenged by a reaction towards the emotionalism and pietism of the mediæval period. This appeared in the philosophy of writers like Herder and, to a lesser extent, Kant, Fichte and Hegel, in the Christian apologetic of men like Chateaubriand, Paley and the leaders of the Oxford and Tractarian movements, and in the conservative political notions of such men as Burke, Bonald, De Maistre and Von Haller.[58] This reaction against Rationalism in philosophy was paralleled by a similar trend in historical writing. The Romanticist philosophers protested against the catastrophic theory of historical causation and the notion of the possibility of effecting rapid changes in institutional life through the application of "a few self-evident dictates of pure reason." They contended that institutions develop slowly and gradually, shaped by a multiplicity of obscure but potent spiritual causes, and could not be artificially transformed in any hasty manner by the volition of man. In a certain sense they were in this matter more historically minded than the Rationalists, but they partly vitiated this valuable contribution through mystical and obscurantic trends in their own detailed philosophy of history. The Romanticists were prone to stress the importance of emotional and mystical factors in life and culture at the expense of intellect

[57] Fueter, op. cit., pp. 415–83.

[58] H. Höffding, *History of Modern Philosophy;* E. C. Moore, *Christian Thought since Kant;* A. C. McGiffert, *The Rise of Modern Religious Ideas;* W. A. Dunning, *Political Theories from Rousseau to Spencer,* Chaps. iv–v.

and reason. Under certain conditions this might have marked a healthy trend, but writers of this group tended to lose the tolerance and objectivity of the Rationalists and to revert to the piety and supernaturalism which had characterized the earlier centuries. Yet the Romanticists unquestionably widened the field of historical interests by their cultivation to an unprecedented degree of such fields as anthropology, philology, comparative religion and literature, and the history of æsthetics. Further, by their striving for elegance of expression and the reproduction of "local color," the literary representatives of the Romanticist movement greatly stimulated the growth of a general interest in the reading of history, which was an important impulse to historical writing.[59] Lord Acton has in the following paragraph summarized in a discriminating manner the contributions of the Romanticists in widening the horizon of the historian:

> The romantic reaction which began with the invasion of 1794 was the revolt of outraged history. The nation fortified itself against the new ideas by calling up the old, and made the ages of faith and of imagination a defence from the age of reason. Whereas the pagan Renaissance was the artificial resurrection of a world long buried, the romantic Renaissance revived the natural order and restored the broken links from end to end. It inculcated sympathy with what is past, unlovable, indefensible, especially with the age of twilight and scenes favorable to the faculties which the calculators despised. The romantic writers relieved present need with all the abounding treasure of other times, subjecting thereby the will and the conscience of the living to the will and conscience of the dead. Their lasting influence was out of proportion to their immediate performance. They were weak because they wanted strictness and accuracy, and never perceived that the Revolution was itself historic, having roots that could be profitably traced far back in the ages. But they were strong by the recovery of lost knowledge, and by making it possible to understand, to appreciate and even to admire things which the judgment of rationalism condemned in the mass of worthless and indiscriminate error. They trifled for a time with fancy, but they doubled the horizon of Europe. They admitted India to an equality with Greece, medieval Rome with classical; and the thoughts they set in motion produced Creuzer's *Comparative Mythology* and Bopp's *Conjugations*, Grimm's enthusiasm for the liberty and belief of Odin's worshippers, and Otfried Müller's zeal for the factor of race.

Classic products of this type of historical literature were Thierry's works on mediæval French and English history; Barante's *History of the Dukes of Burgundy;* Michelet's *History of France,* Leo's *His-*

[59] Fueter, op. cit., pp. 517–57; see the brilliant characterization of the historiography of Romanticism in J. E. Dalberg-Acton, *Historical Essays and Studies,* pp. 345–6.

INTRODUCTION

By Harry Elmer Barnes

This book consists of articles on the History and Prospects of the Social Sciences which, so the editor and contributors believe, possess something more than mere esoteric and scholarly significance, namely, an immediate practical value for the solution of concrete social problems. It is becoming ever more apparent that the complex difficulties of the present scientific and industrial age can in no way be competently dealt with by excellent intentions, single-track schemes of social and economic reconstruction, metaphysical idealism or religious zeal, important as all of these may be in their respective spheres. Not only have the social sciences themselves been a product of the developments of the last two centuries, but these very aspects of progress in science, technology, industry and social relations have produced a social order which is becoming more and more evidently and certainly dependent upon social science for adequate and intelligent control, direction and reorganization.

This is readily apparent at once when one calmly endeavors to appraise the striking transformations in human society which have been brought about by the rise of modern critical thought, science, technology and industry. A century ago our society was based upon a geocentric dogmatism, which represented our planet as God's chief creative achievement, and man as the supreme product of divine ingenuity and the main object of God's solicitude. Earth, man and all organic life were looked upon as having been created some six thousand years ago in the brief span of six days, and absolute proof of this fact was supposed to be embodied in an infallible and directly inspired holy work. The final, perfect and comprehensive guide to conduct was to be found in a few precepts contained in this work, and man was believed to be perfectly free to choose whether he would follow these divinely originated and inspired dicta, or willfully and perversely succumb to the wily seductions of the devil. There was no general comprehension of the fact that the only sure guidance for human conduct was to be sought in a study of human nature and social relationships, or that such information is to be procured only from competent scientists in the various fields and subjects involved, rather than from metaphysicians and theologians. Society itself re-

mained, as it had been for at least ten millenniums, organized on a simple, stagnant, repetitious and provincial agricultural basis. Life was uncomplicated and uniform, new processes or ideas rare and unusual, and the problems demanding the intervention of government few and rudimentary. The outlook of the majority of mankind was primarily local, any general national patriotism being almost non-existent among the mass of mankind in the middle of the 18th century. The vision of statesmen and diplomats was closely circumscribed by narrow nationalistic concepts compounded of dynastic ambitions and mercantilistic economic theories. A few philosophical dreamers from Dante onward proposed plans of world organization or federation, but their visions were either ignored or held in contempt by those in the practical control and direction of international relations.

At the present time practically all of these foundations of the old order have been either seriously challenged or entirely destroyed. In the light of modern astro-physics our planet becomes but the most insignificant of celestial juveniles, microscopic in size and incomparably recent in origin. In the place of a single universe existing primarily for the benefit of one of the smaller planets, we have now come to conceive of the cosmos as constituted of infinitely complex and numerous groups of universes of universes moving with incredible speed over paths of unfathomable extent, all apparently obeying laws of the utmost uniformity and precision. In place of the special creation hypothesis we have the concepts and processes of cosmic and biological evolution, which indicate that all matter and life are in a process of endless transformation, comprehending both progressive evolution and disintegration. Our earth, the human race, and all types of organic life appear to have come into existence as an integral part and parcel of this great process of development and destruction. No human trait or characteristic has yet been discovered which clearly violates the natural laws discovered and expounded by scientists. There is nothing which can in any way support the hypothesis of the supremacy of man in the cosmos. The combined implications of cosmic and biological evolution have destroyed completely any foundations for the hypothesis of human uniqueness or primacy.

The textual foundations of the opposing or orthodox view of human origins and characteristics have been entirely removed by the progress of critical scholarship in describing the origin and nature of the supposedly divine revelations on these subjects embodied in the sacred books of the Jews. The progress of comparative religion and Biblical criticism has shown that the Bible of western civilization corresponds in the nature of its authorship and the contents of its ideas

to the religious literature of other nations and times. There is no convincing evidence of any sort to support the hypothesis of the uniqueness of the Hebrew Bible or the thesis that it contains the direct and explicit word of God. Modern astro-physics renders absurd the Fundamentalist hypothesis that Yahweh, the ancient tribal god of Moses' father-in-law, could serve as even a symbolic expression of that force or personality which the modern liberal theologian assumes to lie back of the energy and order evident in our vast and complicated cosmic system.

The progress of knowledge in these fields of scholarship, together with the advances in biology, psychology and sociology, have likewise served wholly to invalidate the older views concerning the criteria of conduct. We now recognize that every human thought or act is strictly determined by a long process of antecedents, including our physico-chemical nature, our biological heredity, our endocrinal and metabolic processes, and our personal experiences in human association from the time of parturition to the moment of the particular act or thought. There is not the slightest iota of choice allowed to any individual in any act or thought from birth to the grave. If better and saner types of conduct are to be achieved, this must be brought about by giving the individual a better set of experiences through heredity, education and association. What these new guiding criteria for conduct shall be can only be determined by the most earnest and prolonged collaboration of natural and social scientists, each a specialist, and all dominated by the aim of social betterment.

In the place of the simplicity of a stagnant and provincial agrarian society we now have the complexity, the strains and stresses and increased stimuli of modern urban civilization, which has in the period of less than a century projected man, with his paleolithic mental and physical equipment, into the modern city apartment, office building and factory. The phrase "the cave man in the modern city" is not a mere picturesque phrase but a precise description of this ominous transformation of the social and psychological basis of life. Modern science, industry, commerce and urban society have enormously increased the number, variety and complexity of the problems which face statesmen in the present era, so that the mayor of many a second-class American city is confronted with financial and economic problems of a far more extensive and baffling type than those which called forth the financial and political genius of Alexander Hamilton in the earlier days of our national government. The progress of modern national unification, and the development of contemporary methods of nation and world-wide communication, with

the cheap popular daily newspaper to give these communicated facts general circulation, have served to transfer the provincial and narrow-minded neighborhood outlook to the nation as a whole. There has thus developed an aggressive and intolerant popular national patriotism which was unheard of and unimagined a century ago. But if the majority of men still remain primarily dominated by a savage tribal attitude toward the outside world, civilization itself has become definitely international in its intellectual and economic foundations and must sooner or later reconcile with these facts the political relations between states. This situation has already impressed some of the more intelligent and far-sighted statesmen and diplomats, and we have developed in the last quarter of a century scores of plans for international mediation and arbitration, and at least the embryonic basis for a world organization, disarmament and security in the League of Nations and the Geneva Protocol, achievements which must not be overlooked in spite of the fact that the last decade witnessed the most stupendous and disastrous explosion of mass insanity since dry land emerged from the primal waters of the planet.

The implications of these changes in the social structure should be readily apparent to all intelligent and informed readers. The stupendous changes wrought by critical thought, science and technology in our material civilization have given rise to problems which can be solved only by a corresponding development of the various social sciences which deal with the diverse aspects of social life that have been so thoroughly revolutionized since the days of George Washington. We can no longer hope to receive adequate guidance in these matters from the theologian or metaphysician. Rather we must bring the social sciences up to something like the same level of development and objectivity which have at present been attained by the natural and applied sciences. Not only must we achieve in this way accuracy and comprehensiveness in the particular social sciences, but we must also provide for proper and intelligent coöperation between them. As modern society is a unity of diverse processes and institutions, so these social sciences must be a coöperating group enriched by contributions from investigators in many realms of human endeavor. An excellent statement of this contrast between the progress of natural and social science in the last century, as well as an eloquent appeal for the development of the social sciences in the century to come, is embodied in the following quotations from the stimulating address recently delivered by President Walter Dill Scott of Northwestern University on "The Discovery of Truth in Universities."

The universities justly claim first place as agencies for training men in effective methods of research and for formulating and teaching the principles that form the basis for later discoveries and applications.

A survey of the progress of the agencies which promote human welfare reveals the fact that universities through the accomplishments of their teaching and research staffs have formulated principles and made discoveries and applications which have rendered the world a service much greater than is generally known.

Specific illustrations can be drawn most readily from such experimental sciences as physics, chemistry and geology and their application to engineering; or from such observational sciences as zoology, botany and bacteriology and their application to agriculture and to medicine. Illustrations are abundant but a few random citations are sufficient:

Professor Newton, of Cambridge University, England, formulated the three laws of motion which may properly be characterized as being a considerable part of the foundation of all physics and engineering.

Watt, while acting as instrument maker at the University of Glasgow, invented the separate condenser, the double-acting cylinder and the governor of the modern engine. This perfection of the engine, developed in a university atmosphere, is the foundation for most of our present manufacturing and transportation systems.

Professor Faraday, of London, discovered the laws of electro-magnetic induction and so made possible the experiments resulting in the telephone, the dynamo and most of our modern electric conveniences.

Professor Bernoulli, of the University of Basel, developed the Bernoulli theorem which is the basis of a large part of modern developments and practical applications in hydraulics.

Professor Maxwell, of the University of Cambridge, created the entire theory of electro-magnetic waves, which later were realized experimentally by Professor Hertz, of the University of Bonn. They are the waves which today fill our entire atmosphere in the service of wireless communication.

Professors Elster and Geitel, of Germany, started the development of knowledge of thermionic effects. Their researches were carried forward by Professor Thomson, of Cambridge University, and by Professor Richardson, of Kings College, London. This knowledge of thermionic effects has been very extensively applied recently in connection with long-distance telephony and wireless telephony and is an essential part of their recent development.

Professor Armstrong, of Columbia University, discovered the "feed back circuit" and added the last factor necessary to successful experiments in the rapid simplification and spread of radio telegraphy and telephony.

Professor and Madame Curie discovered radio activity in the laboratories of the University of Paris. Many important applications of their knowledge are being made in various fields.

Professor Moissan, of the Sorbonne, invented the electric furnace and so laid the foundation for the electric metallurgical industries.

Professor Posepny, of the University of Przibram, Bohemia, developed the theory of "The Genesis of Ore Deposits" and Professor Winchell, of the University of Michigan, and Professor White, of the University of Wisconsin, formulated "The Anticlinal Theory" regarding the accumulations of oil and gas. These theories provided the essential basis for scientific procedure in mining and in the oil industry.

These citations from the physical sciences and their applications are no less marvelous than the following citations from the biological sciences and their applications:

Charles Darwin, together with Professor Huxley, of the School of Mines in London, developed the fundamental ideas of evolution which led to the biological sciences with their practical applications in the improvement of animals and plants by breeding.

Professor DeBary, of the University of Strassburg, was the first to trace the life-history of parasitic fungi from spore to spore again, thus opening the way to the whole field of phyto-pathology with its many investigators and their wonderful successes in the study of the causes, checks, prevention and eradication of the plant diseases of our orchards, fields and forests.

Professor Bailey, of Cornell University, systematized the application of biological principles to agriculture and so made effective the work of our agricultural experimental stations.

Professor Schwann, of the University of Louvain, established the cell-theory of life. This theory resulted in experimental medicine with all its significant progress

Professor Pasteur, of the École Normale, Paris, invented serum inoculation. This resulted in experiments in preventive medicine and the discovery of the method of conquering some of the world's worst plagues.

Professor Lister, of Glasgow, introduced aseptic surgery and so made feasible the marvelous advances of modern surgery.

Professor Walter Reed, of George Washington University, discovered the nature and the means of transmission of yellow fever and provided the practical knowledge for eliminating that scourge from Cuba and our gulf ports. At the same time these researches gave to General Wood the knowledge necessary for reforming the sanitation of Havana.

These illustrations of the discovery of truth by educational institutions are cited from the physical and biological sciences because the benefits in these are so direct and so apparent. Such citations are not exceptional; they are typical of the service which institutions of higher learning are rendering to society in the discovery of truth. . . ,

Advance in the physical and the biological sciences during future decades will certainly prove as helpful as at any previous time. But the most fruitful researches during the twentieth century will probably be conducted not in the natural sciences but in the social sciences. We are at last coming to see that the proper study of mankind is man. We are beginning to direct our researches to the whole life of mankind—to the nature of man as a social and political being and to the achievements of man recorded in languages, literature and institutions. There is recognized a need for a thorough rewriting of all our texts on history, economics, politics, sociology, psychology, æsthetics, pedagogy, ethics and religion. The social sciences are fostering a progress that may be measured not in mere billions of dollars, but rather in the finer though less tangible terms of appreciation, service and sacrifice.

Research in the natural sciences has been effective in aiding the race to adjust itself to its physical environments. No such discovery of truth in the social sciences has been made in aiding the race to adjust itself to its human environments. Men are not now working together happily and effectively. There is said to be a lack of control in the home, restlessness in the school, apathy in the church, shirking in the shops, dishonesty in the counting houses, grafting in politics, crime in the city and bolshevism threatening all our institutions.

All our human relations will be improved as rapidly as we make progress in the social sciences, and I am convinced that our universities will make as great a contribution here during the twentieth century as they did by the discovery of truth in the natural sciences during the nineteenth century.

We may expect the most helpful contributions to the betterment of human relations from universities possessing certain favorable characteristics.

First, the university must be untrammeled by traditions or superstitions, by politics or cults; but must be animated by a love for truth and the members of the teaching and research staff must be zealous in their pursuits of truth in their respective fields.

Second, the university must sustain a graduate school and a group of profes-

tory of the Italian States; Carlyle's biographical studies of Cromwell and Frederick the Great; Froude's history of England in the period of the Reformation; and Motley's *Rise of the Dutch Republic.* Though scarcely superior in scholarship to such earlier works as those by Gibbon and Robertson, these books possessed a literary power which aroused an interest in historical writing and investigation on the part of some of the most distinguished scientific historians of the nineteenth century.[60]

10. THE RISE OF MODERN NATIONALISM IN ITS RELATION TO THE WRITING OF HISTORY

Romanticism led rather directly into nationalism. The literary distinction of Romanticist historical writing adapted it admirably for the function of arousing enthusiasm in the events and heroes of the national past. This was particularly so because of the fact that a main element in the theory of historical causation set forth by the Romanticists was the conception of "National Character" as the distinct and unique source of national culture and institutions. Being shaped in the distant historical past it called for a patient and reverent attention to national history. Again, the political events of the period from 1789 to 1870 were peculiarly fitted to arouse ardent patriotic sentiments. The successful wars of the French Republicans against the reactionary Coalitions, and the glorious victories of Napoleon served to arouse French national ardor to a high pitch. The French carried this enthusiasm directly to Italy and Poland, and stimulated avid nationalism in Spain, Prussia, England, Russia and Austria as a defensive attitude against the rising power and aggression of France. Following upon the close of the Napoleonic period came the struggle for independence and emancipation on the part of repressed nations in eastern Europe and the Balkans, and the movement for national unification in Germany and Italy which was brought to a successful conclusion in 1870.[61]

[60] Fueter, op. cit., pp. 557–80; G. P. Gooch, *History and Historians in the Nineteenth Century,* Chaps. iii, iv, x, xvii. J. S. Bassett, *The Middle Group of American Historians,* pp. 223–32.

[61] W. A. Dunning, *Political Theories from Rousseau to Spencer,* Chap. viii; A. N. Holcombe, *The Foundations of the Modern Commonwealth,* Chap. iv; "Nationalism: Its Historical Development," in *Encyclopedia Americana;* G. P. Gooch, *Nationalism;* R. Muir, *Nationalism and Internationalism;* J. H. Rose, *Nationality in Modern History;* S. Herbert, *Nationality and Its Problems;* H. M. Stephens, "Nationality and History," in *American Historical Review,* 1916.

Many important, if sometimes grotesque and amusing, cultural factors served to promote the growth of national sentiment in this same period. Theories of racial mission and superiority were evolved by such writers as Count Joseph Arthur de Gobineau and his various disciples in every modern state. Historians and essayists writing on national culture tended to eulogize national products in art, literature and other phases of culture as immeasurably superior to those of any other people. Apostles of aggression or "revanche" endeavored to keep vigorously alive a narrow chauvinism, ever stimulating militarism and warlike sentiment. Social theorists, with many popularizing imitators, endeavored to carry over the terminology and mechanisms of Darwinian evolutionary biology into the field of sociology and politics, and to represent war as the social and political analogue of the struggle for existence, and the chief factor and process in social and political development and perfection. This doctrine, combined with the Hegelian apotheosis of the state, produced the concepts and practices of *Macht und Realpolitik*. It is not surprising that historical writing capitulated to the pressure of such an imposing array of influences.[62]

The first result of nationalistic feeling upon historical writing which may be noted, and the most desirable and constructive in its nature, was the collection and publication of the sources of national history down through the mediæval period, and, in some cases, the sources for special periods of modern history. This was a contribution of an importance for historical documentation which is incapable of exaggeration. While there had been earlier fragmentary collections of the sources of national history, going as far back as the work of Goldast and Duchesne in the seventeenth century, the systematic activity in this field belongs to the nineteenth century. Pertz, Waitz and their assistants brought together the great German collection known as the *Monumenta Germaniæ Historica*. Guizot initiated the great French collection, known as the *Collection de Documents Inédits sur l'Histoire de France*, which was carried forward by Mignet, Thierry, Guérard and Raynouard. Another large collection has been produced by scholars working under the auspices of the *L'École des hautes études*. Stubbs, Hardy, Brewer, Gairdner, Giles, Robertson and Dimock led in collecting the sources of English history in *The*

[62] J. H. Robinson, "What is National Spirit?" in *Century* Magazine, 1916; C. J. H. Hayes, "Nationalism and the Social Studies," in *Historical Outlook*, 1923; A. J. Todd, *Theories of Social Progress*, Chaps. xviii–xix; F. Bernhardi, *Germany and the Next War*; J. A. Cramb, *Germany and England*; E. Dimnet, *France Herself Again*; F. H. Hankins, "Race as a Factor in Political Theory," in C. E. Merriam and H. E. Barnes, *Political Theories: Recent Times*, pp. 508–48.

Chronicles and Memorials of Great Britain and Ireland During the Middle Ages, which are known more briefly as *The Rolls Series.* The lesser European states followed in the lead of Germany, France and England, and brought together more or less complete collections of the sources of their national history. The United States has never carried through a similar achievement, primarily because systematic aid to scholarship and education has never seemed an appropriate function of government to our national legislators. Some sporadic collecting and editing has been done by historical institutions and state historical societies. This activity in collecting and editing was one of the major contributions of the nineteenth century to more scientific history. Convenient and effective use of these collections was notably forwarded by the preparation of that remarkable guide to the various series known as Potthast's *Wegweiser durch die Geschichtswerke des Europäischen Mittelalters.*[63]

The other phase of nationalistic historical activity in the nineteenth century was a less unmixed good. The nationalistic historical narrative unquestionably brought with it vast erudition and productivity and greatly stimulated popular interest in history, but, at the same time, it produced almost irreparable bias and distortion of fact and interpretation. Next to the inadequacy of its scope and the incompleteness of the material exploited, it is probable that the most serious indictment which can be brought against modern historical writing is its frequent inability to deal fairly with the problems of international relations and the history of foreign states. This defect has its origins primarily in the traditions and habits established by the patriotic historiography.[64]

Limitations of space forbid anything beyond the enumeration of the more notable examples of nationalistic historical narrative produced in the leading modern states. In Germany nationalistic historical writing received its most powerful impulses from Tacitus' exaggerations concerning the unique virtues of the early Teutons, from the traditions of the extent and glories of the Holy Roman Empire, and from the aspirations for, and achievement of, German political unity in modern times under the leadership of Prussia and the Hohenzollerns. The Maurers and Waitz built upon Tacitus a theory

[63] H. E. Bourne, *The Teaching of History,* Chap. ii; W. Wattenbach, *Deutschland's Geschichtsquellen im Mittelalter,* Vol. I; Gooch, op. cit., pp. 64–75, 191, 340–41; J. S. Bassett, *The Middle Group of American Historians,* Chap. v.

[64] H. E. Barnes, "History and International Good Will," in New York *Nation,* March 1, 1922; "Recent Tendencies in the Writing and Interpretation of History," in E. C. Hayes, *Recent Developments in the Social Sciences;* H. M. Stephens, loc. cit.

of the Teutonic basis of mediæval economic, social and political institutions. Giesebrecht detailed the glories of the Holy Roman Empire of the Middle Ages with enthusiasm tempered by rare scholarship. Ranke exceeded his usual sober restraint in his account of the contributions of Luther and his associates to the greatness of modern Germany and the cause of human freedom. With Freytag Luther became a mystical national hero of majestic proportions. Duncker and Droysen vividly sensed the potent mission of the early Hohenzollerns in laying the basis for that Prussian development which was the indispensable preliminary to the consummation of German unity. Treitschke, in the most brilliantly written product of German historical literature, set forth the heroic exploits of the War of the Liberation and the disasters of the Metternichian plot against Teutonic unification. Sybel challenged the political capacity of the French, and vindicated that of the Germans in his interpretation of the French Revolution and in his account of the culmination of Bismarck's *Politik* in the Treaty of Frankfort.[65]

The French historians, stimulated by the memory of the exploits of Clovis, Philip Augustus, Saint Louis, Henry IV, Louis XIV, and Napoleon, countered the German pretensions at every point. Fustel de Coulanges protested against the contention that the Germans had laid the basis for the institutional life of the Middle Ages, an achievement which he unhesitatingly assigned to the Celtic ancestors of the French. Michaud recalled the remarkable achievements of the French in the period of the Crusades. Raynouard convinced himself and a large circle of readers that French civilization in the mediæval period far surpassed that of any other state of the age. Fagniez and Chéruel portrayed the success of the early Bourbons and their great ministers in centralizing the modern French state. Michelet, Lamartine and others saw in the French Revolution the turning point in the history of European civilization. Thiers eulogized Napoleon as First Consul, and Vandal, Masson and Lévy defended Napoleon's personality and achievements in their entirety. The post-Napoleonic era in France was less fitted to promote particularly vigorous expressions of patriotic pride, especially when following after the glories of the age from 1792 to 1814, but each stage of French political development since 1815 has found its apologists in Thureau-Dangin, La Gorce, Ollivier and Hanotaux. A synthesis of the notable exploits and contributions of the French throughout the whole of their history was early provided by Jules Michelet, and later worked out with more

[65] A. Guilland, *Modern Germany and Her Historians;* Gooch, op. cit., Chaps. vii–viii.

thoroughness and moderation, if less stylistic distinction, by Henri Martin.[66]

In the nationalistic political history of the English people the dominant thread has been the epic of the unfolding of Anglo-Saxon political liberty and the contributions of various ages to that development. The background for the drama was supplied in Charles Kingley's preposterous work, *The Roman and the Teuton*. In this the destiny of Western Europe was inseparably linked with the triumph of the youthful and virile Teutons over the effete and decadent Romans. Kemble, Freeman and Stubbs indicated how the best in the political genius of the Germanic race had migrated to the British Isles during the Teutonic invasions of this area, which had swept it clear of the fickle Celts. Stubbs, in particular, traced the culmination of this first stage of English political development in that "harbinger of every modern liberty"—the Magna Carta. Froude lauded the Tudor severance of the English from the ecclesiastical domination of Rome. Cromwell found his great apologist in Carlyle. Macaulay discovered in the Whig Revolution of 1689 the crucial epoch in the history of representative government. Napier extolled Wellington's campaign against Napoleon in Spain. Seeley described the results of the superior commercial and colonial capacity of the English. This calm satisfaction was followed by the ecstasy of Cramb and the frenzy of Homer Lea and Kipling. Finally, while widely different in his outlook upon life and history from most of the above writers, John Richard Green popularized the arresting story of the growth of the English nation.[67] The other European states contributed their share towards the nationalistic narrative, and even Jewish historians were found who made heroic efforts to link up the tradition of the ancient grandeur and prestige of Palestine with the vision of the restoration to come with the realization of the Zionist program.[68]

Though the United States possessed but the briefest kind of a past, as compared with those European states whose early historians had attempted to trace their origins to the lost Ten Tribes of Israel, to Troy, or beyond to Adam, yet we were not without our enthusiastic compilers of ardent patriotic literature. John Fiske discovered that the first important event in American history was the Teutonic vic-

[66] Gooch, op. cit., Chaps. ix–xiv.

[67] Ibid., Chaps. xv–xviii. See also H. J. Ford, "The Anglo-Saxon Myth," in *American Mercury*, September, 1924.

[68] Especially important was the influence of the historians of the repressed nationalities in arousing a sentiment for national independence. In particular one might point out the importance of Palacky in Bohemia, of Lelewel in Poland, and Xénopol in Roumania; cf. Stephens, loc. cit.; and H. M. Kallen, *Zionism*.

tory over the Roman legions at the Teutoburg Forest in 9 A. D. Herbert Baxter Adams and his students at Johns Hopkins attempted to trace in detail the Teutonic and Anglo-Saxon basis of American political institutions both federal and local. The Germanic hypothesis was forwarded by Burgess and his earlier students at Columbia, though as much in the field of political science as in history. Bancroft organized his massive epic about the migration of our colonial ancestors from Old World oppression, their establishment of unique liberal institutions in their new home, their courageous and disinterested stand for the rights of mankind at large, which incidentally produced separation from England and national independence, and their successful effort to construct the most notable instrument of government yet devised by man. Palfrey and Lodge supplied the apologies for Puritan New England. Mahan emphasized the importance of naval victories and sea-power, not only for the United States, but also for the modern world. Hildreth and John Church Hamilton expounded the enduring contributions of the Federalists to American political institutions. Roosevelt described with evident enthusiasm "the winning of the West." Van Holst defended with vigor the crusade of the North against slavery. Burgess found in the triumph of federalism over secession a sure vindication of the Teutonic capacity for politics inherent in the American people. Fiske, in his various historical works and essays, harmonized the American epic with liberal Whig tradition, the rise of the new capitalism and the development of American federalism and world power.[69]

The tragic culmination of all this patriotic effort was the efficient aid which it gave to the creation of the general nationalistic and militaristic psychosis which precipitated the World War in 1914. And the war itself brought about a recrudescence of patriotic ardor among historians unequaled since the close of the Napoleonic era. Even the most distinguished and objective of historians, from Eduard Meyer down, frequently lost their poise and fell back upon the patristic formulæ and principles of diabolism, dualism and eschatology in their interpretation of the outbreak and purposes of the war and of the motives and intent of their enemies. While sanity and objectivity are gradually returning in the writing of contemporary political and diplomatic history, it will be a generation before the state of affairs which prevailed in 1910 will be regained.

[69] J. F. Jameson, *A History of Historical Writing in America;* J. S. Bassett, *The Middle Group of American Historians;* J. Fiske, *American Political Ideals;* Gooch, op. cit., Chap. xxi; H. B. Adams, *The Study of History in American Colleges and Universities;* G. E. Howard, *Local Constitutional History of the United States.*

1. THE DEVELOPMENT OF CRITICAL AND OBJECTIVE HISTORICAL SCHOLARSHIP

Romanticism had given to historical writing a vivid literary form of expression and aroused much popular interest in the subject. Nationalism had continued this interest and, in many cases, the same excellence of historical prose, and, above all, had supplied the impulse which led to the great collections of source-material. Parallel with these significant developments was one which aimed not so much at literary achievement or the development of a popular following as at the ascertainment of as close an approximation to historical truth as all the information in any situation would permit.[70]

An approximation to the reproduction of the truth with respect to any historical circumstance depends upon the number of genuine contemporary documents available and upon the reliability of the witnesses whose accounts are therein embodied. The establishment of the genuineness and authenticity of an historical document depends upon the aid of certain sciences auxiliary to history, such as diplomatic, chronology, palæography, epigraphy and lexicography. The development of these sciences to a respectable level, thus providing the basis for external or textual criticism, was the work primarily of the Benedictine monks of the Congregation of Saint Maur in Paris, who found their leader in Jean Mabillon (1632–1707), though laymen such as Du Cange made notable contributions to certain phases of this science of more accurate documentation.[71] But an authentic document is not necessarily an accurate description of the events which are dealt with. Bias and prejudice may distort the vision and warp the judgment of the writer to such a degree as to make his version practically worthless. Because of this fact it is necessary to examine into the credibility of the witness and discover as far as possible the orientation and attitudes which might color his account of any affair or controversy. Contributions to this phase of historical scholarship, known as internal criticism, were early made by Vadianus in his *History of Saint-Gall*, by Muratori in his editorial labors on the sources of Italian history, by Thoryas in his history of seventeenth century England, by Bolland and the Belgian Jesuits in their work in initiating the great series on the lives of the saints, by Beau-

[70] W. A. Dunning, "Truth in History," in *American Historical Review*, 1914; C. Becker, "Detachment and the Writing of History," in *Atlantic Monthly*, October, 1910; H. E. Barnes, "The Drool Method in History," in *American Mercury*, January, 1924.

[71] E. De Broglie, *Mabillon et la Société de l'Abbaye de Saint-Germain-des-Prés.* Also R. Rosenmund, *Die Fortschritte der Diplomatik seit Mabillon.*

fort in his critique of the sources of early Roman history, by Dubos in a notable investigation of the sources for the history of early mediæval France, and by Niebuhr, who completed the first really scientific work on Roman history.[72] It remained, however, for Leopold von Ranke to bring together in systematic form the requirements and procedure necessary for a truly scientific use of documentary evidence, by the publication of his *Zur Kritik neurer Geschichtschreiber* in 1824, and to provide the permanent basis for systematic training in the technique of the scientific historian by establishing the seminar method in 1833.[73] The last stage in the development of a critical attitude towards the use of historical documents, that supplied by modern psychology, was closed to Ranke. This psychological contribution has proved the relative unreliability of the most veracious and unprejudiced eye-witness, and the almost complete untrustworthiness of autobiographical material dealing with an explanation of personal motives. These recently developed conceptions provide the present-day historian with ample ground for doubting the reliability of much of what has passed for even hypercritical historical and biographical narrative during the last half century.[74]

An adequate summary of the work of critical historians since 1825 would, obviously, occupy more space than that allotted to this entire chapter. All that can be attempted is the mere enumeration of a few representative names from among the several generations of scholars who have labored since von Ranke's time. The product of the older generation of critical scholars in Germany is associated with such names as Ranke, Mommsen and Waitz, and that which followed by Eduard Meyer, Harnack, Erdmannsdörffer, Koser, Delbrück, Ritter, Meinecke, Lenz, Haller, Valentin, Rackfahl and von Hagen. A representative repository of the critical German historiography is to be found in Oncken's *Allgemeine Geschichte in Einzeldarstellungen.*[75] In France the generation of Ranke and Waitz was matched by Guizot, Mignet and Duruy, who have been followed by such scholars as Maspero, Diehl, Rambaud, Luchaire, Delisle, Monod, La-

[72] Fueter, op. cit., pp. 267–270, 395–9, 403–8, 581–7; Gooch, op. cit., Introduction and Chap. i.

[73] Fueter, op. cit., pp. 589–605; Gooch, op. cit., Chap. vi.

[74] W. F. Ogburn, "The Psychological Basis for the Economic Interpretation of History," in *American Economic Review*, Supplement, March, 1919; H. Munsterberg, *Psychology and Crime;* A. G. Tansley, *The New Psychology and Its Relation to Life;* E. H. Williams, *You May Take the Witness.*

[75] Gooch, op. cit., Chaps. vi, xxiii, and pp. 155, 483–4; A. Guilland, "German Historical Publications, 1914–1920," in *American Historical Review*, July, 1920. A concise summary of the products of the critical school is to be found in my "History: Its Rise and Development," loc. cit., pp. 245–50.

visse, Seignobos, Aulard, Sorel and Langlois. *The Histoire Générale* and the *Histoire de France* are the two great coöperative works which exemplify the best of French critical historical scholarship.[76] In England scientific history appeared with the generation of Freeman, Stubbs, Creighton and Lecky, and was continued in the works of writers like Gardiner, Prothero, Oman, G. M. Trevelyan, Rose, Fisher, Bury, Pollard and Gooch. In the *Cambridge Ancient History*, the *Cambridge Mediæval History* and the *Cambridge Modern History* one may seek the names of the most eminent of contemporary English historians of the scientific school.[77] Men like Andrew D. White, C. K. Adams, H. B. Adams, Henry Adams, J. W. Burgess, H. C. Lea and M. C. Tyler introduced the concepts of Ranke and scientific history into the United States, and their labors have been succeeded by those of Osgood, Rhodes, C. M. Andrews, G. B. Adams, Munro, Burr, Dunning, Channing, Fling, Jameson, McLaughlin, Haskins and many others among their students. In the *Narrative and Critical History of America*, edited by Justin Winsor, in the *American Nation*, edited by Albert Bushnell Hart, and in the *Chronicles of America*, edited by Allen Johnson, one will discover the coöperative work of the majority of the critical political historians of this country. The minor countries of Europe have not been without eminent contributors to scientific historical writing, as will be evident by the mention of the names of Sickel, Ficker, Friedjung and Pribram in Austria, Marczali in Hungary, Villari and Tomassini in Italy, Canovas and Altamira in Spain, Fueter in Switzerland, Pirenne in Belgium, Fruin and Blok in Holland, Steenstrup in Denmark, Malmström in Sweden, Sars in Norway, and Kluchevsky and Vinogradoff in Russia.[78]

In connection with this improvement of critical historical scholarship several important contemporary innovations should be mentioned. Among these are the provision of ample bibliographies, which are carried along in current periodicals, the use of cross-references and loose-leaf note systems, a better system of indexing and filing material, and other essentially mechanical contrivances and devices which are of great importance for accuracy and rapidity of work. Progress of this sort has been most notable in the United States.[79]

[76] Gooch, op. cit., Chaps. xi–xiv; *Science and Learning in France*, pp. 133–40.
[77] Gooch, op. cit., Chaps. xviii–xx.
[78] Ibid., Chaps. xxi, xxii; W. A. Dunning, "A Generation of American Historiography," in *Annual Report of the American Historical Association*, 1917.
[79] E. Bernheim, *Lehrbuch der Historischen Methode;* Langlois and Seignobos, *An Introduction to the Study of History;* J. M. Vincent, *Historical Research;* E. W. Dow, *Principles of a Note-System for Historical Studies.*

Most of these critical scholars, while relatively free from the rabid patriotic bias of Sybel or Raynouard, were sufficiently influenced by the political trends and historical traditions of the nineteenth century to be absorbed chiefly in political history, quite as frequently of the anecdotal and episodical, as of the institutional type. Mainly in the present generation a school of historians has arisen who have challenged the adequacy of the critical political history and its conceptions. Accepting as valid Ranke's generalization that we should know exactly what things happened in the past, they have contended that we should know something about many more things than dynastic changes, diplomatic negotiations, battles and political campaigns. They have insisted that, as far as possible, we should have an account of the development of science, material culture, æsthetic achievements, and institutional life in all of its phases. But they have gone further than to challenge the adequacy of the older notions of the scope and content of history. They have maintained that it is not enough to know merely what events took place; it is also desirable to know how and why they happened when they did and as they did. In other words, the historian must investigate the problem of causation in human events and cultural development. It is, of course, obvious that in many cases there are not enough data of a reliable sort to make it possible to establish a complete interpretation of causation, but an investigation of causes should be a major part of the objective of the modern scientific historian.[80] Finally, they have contended that the narration of events, important as this is in the preliminary stages of historical synthesis, has little significance as such, and must be completed by an interpretation of the significance of the events recorded. Until this is done, narrative history has little more pragmatic value than the notes of observations made by a natural scientist in his laboratory or in field work which have never been classified, tested and interpreted. The problem of historical interpretation is, to be sure, closely interrelated with that of the determination of historical causation.[81] The remainder of this chapter on History will be chiefly concerned with the manner in which the more recent type of historiography has promoted such tendencies as historical synthesis, and the furtherance of the solution of the problems of historical causation and historical interpretation.

[80] J. H. Robinson, *The New History*, passim; A. M. Schlesinger, *New Viewpoints in American History*; F. J. Teggart, *The Processes of History*.

[81] J. T. Shotwell, *An Introduction to the History of History*, Chaps. i, xxvii; cf. H. Rickert, *Kulturwissenschaft und Naturwissenschaft*.

III. THE NEW OR SYNTHETIC HISTORY

1. THE CULTURAL SETTING AND BACKGROUND OF THE NEW HISTORY

No one can adequately comprehend the nature and purposes of the so-called "New History" without understanding the historical background out of which it has proceeded. As the Christian Epic and the National State, with its various problems and processes, stood behind the conventional history of the last century, so the new history has developed out of the *Weltanschauung* provided by the rise of modern natural science and critical thought, on the one hand, and the industrial and social changes produced by the applications of science to modern technology and industrial processes, on the other.[82]

The new astronomy and celestial mechanics, starting from Newton's preliminary synthesis, has much more than vindicated the brilliant intuition of Giordano Bruno with respect to the plurality of worlds and the similarity of the heavenly bodies and the earth in their material composition. Distant planets, such as Uranus and Neptune, have been discovered, the existence of which proves the unsuspected extent of our own solar system, but much more significant has been the development of instruments which have enabled us to detect innumerable and, in many cases, almost incalculably distant solar systems. Our cosmic outlook has required adjustment not merely to the disconcerting notion of a plurality of worlds, but also to the vastly more impressive concept of an almost infinite plurality of universes. This has led to the necessity of a much chastened revision of the cosmology of the Greek science, Hebrew tradition and the Christian Epic. The relative insignificance and modernity of the earth has become impressively apparent, and, with the dawning recognition of this, has come the scientific vindication of Montaigne's suspicion that it is highly improbable that God has the meticulous and inquisitorial supervisory interest in, and record of, each and every passing thought and casual act of each individual man. This new astronomy, far more than evolutionary biology, has dealt a death blow to the supernatural and providential theory of historical causation. Further, the enormous demands upon the element of time required by the newly realized cosmic chronology make the assumed date of the

[82] F. S. Marvin, *The Century of Hope;* Robinson, *The New History,* Chaps. i–v. I have dealt much more thoroughly with the recent developments in history, and its relationships with other sciences in the section I contributed to E. C. Hayes' *Recent Developments in the Social Sciences;* and in my *New History and the Social Studies.*

creation of the universe in 4004 B. C. seem as naive and infantile a concept as the most crude creation tale of any other known primitive people. The new cosmic time perspective is as much more impressive than the geological perspective, as the latter is more striking and imposing than the "Mosaic" chronology The discoveries of Fraunhofer, Michelson and Einstein must supplant Adam, Noah and Moses as the foundation upon which the historian bases his notions of time perspective and historical relativity.[83]

What astronomy has done for the cosmos at large, geology and paleontology have done for our conception of the genesis and antiquity of our own planet, which is, from the cosmic viewpoint, an exceedingly frail and minute celestial juvenile. Historical and structural geology has proved the naturalistic evolution of the earth, the relatively immense period of time required for this process, and the fact that the geologic period prior to the origin of life on the planet probably vastly exceeds that which has elapsed since. Paleontology, as the true historical background of evolutionary biology, has revealed the gradual development of organic life on the earth, the progression of types of plant and animal life, and the genetic connection between extinct and existing genera and species. Above all, it has proved the somewhat paradoxical situation in regard to man, namely, that from the standpoint of the evolution of organic life he is a strikingly modern arrival, while as contrasted with the orthodox view of the duration of his mundane existence he possesses an amazing antiquity.[84]

Basing its doctrines and generalizations upon the paleontological record, upon observed affinities between extinct and extant species of plants and animals, and upon results obtained from selective breeding, mixing and crossing, evolutionary biology has also notably forwarded the development of new conceptions and perspectives for the historian. It has shown the organic continuity in the development of life, to which man is no exception. It assigns to man his proper and scientific place in nature, and denies him any unique, cataclysmic or providential origin. It insists upon the necessity of studying the nature and conduct of man according to the definite scientific methods of biology, psychology and anthropology, if we are to obtain any reliable basis for understanding his motives and behavior, an attitude which, of course, carries with it a complete abandonment of the old

[83] Sedgwick and Tyler, *A Short History of Science*, Chap. xvii; *An Introduction to Reflective Thinking* (by Columbia Associates in Philosophy), Chap. iii; H. Shapley, "Man and His Young World." In New York *Nation*, May 7, 1924.

[84] H. G. Wells, *The Outline of History*, Book I; E. Perrier, *The Earth before History*; R. S. Lull, *The Evolution of the Earth and Its Inhabitants*.

theological view of the unique nature of man and the supernatural forces controlling his each and every thought and action. Working in coöperation with genetic and comparative psychology, biology undertakes to solve the important and intricate problem of the causes for the ascendency of man in the animal kingdom, something which can no longer be explained on the basis of a specific creative act. It appears that in many ways man is distinctly inferior biologically to other animals, and that his present dominant position is due primarily to his relatively greater brain capacity, the greater freedom of his forelegs for prehensile purposes and uses, his superior versatility and, perhaps, his more highly developed sociability.[85]

Beyond this new approach to the study of man and his behavior, evolutionary biology has provided for the first time a truly adequate basis for a genetic point of view. It has dealt the final blow to the Platonic epistemology and the philosophy of transcendentalism and typical realism. There appears to be nothing in either nature or nurture, in organic life or human culture, which is fixed and final, stable and not amenable to change. Rather, everything is apparently the product of change, which leads either to improvement or deterioration. In other words, we now have for the first time a scientific background for a theory of progress or decline, such as was denied to those writers of the eighteenth century who first caught a vision of the necessity of abandoning the old eschatology inseparably associated with the Christian Epic. History, itself by definition dynamic in its concepts, finds itself in harmony with a dynamic cosmos and nature. It is no longer faced with the dilemma and paradox of changing culture but fixed and transcendental beliefs, and of a cataclysmic origin but a subsequent slow and gradual development of man.[86]

Anthropology has likewise been of great assistance in aiding the historian to gain a better perspective and a more intelligent attitude towards the problems of his subject It furnishes the historian with a knowledge of the cultural evolution of man in the pre-literary period, thus constituting the true "threshold of history."[87] It supplies, in this way, that picture and background of cultural evolution, in much the same way as evolutionary biology does that of the physical

[85] H. F. Osborn, *The Origin and Evolution of Life;* T. H. Huxley, *Man's Place in Nature;* J. C. Merriam, "The Beginnings of Human History," in *Scientific Monthly*, 1919. G. E. Partridge, *The Genetic Philosophy of Education.*

[86] *Evolution in Modern Thought* (Boni and Liveright Modern Library); Caldwell and Slosson, *Science Remaking the World*, pp. 167–90; F. S. Marvin (ed.) *Science and Civilization*, Chap. viii.

[87] A. A. Goldenweiser, *Early Civilization;* A. L. Kroeber, *Anthropology; Cambridge Ancient History*, Vol. I, Chap. i.

side of man's development.[88] In one of its main divisions, archæology, it has uncovered many hitherto unknown or obscure civilizations, such as those of early Egypt and Mesopotamia, Anatolia, the Ægean and early Gaul.[89] In the cultural side of the subject, sometimes called ethnology, there is considered the important problem of the patterns and laws of cultural and institutional change and development, something which constitutes the indispensable theoretical equipment of the newer type of cultural historian.[90] Finally, physical anthropology, scientifically studied and presented, is able to dispose of much of the older nonsense with respect to racial differences and the racial interpretation of national history, which has centered chiefly around the acceptance by historians of the thesis of books like Gobineau's *Essay on the Inequality of the Human Races* as to the reality and superiority of the "Aryan race."[91]

Psychology, or the science of human behavior, has obviously proved an aid to the historian, who devotes himself chiefly to the recording of the results of this behavior. In the same way that astronomy, geology and biology have destroyed the belief in the supernatural and providential in relation to the origin of man, so psychology has eliminated the view of the supernatural foundation of his attitudes, motives and actions. Instead of the behavior of man being regarded as the direct product of specific intervention of, or impulsion from God or the Devil, or of the unlimited free-will of the individual free-moral agent, psychology looks upon behavior as the result of the responses of the organism to specific stimulation coming from the natural and social environment. Human motives are the product of stimuli and impulses derived from the chemical properties and processes in the human body, the biological past and the personal experiences of the individual; and conduct is, in a psychological sense, strictly determined, there being no place in modern psychology for the old metaphysical doctrine of free-will. This dynamic type of psychology looks upon mental development as a process of adjustment and adaptation to changing sets of stimuli. It thus offers an interesting critique of the older view of the unchanging state of human nature.

[88] C. Wissler, *Man and Culture;* R. H. Lowie, *Primitive Society.* F. Müller-Lyer, *The History of Social Development.*

[89] A. C. Haddon, *History of Anthropology,* Chaps. viii–ix; A. L. Kroeber, *Anthropology,* Chaps. vi, xiv; *Cambridge Ancient History,* Vol. I, Chaps. ii–iii; H. H. Wilder, *Man's Prehistoric Past;* J. De Morgan, *Prehistoric Man.*

[90] R. H. Lowie, *Culture and Ethnology;* Wissler, op. cit., Part II; Kroeber, op. cit., Chaps. viii–ix; Müller-Lyer, op. cit.

[91] W. Z. Ripley, *Races of Europe,* Chaps. vi, xvii; R. B. Dixon, *The Racial History of Man,* Introduction; F. Boas, *Mind of Primitive Man,* Chap. i; Hankins, loc. cit.; T. Simar, *The Race Myth.*

From the standpoint of dynamic psychology, while the biological aspects of human nature are relatively static, the responses of this human organism are largely determined by the nature of the stimuli. Hence, notable shifts in culture will produce significant alterations in the responses of human nature. It is this alone which can account for the differences in the behavior of the Cro-Magnon man in the Magdalenian period and the inhabitant of New York City to-day. It is further recognized that the motives for many human activities are not revealed to the conscious mind, being derived from the subconscious, and much of our explanation of motives and purposes is but elaborate secondary rationalization, which is more congenial than the actuality to the content, sets and attitudes of the conscious mind.[92]

Sociology has supplemented anthropology and psychology in a most useful manner by indicating the important group basis and causation of the majority of the mental attitudes of man, and of all of his institutional life and surroundings. Sociology makes it clear how most of our ideas and attitudes, which were earlier believed to be derived from divine inspiration operating through the soul and the conscience, are group determined or group conditioned. As Trotter and Sumner have shown in a convincing manner, the socio-psychic products of herd-instinct and the folkways and mores provide prescribed and approved ways of thinking on nearly all subjects. It is the rare individual who is able to rise above, view objectively, and criticize in a sane and valid manner, the conventional opinions and beliefs of his group. The "still, small voice" within us is, as Professor Robinson has suggested, the still, small voice of the herd. Our culture and institutions represent society's crude and awkward efforts to adjust itself to the conditions of life as found in any given region. No human institutions have existed in their present form from the beginning, all are the changing products of the necessity of continual social readjustment to altering environmental and technological factors. Conduct and institutions are, thus, mundane in their origin and local characteristics, and are not divinely created or inspired; and the only valid test of the excellence and adequacy of an institution is its efficient adaptation to the needs of the group in a particular respect at any given time. Institutions and morals are, then, transient and relative, the products of man and society, and subject to the possibility of artificial human alteration for better or worse. Sociology,

[92] H. E. Barnes, "Psychology and History," in *American Journal of Psychology*, October, 1919; R. S. Woodworth, *Dynamic Psychology;* Tansley, op. cit.; J. Dewey, *Human Nature and Conduct;* J. H. Robinson, *The New History*, Chap. viii. F. Wittels, *Sigmund Freud;* W. F. Ogburn, *Social Change*.

has in this manner secularized human institutions in the same way that anthropology and psychology have secularized the origin, nature and activities of man.[93]

The outlook of supernaturalism which lay back of conventional history down to the present generation has been challenged, not only indirectly through the development of natural and social sciences which have shown convincingly the grotesque inconsistencies and naïve impossibilities of the orthodox *Weltanschauung*, but also directly through the critical and historical study of the "sacred" documents in which the supernatural hypothesis has been embodied. The alleged Mosaic authorship of the Pentateuch was doubted by a Jewish scholar, Aben Ezra, as early as the latter part of the twelfth century. This skepticism was revived by Hobbes and justified by Spinoza in the seventeenth century. Astruc in 1753 laid the basis for a critical study of the literature of the Old Testament. From Astruc to Wellhausen, Harnack, Loisy and contemporary scholars the work was carried on, until it has become apparent that the orthodox view of the nature, dates and authorship of the books of the Bible is nothing less than grotesquely inaccurate. In the Old Testament one may read in the same chapter of a given book material written by several authors separated by centuries. Some of the oldest books in point of date of actual authorship are put in the latter part of the Old Testament, while some of the latest appear early in the work. Rarely in the Old or the New Testament is the author conventionally assigned to the book, the one who actually wrote it. Further, many of the books originally part of the Old Testament have been lost and remain only through references to their former existence. Again, the Jews down to the period of foreign conquest and persecution freely edited and altered the Old Testament. Finally, Winckler, Rogers, Delitzsch, Robertson Smith and others have shown the affinity of Jewish to other Semitic religious beliefs, and the probable derivation of the former from the latter. It is evident that all of these discoveries serve to render entirely impossible of intelligent support the hypothesis of the uniquely revealed nature of Judaism and Christianity, or the direct and verbal inspiration of the Bible. In this manner the alleged documentary basis of supernaturalism disappears completely, and the "warfare between science and theology" is finally revolved into naught for the educated classes. Modern science, far from being

[93] W. Trotter, *Instincts of the Herd in Peace and War*; W. G. Sumner, *Folkways*; H. E. Barnes, "Sociology and History," in *Historical Outlook*, November, 1922; *Sociology and Political Theory*; "Sociology and Ethics," *Journal of Social Forces*, January, 1925; R. C. Givler, *The Ethics of Hercules*.

opposed to the thesis of the existence of God, actually furnishes the only plausible basis for a belief in deity.[94]

While the rise of the national state, the growth of constitutionalism, and the new problems of government, associated with the rise of the middle class and the protection of property rights, were the chief environmental facts lying back of nationalistic historiography and the critical political history of the nineteenth century, the environmental background of the new synthetic history is to be found in the rise of modern science and technology, the resulting Industrial Revolution, and the ensuing transformation of our material culture and most of our institutional life. The great impulse to industrial and commercial development produced by the Commercial Revolution following 1500, with the resulting increase of capital, combined with the remarkable advances in science from Kepler and Galileo to Black and Lavoisier to bring about a series of technological changes and economic transformations which were to alter almost completely the material culture of western society. This Industrial Revolution, as it has been called, consisted primarily in the introduction of the machine technique in the place of the tool and handicraft economy; the substitution of the factory system for the guild, domestic and household systems of the application and control of labor; and the many economic, social, political and cultural results which flowed from the combined application of the mechanical technique and the factory system, such as the increase of productivity and capital investment, the growth in the size of business units, the complete triumph of the pecuniary criteria in status and achievement, the rise of industrial cities and the development of urban life and problems, immigration and major shifts of population in readjustment to new industrial developments, general psychological and cultural alterations to conform to the new industrial and social situations, and the development of constitutional government, political democracy, nationalism and imperialism.[95]

The new time-perspective put at the disposal of historians by astronomy, geology and anthropology, the destruction of the obsession of supernaturalism by science and Biblical criticism, and the presence everywhere of striking proofs of revolutionary changes in culture

[94] A. Duff, *History of Old Testament Criticism;* F. C. Conybeare, *History of New Testament Criticism;* and J. A. Thomson *Science and Religion.*

[95] F. A. Ogg, *Social Progress in Contemporary Europe;* N. S. B. Gras, *An Introduction to Economic History,* Chaps. v–vi; T. Veblen, *The Theory of Business Enterprise,* Chaps ii, ix; C. J. H. Hayes, *Political and Social History of Modern Europe,* Vol. II; F. S. Marvin, *The Century of Hope;* P. A. Parsons, *An Introduction to Modern Social Problems.*

and institutions produced by transformations of technology and economic processes, united to give historians a better grasp upon the nature and duration of human and cultural development, a wider appreciation of the variety of achievements and tendencies which need to be studied and recounted by history, an interest in the importance of the "commonplace" things of industry and economic life, and a reflective spirit which has led to an interest in the why and whither of history, namely, historical interpretation.[96] We may now turn to a brief review of some of the more important work which has been done by various groups of students in the attempt to give history a broader content, a greater educational significance, and a more profound grasp upon the problems of human and cultural development.

2. INTELLECTUAL HISTORY

The first of the various salutary efforts to break with the narrow tradition of political history and substitute an interest in the evolution of human culture which we shall consider is what has been called "intellectual history," or a review of the transformations of ideas, beliefs and opinions held by the intellectual classes from primitive times to our own. Exponents of this approach to history contend that, in the same way as the human mind is the integrating factor in the human personality and its behavior, so the prevailing intellectual attitudes in any age are the most important unifying, organizing and controlling factor in the development of human culture. The possible significance of this type of history was forecast by Francis Bacon when he held that: "no man hath propounded to himself the general state of learning to be described and represented from age to age, as many have done the works of nature and the State civil and ecclesiastical; without which the history of the world seemeth to me to be as the statue of Polyphemus with his eye out; that part being wanting which doth most show the spirit and life of the person." The same position was held by Dr. Samuel Johnson, who stated in his *Rasselas* that: "there is no part of history so generally useful as that which relates to the progress of the human mind, the

[96] J. H. Robinson, *The New History*, Chaps. i, v; *Mind in the Making;* L. C. Marshall, *The Story of Human Progress;* E. R. A. Seligman, *The Economic Interpretation of History;* S. Mathews, *The Spiritual Interpretation of History*, Chap. i; J. T. Shotwell, *An Introduction to the History of History*, Chap. xxvii; C. Becker, "Some Aspects of the Influence of Social Problems and Ideas upon the Study and Writing of History," in *Publications of the American Sociological Society*, 1912.

gradual improvement of reason, the successive advances of science, the vicissitudes of learning and ignorance, which are the light and darkness of thinking beings, the extinction and resuscitation of arts, and the revolution of the intellectual world." A notable impulse to this line of approach was given by the French sociologist, Auguste Comte, who worked out a philosophy of history based on the general conception of the major stages in the evolution of mental attitudes and interpretations, which he postulated as the theological, metaphysical and scientific. An even more important contribution was made by G. Stanley Hall in his development of genetic psychology, which was built upon the notion that the evolution of the human mind might be studied historically from the background of its origins in the mental life of the earliest organisms to its present state. Genetic psychology was supplemented by social psychology, as advanced by Bagehot, Tarde, Durkheim and others. W. E. H. Lecky, Andrew D. White, and John W. Draper aroused much interest in this field by their assaults upon obscurantism and their presentation of the intellectual progress of Europe.[97]

The first contemporary historian to devote systematic attention to this field was Karl Lamprecht of Leipzig. Lamprecht admits the general anticipation by Comte, but he worked out a far more elaborate scheme. To him the basis of any adequate periodization of history is to be found in the prevailing collective-psychological dominants that have succeeded one another in history. These are what give character to the culture of each period, as well as preparing the way for that of the next. In looking over the course of German history Lamprecht distinguished some six major periods in the evolution of the collective psychology, the primitive or symbolic, the early mediæval or typical, the late mediæval or conventional, the age of the Renaissance and Reformation or individualistic, the period from the Reformation through Romanticism or the subjective, and that since the Industrial Revolution, distinguished by "general nervous tension" and groping, but not as yet organized about any dominant socio-psychological principle. Though he originally postulated and elaborated this scheme to apply to German history alone, he was later pleased to find it well adapted as a framework about which to organize the general history of human culture.[98]

[97] Robinson, *The New History*, Chap. iv; *Sociological Review*, July, 1921, pp. 152–6, 163–7; *The Open Court*, July, 1922, pp. 423–0, August, 1922, pp. 497–500.

[98] *Evolution in Modern Thought*, pp. 260–62; K. Lamprecht, *What is History?* Chaps. ii, iv–v.

While admitting the validity of Lamprecht's general thesis that the dominant socio-psychological traits of any era constitute the most fundamental basis about which to organize the trends in cultural development as a whole, many historians in sympathy with Lamprecht's general point of view have held that his particular interpretation is too rigid, subjective and schematic to be capable of accurate application to the interpretation of the intellectual history of Europe. They look upon it as one more example of that somewhat subjective effort to divide the history of mankind into "stages" of development, which has characterized much of the anthropological, sociological and culture-historical writing on social and cultural evolution, particularly among German writers, and has frequently sacrificed specific accuracy in the interest of order, clarity and simplicity of organization and exposition. This has led to the development of a more pragmatic and flexible method of organizing and presenting the intellectual development of Europe, namely, a study of the actual nature and changes in the prevailing opinions and attitudes in western society from oriental times to the present day, without any commitment to a special type of interpretation or any rigid prearranged scheme of organization. In executing this newer and more scientific approach to intellectual history the most active figure has been Professor James Harvey Robinson, formerly of Columbia University. Professor Robinson developed his interest and competence in this field in connection with an original course in the history of the intellectual class in Europe, which he initiated a generation ago as an experiment, and which grew into much the most popular and influential course ever offered in the department of history in that institution. His delimitation of the field and his general conceptions as to its nature and scope can best be discovered by consulting the syllabus which he prepared for use in connection with this course, entitled *An Outline of the History of the Western European Mind.* This he amplified somewhat in his *Mind in the Making,* and *The Humanizing of Knowledge,* which have done more than any other works to arouse an intelligent popular interest in this field. His long promised *magnum opus* has not yet appeared. Rather the substantial scholarly products of his stimulus are to be found in the achievements of his students and disciples, the most notable of which are the recent works of Preserved Smith on the period of Humanism and the Reformation, of Lynn Thorndike on the *History of Magic and Experimental Science,* and of Miss Ornstein on the rise of the Scientific Societies in the seventeenth and eighteenth centuries. A number of penetrating writers such as Taylor, Bury, Burr, Becker, Haskins and others seem to have developed

an interest in the general history of ideas, quite independent of Professor Robinson.[99]

While it is to Professor Robinson and his followers that we owe the demarcation and cultivation of intellectual history as one of the most promising fields of historical study, there have been many notable contributions to the subject by those who have in many cases not been aware of the formal existence of such a line of historical activity, but have been led on by an interest in some phase or period of the history of thought. As representative of such labors which have enriched the content of intellectual history might be mentioned the works of Lévy-Bruhl, Wundt, Goldenweiser, Bartlett, Radin, Marett and Wissler on primitive thought; the contributions of Breasted, Erman, Rogers, Robertson Smith and Winckler to the thought of the ancient Orient; the studies of classical thinking by Gomperz, Christ, Aust, Zeller Wissowa and others; Harnack's great history of Christian dogma, Lea's study of the mediæval Inquisition, and the works of Taylor, Poole, Rashdall and De Wulf on mediæval thought; the monumental surveys of Humanistic scholarship by Voigt and Sandys; the studies of the rise and influence of modern Rationalism by Lecky, Morley, Benn and Robertson; Merz's unmatched study of European thought in the last century; Stein's histories of modern philosophy and of social philosophy; and the histories of national thought by such writers as Fischer, Lévy-Bruhl, Faguet, Croce, Patten, Stephens, Riley and others. In no other field of history are the sources so rich as those for intellectual history, while the secondary works mentioned above are not surpassed for scholarship by the products of any other group of historians.[100]

3. THE HISTORY OF SCIENCE

Closely related to intellectual history is the history of science. Indeed, there is almost a sequential relation between them, because the prevailing intellectual attitudes will generally determine the state of the development of science and the position accorded to it in the cultural complex. Naturally, the history of science has as yet scarcely attracted any favorable or fruitful attention from professional historians. The historians have been more in touch with the literary and university traditions, which, until very recently, have looked scornfully upon natural science. In fact, at the present

[99] H. E. Barnes, "Psychology and History," loc. cit; and by the same, "The Historical Philosophy of James Harvey Robinson," in *Humanity and Its Problems*, July–August, 1924.

[100] *American Journal of Psychology*, October, 1919, pp. 357–9, note.

time in many universities the student majoring in natural science is stigmatized by the B.S. degree, while his more urbane associate who has successfully wrestled with the hortatory subjunctive and the future periphrastic is honored with the traditional A.B. degree. The Industrial Revolution and the applications of our growing scientific knowledge, which have revolutionized modern material culture, have made it increasingly difficult, however, for the historian to ignore the ever-growing importance of science in the development of man and society. Slowly a few of the more progressive historians have joined with scientists in beginning the cultivation of this extremely significant phase of cultural history, but up to the present time most of the work in this field has been done by the scientists, not always with the best results, because of lack of proper training in historical method and expression.[101] Some important representative contributions made to the history of science by scientists are the general histories of science by Dannemann, Sedgwick and Tyler, and Libby; the valuable essays on various phases of the history of science and thought edited by Dr. Singer; the surveys of ancient science by Cantor, Milhaud, Bouché-Leclerq, Berthelot and Duhem; the investigation of mediæval science by Duhem, Thorndike and Haskins; Shipley's monograph on the rise of modern science; and Merz's remarkable survey of the growth of contemporary science in Vol. II of his *History of European Thought in the Nineteenth Century*. In addition to these works on particular periods of the development of science there have been special works covering the history of some particular science, as, for example, the works of Locy, Cajori, Garrison, Mach, Osborn, Thorpe, Bauer and others on the history of biology, mathematics, medicine, physics and chemistry. In particular, there should be mentioned the notable work of George Sarton and Frederick Brasch in stimulating active interest in the history of science on the part of both scientists and historians, Sarton's important activities as an editor and investigator in the history of science, and the notable bibliographic work done by Dr. Aksel G. S. Josephson on the history of science.[102]

A considerable number of progressive historians have evinced an enthusiastic interest in the history of science, such as Lamprecht and

[101] H. E. Barnes, "The Historian and the History of Science," in *Scientific Monthly*, August, 1920.

[102] For an admirable bibliography of the work achieved in the history of science see A. G. S. Josephson, *A List of Books on the History of Science in the John Crerar Library*, 1911, and subsequent supplements. Current progress can best be followed by consulting George Sarton's remarkable periodical, *Isis*, which is devoted to the history of science and is particularly rich in bibliographic material.

his followers in Germany, Henri Berr and his group in France, F. S. Marvin in England and James Harvey Robinson and his disciples in the United States, to whom in this country should also be joined the names Burr, Breasted and Haskins. There have been, however, but two comprehensive works of enduring significance produced by professional historians dealing with the field of the history of science, namely, Lynn Thorndike's *History of Magic and Experimental Science during the first Thirteen Centuries of the Christian Era,* and C. H. Haskins' *Studies in the History of Mediæval Science.* It may be safely predicted, however, that historians can no longer systematically ignore the history of science, and a generation hence it may well occupy as much of their attention as the history of constitution-making, something which seems forecast by the giving over of special sessions of the American Historical Association to the history of science.[102]

4. THE HISTORY OF TECHNOLOGY

It is obvious that the history of technology, especially in relation to its bearing upon changes in culture and social institutions, is intimately associated with the history of science. If one regards technology in the broad sense as generally identical with applied science, it is evident that natural science makes its contact with practical life and culture chiefly through the medium of technology. The importance of technology for history can be readily shown by calling attention to the fact that the history of progress in material culture is little more than a record of the development of technology. It is the available technique which determines the degree to which man can conquer and exploit nature and adapt it to his use, which achievement is material culture in its dynamic setting. And whether or not one cares to accept the hypothesis of the determining nature of material culture in its relation to other cultural factors and human institutions, it can scarcely be denied that material culture is an extremely important conditioning factor affecting all other aspects of human life and expression. The two major stages in the progress of technology have been the development of the tool, and its displacement by the machine. The great and classic illustration of the revolutionary influence of changes in technology is, of course, the Industrial Revolution, which, resting upon a series of scientific and technological

[102] As in note 101. These sessions began at Cleveland in 1919. Especially significant was the joint session with the American Association for the Advancement of Science held at Cambridge in December, 1922. See J. H. Robinson, *Humanizing of Knowledge,* Preface. These meetings have been summarized by Brasch, Thorndike and others for *Science* each year.

changes in spinning and weaving, iron and steel manufacture and transportation methods, has profoundly altered the whole complexion and direction of modern civilization.[104]

Important as the history of technology might be, then, for an understanding of cultural and institutional development, it must be admitted that historians have not as a class seriously interested themselves in this field, a situation which is not surprising when one reflects that while for generations all books on modern history bestowed many chapters on the relatively insignificant episode of the French Revolution, the first general textbook to include even a chapter on the Industrial Revolution was Robinson and Beard's *Development of Modern Europe*, published in 1907. Nevertheless, the problem has been attacked from various angles and notable contributions have already been made. The archæologists and cultural anthropologists have done much to supply us with a knowledge of the origins of human technique—the appearance and development of various tools —and certain apparent laws or processes of the origin, development and transmission of material culture. Some of these data in their earlier form were brought together in a theoretical and descriptive synthesis by Otis T. Mason in his *Origins of Invention*, and have recently been popularized in more modern fashion in the works of the Quennells and Wissler. From the so-called "prehistoric" period to the Industrial Revolution little has been done except in specialized histories of various lines of technological advance. The history of the mechanical progress involved in the Industrial Revolution has been worked out in such books as Cochrane's *Modern Industrial Progress*. Then there have been various notable and indispensable studies made of the history of specific types of technical progress, such as that in the textile industry, the iron and steel industry, transportation methods on land and sea, the modern chemical industry, the coal industry, the rubber industry, the application of modern methods of exploiting electricity and so on. General histories of technology have been executed by Professor Vierendeel, Admiral Fiske and Professor Marshall. A profound and suggestive effort has been made by Professor Thorstein Veblen to carry further the impulse of Karl Marx and visualize the process of technological evolution as a whole and set it in its proper place in cultural history and socio-economic evolution, as well as to find in it certain important suggestions as to

[104] T. Veblen, *The Place of Science in Modern Civilization*, Chaps. i-ii; *The Theory of Business Enterprise*, Chap. ix; Robinson and Beard, *Development of Modern Europe*, Vol. II, Chaps. xviii, xxxi; Hayes, *Political and Social History of Modern Europe*, Vol. II, Chap. xviii.

the solution of some major economic and social problems of the present day. His attitude is less thoroughly and effectively developed by such writers as Hobson, Sombart and Taussig. One would probably not be reckless in predicting that within a generation professional historians will be undertaking in a serious and systematic manner the task of investigating the relation of technical development to human and cultural evolution. This is foreshadowed in the interest already shown in the subject by historians such as Lamprecht, Berr, Robinson, Marvin, Shotwell and others, though, unfortunately, their interest has as yet borne little concrete literary fruit.[105]

5. ECONOMIC HISTORY

The history of economic processes and institutions is directly related to the history of technology, inasmuch as our economic life is the product of the application of the existing technique to the problems of the exploitation of nature, as conditioned by certain social attitudes and institutions bearing upon such things as the ownership of property and the differentiation and status of economic classes. The economic historian, then, must start with the aid of the technician and end with that of the sociologist. The history of the economic life of peoples is almost entirely a development of the nineteenth century. Economic life, like the data of science, has savored of the commonplace and has been disdained by the historians whose romantic imagination and literary traits have inclined them towards the majestic achievements of kings, generals, statesmen, diplomats and gentlemen. The earliest interest in economic history came incidentally as an aspect of the rise of economic science in the period of Mercantilism and Physiocracy, during which the writers illustrated their points by more or less dubious economic history. The best of this sort of work appears incidentally in Adam Smith's *Wealth of Nations*. Montesquieu was impressed by the importance of commercial relations in the development of man and culture, and Raynal shortly afterward attempted to estimate the importance of the expansion of Europe and the Commercial Revolution for European history. It was in the spirit of Montesquieu that Heeren, the brilliant Göttingen professor, wrote the first great book on economic history—his history of antiquity in the light of the economic life

[105] See my *Social History of the Western World*, pp. 9–10, 98–119, and bibliography included; Müller-Lyer, op. cit.; J. T. Shotwell, "Mechanism and Culture," in *Historical Outlook*, January, 1925; and J. M. Clark, "The Empire of Machines," in *Yale Review*, October, 1922.

and commercial relations of the time. Some further interest in economic history was stimulated by the controversy over trade policies in the first half of the nineteenth century, and by the development of the German school of historical economists, but real interest in economic history came chiefly after the Industrial Revolution had exerted sufficient influence to call attention to the great significance of economic factors in history.[106]

In the development of economic history there have been two major stages or types. The first was represented by the carrying over of the concepts and practices of descriptive political history into the realm of economic history. The succession of economic events was described and chronicled in a purely narrative fashion, if the treatise was a general one. In other cases the minute monographic investigation of some narrow problem in political or diplomatic history was paralleled in economic history by an intensive study of the development of some particular economic institution or practice, or its special manifestation at a specific time. In either case, while the scholarship might be of a most severely accurate and disciplined sort and the special contribution of real, if limited, importance, there was relatively little effort to relate the economic activities described to the general institutional life of the society as a whole, or to portray the historical development of man and society as an interplay of economic and other factors in cultural growth. Examples of this type of economic history may be found in such well-known works as those by Rogers, Gibbins, Ashley, Cunningham, Unwin, Warner, Inama-Sternegg, Mavor, Bogart and Lippincott; and in monographic works too numerous to be cited here. The most ambitious work along this line of approach has been the series on the general economic history of Europe from the earliest period by Georges Renard and his associates. A more significant, dynamic and synthetic type of economic history has gradually been built up which does make the effort not only to narrate the progression of economic events, but also to describe the evolution of economic institutions and to indicate, as far as possible, the interrelation of the development of economic institutions and factors and other social influences and forces. While there had been earlier anticipations of this approach from Aristotle onward, the definite formulation of this attitude was the contribution of Karl Marx, though

[106] Fueter, op. cit., 475–83; Gooch, op. cit., pp. 584–5; Robinson, *The New History*, Chap. v; Gide and Rist, *History of Economic Doctrines*, Book IV, Chap. i; L. H. Haney, *History of Economic Thought*, Chap. xxv; E. R. A. Seligman, *The Economic Interpretation of History*; H. E. Barnes, "Economic Science and Dynamic History," in *Journal of Social Forces*, November, 1924.

work from this angle can be carried on without any adherence to the socialistic theory of economic reconstruction which Marx postulated, as may be seen by the fact that the most important work done in this field has been the product of writers like Schmoller, Sombart, Bücher, Weber, Levasseur, Hobson, Webb, Hammond, Tawney Veblen, Commons, Gras and others who have been leading critics of Marxian socialistic doctrine.[107]

It is evident that this more highly developed type of economic history must be based upon an adequate knowledge of sociology, which alone can furnish the writer with a sufficiently broad grasp upon the laws and patterns of inter-institutional development to allow him to handle such problems successfully. In general, it may be said that such writers have been successful just in proportion as they have possessed the sociological point of view. In the United States this dynamic approach to economic history has been largely the result of the work of Thorstein Veblen and his disciples, who have made it the basic phase of the new or institutional economics. Perhaps the most interesting fact about the development of economic history of both types is that, with few exceptions, all of the work done in this field has been executed by economists rather than historians. It is of more than casual interest that with chairs of the political, diplomatic and constitutional history of every country and age abounding, there is at the present time but one chair of economic history in all of the history departments of the United States combined.[108]

6. SOCIAL HISTORY

Social history has been another of the more recent additions to the achievement of making history more inclusive in scope and more vital in content. This movement started nearly a century ago with such works as those by Riehl and Freytag, who attempted to arouse an interest in the German past, not so much by recalling the glorious fictions of the Holy Roman Empire or the Hohenzollern mission as by reconstructing the social life and customs of mediæval and modern Germany. This sort of work, particularly in the case of Frey-

[107] Seligman, op. cit.; A. H. Hansen, "The Technological Interpretation of History," in *Quarterly Journal of Economics*, November, 1921; T. Veblen, *The Place of Science in Civilization*, pp. 400–56. Professor W. J. Ashley's *Surveys, Historic and Economic*, contains some acute estimates of the more important books on economic history published prior to 1900; see also A. M. Schlesinger, *New Viewpoints in American History*, Chap. iii.

[108] The professorship in the University of Minnesota held by N. S. B. Gras. Professor Gras' *Introduction to Economic History* is one of the best examples of the dynamic or sociologically oriented economic history.

tag, was less a systematic treatment of the development of social institutions than a collection of word pictures, scenes, anecdotes and episodes descriptive of the intimate daily life of the people. This line of approach has been developed through a large number of studies of the manners and customs of different ages and periods, conceived and executed on the basis of antiquarian interest rather than an aspiration towards broad historical synthesis. A step in advance was taken by those who attempted to give greater space and attention to social factors in the history of a people in works of descriptive narration, conceived and executed more strictly according to historical than antiquarian notions. This type of achievement is embodied in such well known works as Green's *History of England*, Rambaud's survey of French civilization, Blok's *History of the Dutch People*, Altamira's sketch of Spanish civilization, McMaster's monumental work on the national period in American development, and its continuation since the Civil War by his disciple, Oberholtzer.

More significant still is that type of social history which attempts to indicate the general pattern of social development, as generated and modified by the interaction of the various types of institutions and forces and the struggles of different social classes and groups. Such a line of approach assumes social development to be a genetic and cumulative process. Writers who have, in varying degrees, promoted this variety of dynamic social history have been Gothein and Nitzsch in Germany, Fustel de Coulanges, Berr and his associates in France; Maitland, Vinogradoff, Marvin, Slater, Pollard and the contributors to the Traill and Mann volumes in England; Ferrero in Italy; Kluchevsky in Russia, and Shotwell, Turner, Simons, J. T. Adams, Becker, Dodd, Farrand, Hayes, Cheyney, Morison, Schlesinger and Bowden in the United States. The composite series on American social and cultural history edited by A. M. Schlesinger furnishes a good illustration of the status of social historiography in the United States to-day. Some writers, more strictly sociological than social historians, have carried this development still further and have attempted to ascertain the laws of social growth, to detect repetitions in history, and to ascertain the facts as to cause and effect in history; in other words, to reduce history to somewhat of a quantitative and schematic type of genetic social science. Examples of work of this type have been the contributions of Comte, Buckle, Giddings, Lamprecht, Breysig and Wallace.[108]

[108] H. E. Barnes, "Sociology and History," loc. cit.; C. Becker, "Some Aspects of the Influence of Social Problems and Ideas upon the Study and Writing of

7. INSTITUTIONAL POLITICAL HISTORY

These newer trends in economic and social history have reacted in an important manner upon political and legal history. The respectable type of political history in the nineteenth century was primarily anecdotal and episodical, and rarely presented a clear picture of political development, to say nothing of the general ignoring of the relation between political and other institutions and forces in national history. Even where the author was fairly well trained in the science of politics he usually buried the threads of constitutional and institutional development under such a mass of biographical, anecdotal and episodical material that only the most patient and competent reader could make use of his product. The broader and more synthetic view which looked upon political development as largely a resultant of conflicts, pressures, forces and adjustments in society at large led to the appearance of what may be called institutional political history. Here the genetic point of view is adopted, attention centered on institutional changes rather than on episodes and personalities, the leading stages of political evolution indicated, and the economic and social basis of politics expounded. This type of work was anticipated as early as the last half of the eighteenth century by Justus Möser in his *History of Osnabrück*. De Tocqueville, Fustel de Coulanges, Luchaire, Viollet and Flach carried on the work in France. Schmoller, while an economist rather than an historian, stimulated much historical writing of this sort in Germany. Brunner, Waitz and Gneist forwarded this type of work from legal and constitutional points of view. Maitland, Vinogradoff, E. Jenks, Pollard and the Webbs have led the way in England. Milyukoff well represents this trend in Russian historiography. It was also basic in the political analysis in Ferrero's work on Roman history. In America the most extensive contribution to institutional history is to be found in Osgood's history of the English colonies to the Revolution, though it is somewhat archaic in the failure to give adequate attention to the interplay of economic, social and political factors. It did, however, divorce colonial history from the prevailing tendency to bury the development of colonial institutions under an impenetrable shell of biographical, episodical and anecdotal detail. It also stimulated special juristic studies of local political units by competent students. McIlwain has done notable work on the English

History," loc cit.; F. H. Giddings, "A Theory of History," in *Political Science Quarterly*, 1920. Consult the index to Gooch for some of the more notable writers mentioned in the above paragraph.

legal and juristic background of American institutional history. More adequate attention to social and economic factors in the colonial period has been given by C. M. Andrews and J. T. Adams. The closest approximation to such European achievements as those by Maitland and his school and the Webbs is to be found in Beard's monographs on the constitutional and early national period, and his unpublished lectures on American constitutional development, and in the works and lectures of W. E. Dodd. Most suggestive contributions to a prospectus of what is yet to be achieved in American institutional political history have been supplied by Turner, Farrand, Schlesinger and Becker. It must be admitted, however, that no historian has yet given evidence of that grasp upon inter-institutional processes in the growth and operation of political institutions which has been characteristic of such sociological studies of political evolution and political functioning as those by Gumplowicz, Ratzenhofer, Michels, Oppenheimer, Loria and Bentley.[110]

8. LEGAL HISTORY

This more profound approach to the history of political institutions on the basis of economic and social history has also affected the history of law and juristic institutions. Writers of this school have divorced the study of legal development from metaphysical and theological concepts, and have shown the mundane and social nature of legal origins and transformations, indicating how law adjusts itself to changing social conditions at large. Those to whom we owe the most for this epoch-making transformation of legal history are Gumplowicz in Austria; Gierke, Ihering, Brunner, Kohler and Berolzheimer in Germany; Maitland, Pollock, Jenks, Vinogradoff and Laski in England; Duguit and Charmont in France; Vaccaro in Italy; and Holmes, Pound, Wigmore and their disciples in the United States.[111]

9. GEOGRAPHY AND HISTORY

Another very important progressive tendency in recent historical writing has been to bring the pertinent facts of the newer geography

[110] C. A. Beard, *An Economic Interpretation of the Constitution of the United States*, Chap. i; H. E. Barnes, *Sociology and Political Theory*, Chaps. v, vii. Consult Gooch for De Tocqueville, Fustel and Maitland; and see the memoir of D. R. Fox on Osgood, *Herbert Levi Osgood, an American Scholar*.

[111] R. Pound, *Interpretations of Legal History*; F. Berolzheimer, *The World's Legal Philosophies*,

to bear upon the organization and interpretation of historical material. The view that there is a close relation between various geographical factors and the nature and development of human institutions and culture is an old one, which in itself has a history extending from Hippocrates, Aristotle, Strabo and Vitruvius to Ratzel, Brunhes, and Huntington. Some indication of the importance of geography for history has been made clear by anthropogeographers such as Ritter, Ratzel, Semple, Brunhes and Vallaux. The great majority of the activity shown by historians in geography has not been a concern with human and social geography at all, but rather "chromatic politics," namely, a study of the shifting boundaries of political entities and the sites of certain important cities, towns or forts therein located. Slowly, however, the more progressive and dynamic historians have begun to acquaint themselves with the newer physical and human geography and to investigate the interrelation between topography, climate, natural resources and such physical factors and the civilization of any people. Representative examples of such an appreciation are the attention to geographic factors given in the works of G. A. Smith, Breasted, Meyer, Rogers and Myres on the history of the Orient, of Hogarth and Zimmern on Greek history, of Duruy and Ferrero on Roman history, of Harnack on the early history of Christianity, of Lamprecht and Breysig on German history, of Jullian on early French history, of Green and his successors on English history, of Gothein on Italian history, and of Winsor, Payne, Hulbert, Schlesinger, and, above all, Turner and his followers, on American history. Especially interesting has been the effort of some progressive historians to concern themselves with the possible value for their subject of the dynamic theory of climatic influences recently worked out by Ellsworth Huntington.[112]

10. WORLD HISTORY AND THE WORLD POINT OF VIEW

Closely connected with the geographic factor in history has been the recent trend towards eliminating the insularity and provincialism of much historical writing in the past, and the substitution of a world point of view. It is becoming increasingly clear that even the internal political history of one state can scarcely be understood without reference to influences coming from without its boundaries,

[112] A. H. Koller, *The Theory of Environment;* H. E. Barnes, "The Relation of Geography to the Writing and Interpretation of History," in *Journal of Geography*, December, 1921; J. Brunhes, *Human Geography*, Chap. ii; Brunhes and Vallaux, *La Géographie de l'histoire;* F. Thomas, *The Environmental Basis of Society.*

and it is even more evident in this age of easy and rapid contacts of peoples on a world-wide scale that all types of history must, in a real sense, be world history and adopt an international point of view.[113] This salutary departure has been forwarded by the many writers on world politics and international relations in recent years. H. G. Wells has attempted to write a universal history with this point of view dominant at all times. An effort has been made to bring this same thesis to bear upon the history of modern times by more scientific historians such as Fiske, Seeley, Hayes, Botsford, Abbott, Gillespie, Fueter, Keller and Flick, but the most profound and comprehensive attempt to indicate the significance of world history for the development of modern civilization has been the contribution of Professor W. R. Shepherd of Columbia University in his lectures on the expansion of Europe. From this day on, all adequate types of historical work must be in a true sense, if in varying degrees, world history.[114]

11. GENERAL CULTURAL HISTORY

An important contribution to broadening the scope of history is to be found in the increasing evidences of *Kulturgeschichte* in its most general sense, such as the history of art, literature, manners and customs, printing, music and all other expressions of national culture.[115] With such a multiplicity of interests forced upon the historian by the acceptance of the concepts of the new history, it is evident that historical writing in the future must be more and more a co-operative effort to which writers will contribute according to their special interests and training, and the products of no group can be despised if their work is accurate and reliable.

12. HISTORY AND SOCIAL INTELLIGENCE

The last aspect of the new history which we may note here is the recent effort to make history at once scientific and pragmatic, namely,

[113] J. Bryce, Introduction to Helmolt's *The World's History;* and *World History* (Raleigh Lecture); W. R. Shepherd, "The Expansion of Europe," in *Political Science Quarterly*, 1919; J. Buchan, *The Nations of Today*, General Introduction.

[114] The general scope of this course is indicated in Shepherd's article, loc. cit.; the most stimulating books yet written from this point of view are J. E. Gillespie, *The Influence of Oversea Expansion on England to 1700;* and J. B. Botsford, *English Society in the Eighteenth Century*. Cf. also W. C. Abbott, *The Expansion of Europe*.

[115] This type of work has been carried on chiefly by technical and esthetic experts in these various fields rather than by historical students. Historians have gone little beyond the Burckhardt, Symonds, Freytag stage.

useful to the present. Pragmatic history of a sort has been, of course, common in the past, notorious examples being such works as the Book of Chronicles-Ezra-Nehemiah, and Orosius' *Seven Books of History against the Pagans.* More recently the effort has been made to survey history from different points of view, so as to generalize from the assured results of historical scholarship in such a manner as to put the facts of history at the disposal of the statesman, reformer and thoughtful citizen. Well-known examples of such attempts are Marvin's *Living Past,* and *The Century of Hope,* Robinson's *Mind in the Making,* Wallace's *Trend of History,* Wells' *Outline of History* and Van Loon's *Story of Mankind.* Probably most important of all have been the volumes of the Unity Series edited by F. S. Marvin. Whatever one may think of the degree of success contained in such preliminary achievements, it would seem that unless history can lend itself to such pragmatic use when objectively and cautiously exploited, it must be, as far as practical human significance is concerned, essentially "bunk," to employ Henry Ford's already historic epithet. And it would seem that as far as we are concerned to-day the basic practical use of history is to show development from primitive origins, to prove progress in spite of important oscillations and retrogressions, and to demonstrate that the present is so different from the past as to preclude the possibility of drawing many specific analogies for our generation from the past experience of the race. In other words, it is probable that the chief practical utility of pragmatic history is the aid it may render in that laudable effort to lessen the influence of the "dead hand" over those who to-day must plan a more efficient and happy future for the race.[116]

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[116] H. E. Barnes, "History and Social Intelligence," in *Journal of Social Forces,* January, 1924; J. H. Robinson, *The New History,* Chap. viii; *Mind in the Making.*

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J. T. Shotwell, *An Introduction to the History of History.*
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CHAPTER II

HUMAN GEOGRAPHY

By Jean Brunhes
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I. THE PURPOSE OF HUMAN GEOGRAPHY

The progress of physical geography may be called a determining factor in the rise and development, during recent years, of human geography, which scholars of our time look upon not as a new science but as a new field for research, in conjunction with the researches conducted in pure physical geography or natural geography.

What is human geography? It is "the study of the relation between the various forms of human activity, economic, social and political, and the phenomena of physical geography." This formula, which we adopt at the very outset, is not to be taken as a definition, for a definition is necessarily a delimitation, and in human geography it is precisely the question of limits which causes difficulties. Our preliminary formula merely indicates the purpose and object of the new field of study, namely, human beings considered not as individuals but rather in groups and in a body, in relation to terrestrial reality, of which they form an integral part; in other words, the human race considered in its contact with the forces, influences and agencies of the external world. This sort of inquiry has also been undertaken with regard to the other forms of life and is then known as botanical and zoölogical geography. Hence biogeography is divided into three sections.[1]

These questions could not be approached without a perfect knowledge of this world, in which human activity is involved. In other words, without physical geography there could be no substantial human geography. The economic, social and political facts of popula-

[1] See for example E. de Martonne, *Traité de géographie physique* (Paris, Armand Colin, 2nd. ed., 1913), the fifth part of which, entitled *Biogeography*, deals with the flora and fauna in relation to geographical conditions. A new edition will soon appear and will develop still further the geography of plants and that of animals (2nd. ed., 1925, 3 vol.).

tion and material civilization are united with those of a physical nature by bonds of interdependence and repercussion, and precisely these bonds form the subject matter of the researches of human geography. For how would it be possible to study the relations between the earth and man without a thorough preparation, without very definite information on the nature of the soil and the changes in the surface of the earth, without a knowledge of atmospheric circulation and the laws of climate, and without an understanding of the general facts connected in local phenomena with the terrestrial organism?

With this substantial information on the subject of geographical factors of an inorganic nature and, we should add, on the subject of the living world, scholars have taken up in our day the great problem of the influences to which our race has been exposed from without. The setting forth of the "influencing conditions"[2] whereby these *factors act upon the groups, movements and occupations of men*, as well as the restrictive conditions by which they limit their expansion and efforts—this body of observations and ideas, which has long been confined to dissertations and philosophical discussions, has become the very purpose of "anthropogeography." It, too, is a logical consequence of the development of physical geography. This implies one of the most delicate tasks, if we think of the variety of combinations of external agencies and of the diversity of environments, and if, considering the complexity of the human groups, we remember that physical forces as well as human forces are in a perpetual but unequally rapid state of evolution.

Scholars have renounced the system which consists of explaining man and human development entirely by soil, climate and environment. This extreme determinism had to be rejected and the importance of the free play of human activity within natural limits was recognized. Human geography claims the right to discern by positive observation the bond attaching us to the network that surrounds us. This subordination appears in the first relations which the individual had to his environment, those of vital elementary necessity. In order to feed, shelter and clothe himself, he borrowed from surrounding nature whatever it offered him. The life of the individual and that of the groups is composed of thousands of insignificant acts of adaptation and adjustment to geographical conditions. The progress of civilization has not removed even the most

[2] "Natural restrictive conditions" and "natural influencing conditions" are expressions which were formulated, defined and contrasted in a clear manner for the first time in the General Conclusion (pp. 429-439) of the book by Jean Brunhes, *L'Irrigation dans la Péninsule Ibérique et dans l'Afrique du Nord*, (1902).

complex societies from this conditioned relation. On the contrary, in taking root, the human race has always felt this as an increasingly heavy burden; thus the economic life of the modern world always depends upon the distribution of raw materials over the surface of the earth, upon the balance between production, consumption and reserves, and upon the facilities for procuring these necessities. Economic policy with regard to raw materials, such as coal, oil, iron, cotton, rubber, etc., has assumed an increasing importance among all great states.

But, as a counterpart to the previous point of view, adaptation is not to be confused with passivity, and human geography recognizes that human energy should be classed among the most potent factors that tend to change the crust of our planet. Far from giving itself over to the influences that it receives from other factors, mankind has itself become a geographic agency and certainly not the least important. By taking for his needs food and material wherever he finds them, by depriving the soil of its wealth, and by subduing in various ways the natural forces placed at his disposal, man reacts upon his environment, modifies it and gives it his own stamp. By virtue of his cultivation, his settlements and his exploitation he has transformed the physiognomy of the earth; to what degree he has done this is shown by a mere glance at any great modern city.

It has rightly been said that this action has taken place especially on movable bodies, and less on inorganic things than on other living beings. In truth, the world of life is the habitual intermediary for the contact between the physical forces properly so called and human beings; and by his conquests over the vegetable and animal kingdoms man has effected his greatest transformations. By selecting the cultivated plants he has pressed them into service, thus converting a vast portion of savage nature into cultivated land. He would certainly have won more land for his agricultural economy and also more space for breeding animals if he had not been hindered by the sands, the forests, and the glaciers; he has at least, through his works of irrigation, replaced a part of the deserts by cultivated tracts and has studded them with oases. In short, his activity has made itself felt since the beginning of civilization, and scientific progress has made it possible for him to carry his geographic unheavals to the point at which we see them to-day.

Of course a great part of these facts has long been a matter of common knowledge; there is nothing new in them. But in teaching that all these human acts pertaining to the earth's surface should be considered in a coördinated manner as subjects for scientific in-

terpretation and in showing that the question of the relativity of connections between the earth and mankind constitutes a methodical discipline and is one of the sciences of observation, "human geography" has contributed its revelation to the sum total of knowledge.

The human groups, the masses, the agglomerations and the human societies are geographical facts. But their distribution over the surface of the globe is not the mere result of chance. They have taken their bearings and localized, diversified and adjusted themselves, not only because of this psychological factor, which is constituted by rationality and intelligence, the prime movers of human beings, but also because of this contingent of natural dependencies which imposed upon them guiding lines, bounds, and a harmonious order. It is also by the sovereign power of environment that the human elements grouped in one and the same place are most frequently restricted, in spite of their diversity, to analogous or supplementary occupations and receive, as it were, a common imprint. Inversely, the physiognomy of land can be modified in the long run in accordance with the mode of life of the inhabitants and the care or negligence with which they maintain their economic forms.

Human geography inquires then, by observation and interpretation of the facts, to what degree the influence of natural forces is exercised on the various forms of human activity and to what extent mankind has reacted at the suggestion of, or counter to, the natural forces. It demands that the phenomena considered be studied in their evolution, in other words, that the present be explained in its relation to the past. In this light it offers an entirely new manner of considering the development of the human species and groups, as well as their history in the broadest sense. What complicates these questions is that action and reaction are always intermingled, and that the facts frequently imply a renewed repetition of human efforts at a single point of physical space and an endless revival of coöperation, under variable conditions, between nature and man. How were all these problems formerly understood?

II. THE DEVELOPMENT OF HUMAN GEOGRAPHY AND THE WORK OF FRIEDRICH RATZEL

Long before Friedrich Ratzel, who actually originated human geography and who first used the term "anthropogeography," we find ingenious statements on the bond of dependence of man with regard to the soil, the air and the water. This is true of the first

Greek thinkers such as Hippocrates and Aristotle. We also find random observations of this kind in a number of philosophers, historians, and geographers of various periods such as Strabo, Aquinas, Ibn Khaldun, Bodin, Meade, Arbuthnot, and Varenius. In the eighteenth century Montesquieu established a relation between the possibilities of human activity and climatic facts. Buffon raises the question of the inequality of population in various parts of the earth. Buckle assigns a very important part to the physical factor in the determination of historical data, especially among primitive peoples (*History of Civilization in England,* 1857–1861; see the hundred pages of Volume I: "Influence exercised by physical laws over the organization of society and over the characters of individuals."). But from Karl Ritter and J. G. Kohl, in the first half of the nineteenth century, there dates the decisive trend which was to lead to modern human geography. Ritter compiled the first great systematic universal physical geography, thus laying the scientific and factual foundations for human geography. He conceived the fertile idea of the mutual influence of phenomena upon one another in a "harmonious solidarity"; he strove to think of the earth as an entity and especially as the fostering place of refuge for mankind. He goes so far as to admit the predestination of certain districts for their historical rôle. Whatever we may think of his teleological ideas, we must admit that he presented a new, truly geographical interpretation of all the facts dealing with cultivated plants, domestic animals and mineral exploitations.[3] J. G. Kohl saw the bond of correspondence existing between the movements, intercourse, and settlements of men and the forms of the terrestrial model; he studied the attraction exercised by natural productions upon man considered in the various modes of his expansion.[4]

In France during the nineteenth century the great historian Michelet began Volume II of his *Histoire de France* with Book III entitled "Tableau de France," which has remained famous. In it he wished to apply the following principles, which he himself stated in strong terms: "History is first of all geography." And again: "Without a geographical basis, the people, the actors of his-

[3] Karl Ritter, the author of the *Allgemeine Vergleichende Erdkunde,* wrote the first real monographs on economic geography; the complete list (12 in number) with exact references is found in Jean Brunhes, *La Géographie humaine,* 2nd. ed., 1912, p. 299. See also W. L. Gage, Ritter's *Geographical Studies.*

[4] J. G. Kohl, *Der Verkehr und die Ansiedelungen der Menschen in ihrer Abhängigkeit von der Gestaltung der Erdoberfläche* (Dresden and Leipzig, Arnold, 1841). See also the same author's later work, *Die natürlichen Lockmittel des Völker-Verkehrs,* etc. (Bremen, 1878). The very long title is given completely in the work mentioned in the preceding note, p. 300.

tory, seem to be walking in air, as in the Chinese paintings in which there is no ground for people to walk on. It should be noted that this ground or soil is not only the theater of the action. Through food, climate, etc., its influence is felt in a hundred ways. As the nest, so the bird, and as the country, so the man."

But if the thought was often correct, the application of it was frequently too absolute and systematic. Another French historian, H. Taine, in his studies on Greece, England and France, later displayed, with more color and greater verbal flexibility, a determinism which was still more rigorous and in truth excessive.

A more important place, from our point of view, should be given to the French economist, Frédéric Le Play, the real head of the school. This scholar, who devoted all his life to the solution of social problems, introduced the method of positive observation into the examination of economic and social problems. He originated the method of monographic inquiry; the collection of monographs written by him and his students fills numerous volumes under the titles *Les Ouvriers européens* and *Les Ouvriers des Deux-Mondes*. Between 1880 and 1890 there separated from his school an independent branch which at first sought still more rigorously to apply a new and perfected method of social inquiry. The numerous works of this school have appeared in the journal *La Science Sociale* (Paris, Didot) and its leaders were Edmond Demolins and Henri de Tourville. The result of this twofold current of ideas was that more attention was given to the conditions of the "place" in the study of human groups and that more importance was attached to the investigation and classification of the influences of physical environments upon human societies and of human societies upon physical environments.

Friedrich Ratzel, reared in the school of natural sciences, showed himself in his anthropogeographic work an incomparable observer and a great stimulator of ideas rather than a methodical thinker and classifier. The method and the attempt to establish a real classification are found in the *Géographie humaine* of Jean Brunhes.[5]

[5] In the *Géographie Humaine*, 2nd ed., pp. 39–46, the bibliography of all the principal works of Ratzel will be found. See also *Human Geography* (translated by Bowman and Dodge, 1920), pp. 21–35. The first volume of the *Anthropo-Geographie* of Ratzel appeared under this title, as a hyphenated word, in Stuttgar, published by Engelhorn in 1882; the second volume appeared in 1891. By that time the expression "Anthropogeography" had become familiar, thanks to Ratzel, and he wrote it as one word at the head of Volume II. Thus it also appears in the second edition of Volume I in 1899. Volume I bears the subtitle: "Foundations of the Application of Geography to History," while Volume II has the subtitle: "The Geographical Distribution of Mankind."

With Ratzel the important point is the new method of interpreting the facts, and the enormous mass of ideas and examples, from which he is the first to try to extract, so to speak, the geographic essence.

By a conception which is increasingly enlarged, he organized anthropogeography, in accordance with the development of his ideas, as the science of the expansion and distribution of mankind over the earth. The essential principle of his system is the transfer into the domain of human phenomena of the fundamental ideas of every study of the distribution of living forms, that is to say, space, position, bounds, movement and evolution. Thus we note that he devotes extreme care to the determination of the *oikoumene*, that is, the habitable and inhabited earth, with its external limits, its void and its occupied places, its variable density of population in more or less close connection with nature, the configuration and resources of the soil, the effects of climate, etc. He considers the human race and the human groups in a constant state of deplacement, ferment, extension and regression, and from his point of view history is merely a great sum of movements. But he also considers human groups and human societies as developing in natural spheres, occupying a definite place, and requiring a certain amount of territory for the purpose of feeding themselves, subsisting and growing. Great importance is attached not only to the environment but also to the general properties of position, that is to say, to the situation of the groups with regard to the distribution of the continents, the seas and the islands, the zones of climate and of vegetation, the accidents of relief, the great lanes of traffic by land and sea, and hence even the movements and currents of migration.

Anthropogeography has as its essential purpose the description of the regions inhabited by men and the representation of these on the map. This static part is found in the second volume of the *Anthropogeographie*, since Ratzel's mind followed a procedure contrary to the logical order of things in a constituted science. It contains principally, after the definition and determination of the *oikoumene*, the "statistical table of humanity," that is, the whole question of population and of the general facts of distribution, as well as that "of the imprints and works of mankind upon the surface of the earth." In this last chapter there is established the bond which J. G. Kohl had already perceived and which has been so

This seems to be the inverse of the logical order. We emphasize and explain that in our text. The *Politische Geographie* of Ratzel is dated 1897 and has the subtitle: "Geography of States, of Commerce and of War." It is rather a sequel of Volume I than of Volume II of the *Anthropogeographie*.

strongly insisted upon since then, namely the bond between the settlements of man on the surface, on the one hand, and his ways and means of communication, on the other; that is, the connection between the house and the road, and, in its more complex forms, between the village, the city, the large city and the highway, the various means of transportation,—the most perfected devices of modern communication. This conception of the material works of man as affecting the earth's surface was to be taken up again and considerably developed by Jean Brunhes.

The anthropogeography of Ratzel seeks in the second place the geographical causes for the expansion of mankind on the earth and on the sea, the numerous influences favoring, accelerating, or retarding this expansion and consequently introducing to the habitable earth subdivision and variety. Hence we study the movements and evolution of the human groups in their dependence on the soil and thus discover three other categories of external influences. They are: 1. An influence on the movements of man in space, considered in all their relations to the soil, their rapidity, their trajectory, etc.; 2. An influence on the internal development of peoples in the space given to them, whether this space favors their isolation or, on the contrary, their fusion with neighboring groups; 3. An influence on the social organization and economic development of the peoples through the richness of the soil and the more or less considerable facilities for industries, exchanges, and the struggle for existence.

But no matter what the dynamic character of the phenomena, man has striven to circumvent or surmount the obstacles. In many cases his science succeeds in overcoming the evils of climate; the inequalities of the soil are not invincible either. The mountains are no longer insurmountable barriers. They offer easy passages for migrations by virtue of their longitudinal valleys, and at times they even offer refuge. Although man's sphere is essentially the land, the sea has been conquered and civilized and has exercised the greatest possible influence upon history. Instead of opposing the progress of the peoples, it is the "source of their greatness." The rivers, lakes and even the marshes, at first obstructive, have now become auxiliaries. The marshes may serve as places of refuge, as in the case of Amiens, Péronne and Venice. Finally, the forest has been the greatest obstacle to expansion and to the exploitation of the soil. In spite of clearings and cuttings, which have at times been overdone, the forest always forms a screen and is still a factor, in certain continents, in the complete isolation of the population.

"Application of Geography to History" is the subtitle of the first

volume of the *Anthropogeographie*, and it is indeed the "application" which is made clear in that place. It had been Ratzel's starting-point. Geography does not merely assemble the elements of the localization of events; it often gives at least a partial explanation of the facts and human destinies by showing the soil, the climate, etc., interpreted and utilized to the point where they can be given the rare dignity of "historical causes."

Thus the contrast between the desert and the lands that lend themselves to cultivation is reflected and emphasized in the rivalry between nomad shepherds and sedentary farmers. Inversely, as there is no parcel of land which geography can conceive without knowing the great characteristics of evolution, which has given it its imprint, history offers to geography the sum and succession of human phenomena which have filled a given space.

The fact that we now find a people in a certain place does not imply that they always lived there. To anthropogeography is to be attributed the synthesis of "historical movement" (the investigation of the place of origin, issue, radiation, migration, emigration, immigration, movements of passage and internal movements of peoples, intercourse, war, invasions, conquests, colonizations, mass displacements, infiltrations, and transplantations). The progress, the steps in the progressive occupation of land by man, the relation of the emigrating mass to the force of the migration currents, the traces which the latter have left on the globe—all these are questions of anthropogeography. It must especially be noted that the study of the extension of certain objects forming a share of the common patrimony of humanity or of a part of humanity, makes it possible to recognize indications of affinities and of reciprocal communications. To the theory of O. Peschel and Ad. Bastian explaining these relations by the parallel evolution of the "thought of peoples," Ratzel has opposed the geographical theory of borrowing or diffusion, that is, the investigation of the point from which these primitive signs of civilization radiated and the place where they are to be found.

Just as he borrowed from Ritter the "hologeic" idea (that all parts of the earth form an entity), Ratzel borrowed from Herder the conception of universal history embraced in the totality of space and time, a thought which Hans Helmholt tried to realize in his *Weltgeschichte*. Anthropogeography, eminently synthetic and all-embracing, naturally has relations with primitive history, which enlarges our conception of the relations between the earth and man in the sense of duration, as ethnography does in the sense of extension. Like statistics (emancipated from values and graphs that

are too abstract), ethnography is an auxiliary science of anthropogeography. It furnishes it with documents and confirmation. In the *Völkerkunde* of Ratzel, humanity, under the distinctive characteristics of the peoples (races, languages, religions, stages of civilization, manners, and customs), is also considered as a whole, in which there is no lacuna or hiatus but only difference of degree. Never does Ratzel fail to preface ethnographic description with geographic description, which renders the former more intelligible. For the enthnographic facts can only be understood if the bonds attaching them to the soil are not severed, since the connections with the natural sphere constitute the anthropogeographic principle of the classification of peoples.

The consequences of the attempt to use the principles of human geography in the interpretation of political phenomena are found in the *Politische Geographie* of Ratzel, which contains a study of the rudimentary political forms and a study of the states considered in their connection with the soil and in their territorial development. This book is characterized by the conception of the state-organism adhering to the terrestrial surface and at the same time being a human work. Each state is at once a bit of humanity and a bit of soil. Of its two essential elements, one is the peculiar value of the soil which the people constituting the state inhabit, where they work and move, a value which is derived from the physical totality and from the activity of the actions and reactions taking place there. The other is the value and number of the human beings that people the state, a complex whole in which the results of historical evolution, joined with the effects of geographical environment, are combined and totaled. The growth of the states is explained in Ratzel by means of the theory of space and position. The states occupy certain geographical positions and cover certain superficial areas the effects of which are different according as they are more or less favorable, more or less extended and more or less populated. This theory is surely too abstract and insufficient. But what is striking in it—over and above the logical manner in which Ratzel has joined to the geography of states the question of the political domination of the sea, and that of the frontiers considered as the result of movements by which the state develops and diminishes alternately—is the ingenious manner in which he introduces the study of intercourse in the restrictive directions and conditions which nature imposes upon this dynamic human phenomenon. "Circulation" is the movement in space of persons and objects of possession for the purpose of equalizing by exchange the resources and natural gifts of

the earth and of men. But with Ratzel the idea of movement takes precedence of that of exchange and the political point of view takes precedence of the economic point of view. "Circulation," the "conqueror of space," is the precursive agency, concomitant with or consequent to the formation of states, and continues to act forcibly upon their development.

Apparently, then, Ratzel's system turns toward a sort of general biogeography, in which he seeks to form a synthesis of the conditions and even the laws of distribution and expansion of living beings, as the very titles of some of his other works show (*e. g. Die Erde und das Leben, Der Lebensraum*). For example, he seeks to apply in human geography the law of migrations of Moritz Wagner: "The formation of new varieties depends not only upon the sum of the differences of environment with which the living beings are engaged in struggle, but also upon the degree of isolation in which they find themselves with regard to their former congeners." But by reason of the abstractness of this conception and the lack of system in the work, on account of the many later additions, there would be cause to fear that, by the very accumulation of materials, human geography might flounder like an overladen vessel.

The names of Hermann Wagner, A. Hettner, and in the school of Ratzel those of O. Schlüter, E. Friedrich, etc., in Germany, and in America that of Miss E. C. Semple, who will be discussed later, are associated with the criticism, correction, development, demonstration, and orderly arrangement of Ratzel's system. The programs are more or less comprehensive. The largest and also the most personal seems to be that of E. Friedrich, who in his bibliography of statical anthropogeography (*Geographisches Jahrbuch*, XXXI, 1908, pp. 285–461) unites, in a review of the material and spiritual phenomena of adaptation of collective life, the races, the population, all the economic facts, dress and habitation, settlements and agglomerations, the languages, religions, the family, society, the state, art, and diseases.[6] It must be noted also that the course given in 1891 at the University of Berlin by F. von Richthofen on the geography of settlements and intercourse was in reality a course on human geogra-

[6] See also E. Friedrich's *Allgemeine und spezielle Wirtschaftsgeographie*, which contains three maps of the world: *Wirtschaftsstufen* (steps of economic life), *Wirtschaftsformen* (forms of economic exploitation), and *Wirtschaftszonen* (zones of economic activity). See likewise the same author's *Raubwirtschaft: Wesen und geographische Verbreitung der Raubwirtschaft*, in *Petermanns Mitteilungen* (Leipzig, 1904), pp. 68–79 and 92–95. From the special point of view of the present study it is still profitable to consult the work of Kraus, *Versuch einer Geschichte der Handels- und Wirtschaftsgeographie* (Frankfurt a. M., 1905, viii–103 pp.).

phy. Richthofen traced the general relations of man and nature to two classes of phenomena, namely, the occupation of the soil, or settlement, and intercourse. He analyzed them separately and kept them as distinct as possible. Then he studied them in their relation. That was not possible without a previous review of the distribution of mankind over the earth (density of population, races, migrations, spheres of political power, languages, and religions), which illuminated the preponderance of mankind as a geographical factor.[7]

III. THE NEW PART PLAYED BY FRANCE IN THE DEVELOPMENT OF HUMAN GEOGRAPHY

The work and teaching of Jean Brunhes are characterized precisely by a reaction against the too abstract and indefinite features of Ratzel's work.[8] They are in agreement with the tendency which his teacher, Paul Vidal de la Blache, gave to French geographical

[7] *Ferdinand von Richthofens Vorlesungen uber allgemeine Siedlungs- und Verkehrsgeographie, bearbeitet und hrsg. von Otto Schluter* (Berlin), Dietrich Reimer, E. Vohsen, 1908, in-8, xvi–352 pp).

[8] It has been seen how scrupulously I have, in this article, as elsewhere in my books, rendered homage to the German Ratzel and how I have tried to summarize in detail his principal ideas. I must now speak of myself—a more difficult and delicate task. Once for all I wish to declare that I shall treat my work here with all the impartiality and independence of which a man is capable, without exaggeration but also without the false reserve which would not present things in their true light The American publisher insisted that I contribute to this work the chapter on human geography "because," as he said, "of the rôle which I have played in the definition and constitution of this new branch of geographic investigation." I have therefore resolved to speak of my works in an impartial manner as I should speak of those of some one else. I shall merely add, in order to explain, for the benefit of those readers who may not be so well informed as to the beginnings of human geography, the place given to my works here, that the first university chair ever created in Europe or America as a "chair for human geography" was created by the Swiss government of the Canton of Vaud in the Faculty of Sciences of the University of Lausanne in 1907. This chair was created especially for me, and I occupied it from 1907 to 1912. The second "chair for human geography" was also established expressly for me in 1912 at the Collège de France at Paris. I still hold it. These are the undeniable facts, the significance of which could not justly be withheld.

I wish further to mention three very important works which have acquainted the learned French public in an exceptional manner with the ideas of Ratzel. The first, which had a genuine influence upon the whole generation to which we belong, is that of L. Raveneau, "L'Elément humain dans la géographie," *Annales de Géographie* I (1891–1892), pp. 331–347. The second, which appeared after the publication of the *Politische Geographie*, is by Vidal de la Blache himself and bears the title: "La géographie politique à propos des écrits de M. Frédéric Ratzel," *Annales de Géographie*, VII (1898), pp. 97–111. The

science by his vision of the phenomena of the living world. In recalling the concrete idea of the physiognomy of the earth as modified by man, in perceiving not only an intervention of man in the equilibrium of inorganic nature but also that class of relations which places men at odds and in competition with the other living beings, in studying the human facts only in their relation with the surface from which there develop these multiple actions, incessantly repeated, in utilizing the method of the biological sciences, in using, likewise, perfected instruments for his work (exact maps, results of explorations, verification of data), in taking account, as a starting-point, of the general facts of distribution, and in arriving at a sort of "œcology" or conception of the complex bonds existing between a country and its inhabitants, without neglecting the influences from elsewhere—in all these points this doctrine is characterized. But it is a question whether we may call it a doctrine at all and not rather a perspective or point of view, which Vidal de la Blache successfully endeavored to communicate to his students.

Trained in this school, prepared by his various studies on irrigation, on man and the cultivated earth, etc., to understand the changes that man has wrought on the earth's surface, and having always kept in touch with the problems of physical geography, not only through knowledge of the results but also through personal work especially on tornadoes, Jean Brunhes tried to take up human geography quite naturally at its beginning. There was need of order, method, and a principle of classification. In the chaos of the conditions of human life, some general and uniform, others differentiated and quite diversified, there is found an order of increasing complexity, from the first vital necessities (fundamental physiological needs of food, shelter and clothing) to the most complicated social, political, and economic acts. But if the natural facts have a certain effect upon the aptitudes and vocations of human groups, it is because there are intermediary facts by which the contact between the terrestrial activities and the human activities is revealed and by which the influence of the former upon the latter can be explained.

For classification, the guiding element of Jean Brunhes, he limits himself to the human acts which are impressed on the surface of the soil in a visible, tangible, and measurable manner and which an-

third is devoted to the geography of intercourse and was written by a man who combined a noble character with sound scholarship: G. A. Hückel, "La géographie de la circulation selon Friedrich Ratzel," *Annales de Géographie*, XV (1906), pp. 401–418, and XVI (1907), pp. 1–14.

swer the satisfaction of the fundamental needs of the human race. He divides them into six types which may be grouped in pairs: 1. Acts of unproductive occupation of the soil: houses and roads; 2. Acts of vegetable and animal conquest: cultivation and breeding; 3. Acts of destructive economy (*Raubwirtschaft*,—properly speaking, economic rape) comprising all acts of exploitation tending to exhaust raw materials of vegetable, animal or mineral origin, without need or possibility of restitution: devastation of the vegetable and animal kingdom, as well as quarries and mines.

These are the *essential facts*, the material signs of everything in human activity which should be legitimately associated with geography. On this classification, which is his own, Jean Brunhes constructs his entire edifice. Hence he approachs human geography not by the study of collective groups, masses and human races, but by the study of the material works of man on the surface of the earth. Not that we should lose from sight the question of population, for the human masses act with a genuine force upon the crust of the earth, impressing their traces upon it and giving it a sort of irregular lining. The population chart (dissemination and concentration), together with the chart of the distribution of rain, with which it can be compared and on which it can even be superimposed in order to determine the relation, is the first chart of every geographical study of human phenomena. But, according to Jean Brunhes, the population is explained first by the habitation. The habitation directly connected with the natural conditions is the "essential fact." Not only are the essential facts the most simple and most concrete, but they also show the union between the facts of a physical nature and those of the human will. The causes, conditions and repercussions of population will have to be studied much later as the first chapters of the geography of history.

Furthermore the field of "essential facts" is in no sense restricted or narrow. The first category, houses and roads, embraces the whole geography of settlements and intercourse (modes of existence and transportation). The last two categories embrace the greatest part of what was formerly economic geography, freed from the tyranny of catalogues of facts and nomenclatures. Thus relieved, it became properly the geography of human work. In this stage the whole system well merits the name of geography of human activity.[9]

This principle of classification is assuredly geographic. It is the expression of the instantaneous material vision of the relations of

[9] In somewhat the same sense *Natur und Arbeit* of A. Oppel is an economic geography.

nature and man revealed indisputably by the physiognomy of a country. Perhaps it will be found that the divisions are not absolute. Often the quarry and the mine accompany the house and the road, and often the acts of destruction are connected and intermingled with the vegetable and animal conquests. But it has not been stated that the various categories of human phenomena connected with the surface of the earth have no relation to one another. The system remains intact if we pass from elementary facts to those that are more complex. Intercourse is studied with regard to roads, and nomadism as a consequence of breeding. Urban agglomerations are the complexes of the house and the road, and we must revert to this in considering the quarry and the mine, since coal exploitations give rise to agglomerations.

We must judge the method of Jean Brunhes as he has consistently applied it—observation of phenomena, as direct as possible, localization, description, determination of type, delimitation, contiguity, interpretation, comparison, and investigation of causes, physical as well as human. To this should be added—since it is primarily a question of visible and tangible works—photographic documentation as well as documentation by means of maps. We repeat once more, this method is in principle neither psychological nor sociological, but geographical. "For is not localization the reason for the existence of geography? It starts from the idea of place and proceeds prudently toward that of cause. It begins with the 'where' and arrives at the 'why.'" (G. Vidal de la Blache.) The essential facts being given, it is a question of determining what relations they can have to the soil, the relief, the climate, hydrography, and the vegetable and animal environment, and, we should add, with men themselves. From this point of view, the general plans of studies on types of habitations and that of a monograph on coal, all given in the work *Géographie humaine,* should serve as examples representing the proposed method.[10]

We must also agree that it is a wise principle of method and introduction to limit oneself, at the beginning, to determining the

[10] From 1896 to 1902, in an annual series of ten lectures given in the Collège Libre des Sciences Sociales at Paris, Jean Brunhes inaugurated monographic studies of this kind, especially on irrigation and coal. In 1910 Alcan at Paris published the first edition of his *Géographie humaine.* The second edition appeared in 1912, and the third, revised and augmented, with 125 new illustrations, will appear in 1925, also published by Alcan. The same author is also writing, as a geographic preface to the great *Histoire de la nation française* by Gabriel Hanotaux, two volumes devoted to the human geography of France (Paris, Plon); the first volume appeared in 1920 and the second will appear toward the end of 1925.

geographic connections between natural facts and human destinies through the medium of the "essential facts" analyzed in small natural districts. In other words, there should be no great regional inquiries so long as human geography is not complete as a science. We should limit ourselves to restricted and well-chosen fields, according to the advice of Paul Vidal de la Blache with regard to the geography of social facts. The oases of the Souf and of Mzab in the confines of Sahara, the Val d'Anniviers in Switzerland, the African people of the Fang, the Balearic Islands, Bosnia and Herzegovina, Finland and certain groups of primitive peoples of central Indo-China, which he has visited in person, etc., are examples of the type of subject which has been used by Jean Brunhes for purposes of demonstration in his works and in his teaching at the Collège de France.

Assuredly great syntheses can be inspired in a manner quite conformable to the requirements of human geography. Such is the *Tableau de la géographie de la France* of Vidal de la Blache,[11] in which we see the history of a people related to the country that it inhabits, and its adaptation taking place by virtue of habits transmitted and maintained at the point where they originated. The study of the soil, of climate and of cultivation, etc., throws light upon the manners, character, and tendencies of the inhabitants. The natural conditions of environment not only determine the productions, but also exercise their influence on the direction of the great channels of commerce and of population traced in connection with the configuration of the land, the modes of grouping of the population, the nature of its occupations, the position of cities, and the localization of industries. A guiding thought is used in regional description, namely, to develop and coördinate these truths. But such studies demand extensive knowledge, very keen analysis, great precision of choice and judgment, and the combining of these qualities with scientific exactness. All this requires the supreme talent of a Vidal de la Blache.

To Vidal de la Blache is due the proper importance attached to the economic and social idea of the "species of life."[12]

The representatives of the school of Vidal de la Blache, his pupils, who constitute a very notable group of geographers, have published

[11] Volume I of the *Histoire de France* by Lavisse (Paris, Hachette), published separately by the same publisher with illustrations.

[12] Vidal de la Blache, "Les genres de vie dans la géographie humaine," *Annales de Géographie*, XX (1911).

a number of monographs on natural districts or sections, in which a place, often very important, is given to investigations in human geography. Examples are: Emmanuel de Martonne, *La Valachie* (1902); Albert Demangeon, *La Picardie et les régions voisines* (1905); R. Blanchard, *Flandres* (1906); Camille Vallaux, *La Basse-Bretagne, étude de géographie humaine* (1907; J. Sion, *Les paysans de la Normandie orientale* (1909); Levainville, *Le Morvan, étude de la géographie humaine* (1909); Maximilien Sorre, *Les Pyrenées Meditérranéennes* (1913); Pierre Denis, *La République Argentine, La mise en valeur du pays* (1920), etc. Each of these monographs is a large octavo volume, well illustrated and strictly scientific. They represent a collection of great value.[13] We may also mention a very learned book by Lucien Gallois containing a series of short regional monographs: *Régions naturelles et noms de pays* (Paris, Colin, 1907). There is also a cursory, recapitulative volume by Emmanuel de Martonne.

After the death of Paul Vidal de la Blache on April 5, 1918, his son-in-law, Emmanuel de Martonne, collected, grouped and published various studies left by the master under the title *Principes de Géographie humaine* (Paris, Armand Colin, 1922).

This work is composed of three parts: the distribution of mankind over the globe, the forms of civilization, and intercourse. It is accompanied by three novel and important charts in colors entitled: *Milieux, développements autonomes de civilisation.*

In the same year, 1922, Lucien Febvre, professor at the University of Strassburg, with the collaboration of Lionel Bataillon, published (as Volume IV of the collection edited by Henri Berr and entitled *L'Évolution de l'Humanité*) a large, learned work entitled *La Terre et l'évolution humaine. Introduction géographique à l'histoire* (Paris, La Renaissance du Livre).

Febvre attacks especially the deterministic conception of history with regard to geography, which in France at least is no longer held by any geographer. His work, which presents nothing new, might have rendered a real service if it had been published ten years ago. To-day it seems antiquated even at the time of its appearance.[14] More than a year before the publication of these two works, namely in 1921, there appeared the *Géographie de l'histoire, géographie de la paix et de la guerre sur terre et sur mer* by Jean Brunhes and

[13] Most of these works were published by Armand Colin, Paris.

[14] The author himself admits this in part in the note following the preface. See p. xxvi.

Camille Vallaux.[15] This synthetic book surely marks a step forward in the history of human geography.

Perhaps we should mention here the previous works of Camille Vallaux on political and social geography. In two volumes, *La Mer* and *Le Sol et l'État,* he had formulated and discussed the fundamental problems of the geography of political societies. Thus he was prepared to take them up again and to synthetize them even to a greater degree in the new work, *La Géographie de l'Histoire,* in which he collaborated.

This explains why, after general remarks on method, after a general geography of food, supported by agricultural discoveries, and a geography of population, which studies in turn the static facts, or facts of settling, and the dynamic facts, or facts of movement (migration and emigration), this book on the geography of history deals in four chapters with the geographical facts which are directly related to the existence, development and conditions of stability of political societies. It is a question, in the first place, of the relations between the state and the material territory which this relatively new form of human agglomeration covers. In the second place, it is a question of the networks of political routes, geographical as well as historical expressions of the life and survivorship of the states, and of the frontiers marking their limits. In the third place, it is a question of those political and material points in which the states place the central organs of their moral and economic vitality and which are their capitals. Another chapter, which is Chapter X of the book, is entitled: The new solutions: regionalism, federalism, and federations of states.

In the second part the authors examine all of the relations between geography and history, as they have been clearly illuminated by the recent war and the contemporary struggles, that is to say, the positive confirmations, that should be remembered, of the most striking conditions and episodes of the war on land, the geographic observations that arise either from the struggle for the sea and on the sea, or from the great maritime alliances in relation to the policy regarding the oceans.

The chapters that follow contain keen criticism of the idea of races, as well as of those complex groups of human facts taken together under the name of nationalities or nations.

Then, approaching as geographers the problem of "human cohesions," about which the sociologists, philosophers, and historians have

[15] Paris, Alcan, 1921, 8vo; 11 + 711 pp. and 36 maps and diagrams.

so long been disputing, the authors seek to determine what is properly geographical in the present evolution of these complex facts.

They end with a critical examination of the conditions of the European peace. It is apparent how, starting from the most material human realities, such as food, vegetable and animal resources, and human population, they arrive, according to a logical order, at a study, rigorously and consistently geographical, of the problems presented by the existence, aspirations, and present ambitions of the nations.

It is not to be feared that they neglect history, sociology, nad political economy and seek to explain everything by geography. In their conclusion—the last page of the book—they write as follows: "Thus the great war which has just been concluded did not prepare universal peace. But it made indisputably clear the close union between the general politics of the states and national economy. It has not shown that one is the servant of the other. Politics and economics are allied. One is not subordinate to the other. They both develop by virtue of the resources of production and consumption which each region of the globe possesses, joined more and more by necessary interdependence upon neighboring and distant regions. Politics and economics therefore develop by virtue of geography; not, to be sure, by virtue of geography alone, for our point of view is not as exclusive as that. But we claim that in all national or world politics the questions of bread, clothing, and related matters, such as those of coal and oil, will in future have an overwhelming importance. On the other hand, the nations will not be able to subsist unless they have governments. Bolshevist Russia is dying of starvation because it is poorly governed. With all their weaknesses and oversights, the treaty of Versailles and those that followed it confirm one of the most important facts of historical evolution. The economic and social questions play at least as great a part in them as the questions of sovereignty and territory. It is the first time that great international treaties have such a character. Nothing of the kind could be found either in the Treaty of Westphalia of 1648 or in that of Vienna of 1815. This fact, more than the universality of the last war, shows that modern humanity forms a single whole; but a whole does not mean a unity or a harmony, or a fraternity, or a peace."[16]

We add also the judgment of an independent historian, Jacques Ancel, who wrote a long article on the work in question, which he

[16] Jean Brunhes and Camille Vallaux, *La Géographie de l'histoire*, p. 692.

published in *La Géographie* (*Bulletin de la Société de Géographie de Paris*):

"With a critical judgment which from the very first page excludes systematizations in the manner of Taine, Jean Brunhes and Camille Vallaux reject a geographic determinism which would trace all history to natural influences and would reduce to a minimum the importance of the free will of man. At various points they place the reader on his guard. For example: 'Men are linked with the natural sphere not only by virtue of the original aptitudes of this sphere but also by virtue of the human geographic acts which take place by their choice and their own activity' (p. 11). Again: 'If the earth makes man, man also makes the earth through his work' (p. 125). They oppose this determinism of exaggerated simplicity, which may, strictly speaking, be 'a convenient means of exposition' but which is usually an insufficient explanation. For 'the complex fact is not explained by the simple fact; it is explained by the complex fact' (p. 305). And the whole conclusion of the first part sums up this favorite theme, which is the philosophy of the two authors:

" 'If so many erroneous views have been exposed concerning the relation of geography and history, it is not because these relations are not legitimately susceptible of being analyzed geographically, but because there has been a tendency to attribute to these flexible connections too great a continuity in time or too rigorous a similitude in space. The earth certainly rules human activity, but in his turn man rules the earth' (p. 440).

"This constant endeavor of Jean Brunhes and Camille Vallaux to reduce geographic determinism to an insignificant rôle is a very noteworthy fact.

"The distribution will follow precisely from this latter basis of social geography, which the authors boldly introduce among the foundations of the edifice that they construct, namely psychology. In truth, it may be asked whether the placing of the 'psychological factor' here, even in the very broad sense in which the expression is used by the authors, and whether the introduction of the science of the indiscernible in the foundations of a social science does not mean that the structure will have a weak foundation. In any case, no geographical study has given to man and to human liberty so important and so flattering a place. The difficulty lies precisely in giving this imponderable element its rightful place, and we like to believe that it is by reaction against the blind determinism of certain neophytes in human geography that the two professors have decided to place heedless students on their guard. They write: 'The principal psychological fact is therefore this, which is the antithesis of an exact fatalistic determination of human acts by climate and soil: all the groups and details of the natural sphere act on us in the measure and in the sense in which we choose them and interpret them.' " [17]

[17] See Jacques Ancel, "La Géographie de l'histoire," in *La Géographie*, May, 1922, pp. 493–516. For the application of these principles of political geography to regional studies see Jean Brunhes: 1. *Géographie humaine de la France*,

Among the other French geographers who deal especially with human geography we should mention A. Demangeon, Augustin Bernard and Raoul Blanchard.

A. Demangeon, professor in the faculty of letters in the University of Paris, gives to his students instruction and directions which determine works and even vocations. Following the previous researches on habitation by A. de Foville (*Enquête sur les conditions de l'habitation en France, Les Maisons-types,* Vol. I, 1894, Vol. II, 1899); by Vidal de la Blache (*De l'habitation sur les plateaux limoneux du Nord de la France,* 1899; and *Tableau géographique de la France,* 1903, passim), by M. Sorre (*L'habitation dans les plaines littorales du Golfe du Lion,* 1907); and by Jean Brunhes (*La Géographie humaine,* 1910, chap. iii, pp. 89–240, and *Géographie humaine de la France,* 1920, Vol. I, chaps. xiv, xv and xvi, pp. 411–482), A. Demangeon has published especially a substantial study entitled "L'habitation rurale en France, Essai de classification des principaux types," *Annales de Géographie,* Sept. 15, 1920, pp. 352–375, and plates IX to XII. He proposes to classify the houses of France as follows: 1, elementary houses; 2, houses in compact order; 3, houses in dispersed order; 4, houses in elevation.[18] Also in the *Annales de Géographie* (March 15, 1924, pp. 130–150) C. Robert-Muller and R. Capot-Rey published: "Dans les mines de la Sarre: L'habitat et la main d'œuvre."

Augustin Bernard, professor of the geography of northern Africa at the same university, has undertaken in a noteworthy volume an inquiry on rural habitation of the natives of Algeria (*Enquête sur l'habitation rurale des Indigènes de l'Algérie,* Algiers, 1921, 8vo, with a map, 16 plates, photographs and 16 sketches). Awake to all the problems of human geography, he points them out and determines them in his standard works *L'Algérie* and *Le Maroc.* Previously he had published with M. Lacroix *L'Evolution du nomadisme en Algérie* (Algiers and Paris, 1906, XIII+342 pp. and a map) and "Le 'Dry Farming' et ses applications dans l'Afrique du Nord," *Annales de Géographie,* XX, 1911, pp. 411–430.

Raoul Blanchard, professor at the University of Grenoble and

Vol. I of the *Histoire de la Nation française* by Gabriel Hanotaux (Paris, Plon, 1920); 2, *La Tchecoslovaquie· La Terre et les Hommes* (the first of five lectures given in the Union française in 1921 and collected in a volume entitled *La Tchecoslovaquie* (Paris, Georges Crès, 1922); 3. "Les routes nouvelles de l'Annam au Laos," *Annales de Géographie,* Sept. 15, 1923, pp. 426–450 and two maps in the text.

[18] In *Nature* of June 20, 1924, Albert Dauzat published an interesting article entitled "Les Anciens types d'habitation rurale en France, leur répartition, leur formation historique," pp. 53–60, with a map and six figures.

director of the Institute for Alpine Geography, has grouped around him in the midst of the Alps a large number of young geographers; he has constituted a veritable school. He established and now directs the *Recueil des Travaux de l'Institut de géographie alpine,* which has become the *Revue de géographie alpine.* He has published excellent papers on many phases of human geography, on the boundary of the olive-tree, on water-power, on habitation in Queyras, on Corsica, on Vivarais, on the Dauphiné, etc. He has made considerable contributions to the study of cities, having written: "Deux grandes villes françaises: Lille et Nancy, *La Géographie,* 1914, XXX, pp. 103–122"; "Annecy, Esquisse de géographie urbaine," *Recueil des Travaux de l'Inst. de géographie alpine,* 1916, pp. 369–463; "Bordeaux," *Revue de géographie commerciale,* 1917, pp. 323–337, "Nantes et Rouen" (Id., 1918); and "Trois grandes villes de Sud-Est" (Lyons, Marseilles, and Nice), in *Recueil des travaux de l'Institut de géographie alpine, VI,* 1918, pp. 153–210.

The *Revue de géographie alpine* contains a series of urban studies by his pupils, "Le Site de Valence," by Faucher; "Uriage," by Marchal; "Albertville," by Gex; "Briançon," by Petrot, etc.[19]

Of this region of the Alps around Grenoble and Lyons, there have appeared and still appear very valuable studies, such as *La Vie pastorale dans les Alpes françaises, Étude de géographie humaine,* by Philippe Arbos;[20] *Les routes des Alpes occidentales à l'époque napoléonienne* (1796–1815), *Essai d'étude historique sur un groupe de voies de communication,* by Marcel Blanchard;[21] and all the ingenious and well written works of André Allix. Among them we desire to mention the papers relating to fairs, a human phenomenon which Allix was the first one to study systematically. Compare "La Foire de Goncelin," *Recueil des Travaux,* etc., 1914, pp. 299–334; "The Geography of Fairs, illustrated by Old World Examples," *Geog. Review,* New York, XII, 1922, pp. 532–569, 17 figures, maps and photographs; "Les Foires, Étude géographique," *La Géographie,* XXXIX, 1923, pp. 521–563.

In the *Revue de géographie alpine* (IX, 1923, No. 111), C. Robert Muller and André Allix have studied a type of Alpine emigration ("Un type d'émigration alpine, Les Colporteurs de l'Oisans"),

[19] Among his pupils there is also J. Blache.

[20] Paris, Armand Colin (1923), 8vo, 720 pp., 14 plates, 2 colored illustrations, 54 figs.

[21] Grenoble (1920), 8vo, xviii + 416 pp. Paul Girardin, professor of geography at the University of Freiburg in Switzerland brilliantly represents French science in Switzerland. He has paid much attention to problems of intercourse through the Alps. See especially "L'Ouverture du Simplon et les Intérêts français" in *Questions diplomatiques et coloniales,* Oct. I, 1904, 22 pp.

and this original study is accompanied by an excellent questionnaire on emigration in the French Alps by C. Robert-Muller.

The geography of cities, or "urban geography" has developed considerably in France during the last few years. Two of the fullest and best monographs are those of D. Pasquet on London[22] and of J. Levainville on Rouen.[23] Since 1919, the historian of Paris, Marcel Poëte, director of the *Institut d'histoire, de géographie et d'économie urbaines de la ville de Paris,* has established a review, under the direction of himself and Louis Bonnier, devoted especially to the problems of cities. It is entitled *La Vie Urbaine.*[24] An important of this review is devoted to geography, and numerous monographs have been published and noted in it. Mlle. Myriem Foncin has contributed a monograph on a quarter of Paris, Belleville (constituting only a chapter of a longer monograph on Paris, which is in preparation). Camille Vallaux has written on the cities devastated by the war (*Cités devastées par la guerre*), Peronne, Montdidier, etc.; Léon Jaussely likewise (*Les Cités devastées par la guerre, Études de reconstitution*); Michel Lheritier has contributed on Tours (*Tours, ses fonçtions urbaines*); Gaston Rambert on *L'agglomération marseillaise;* J. Levainville on *Caen, Notes sur l'évolution de la fonction urbaine;* and Marcel Poëte on *Besançon, Étude d'évolution de ville.*[25]

Mlle. Myriem Foncin has also published *Versailles, Étude de géographie historique;*[26] Lucien Gallois has published a remarkable collective study on Paris entitled "The Origin and Growth of Paris," and A. Demangeon has written on "The Port of Paris."[27] These studies should be compared with chapters 1 and 2 of the *Régions géographiques de la France* by Emmanuel de Martonne[28] and with the work of Marcel A. Hérubel entitled "Le port de Roscoff, étude

[22] *Londres et les Ouvriers de Londres* (Paris, Armand Colin, 1914, 8vo, 764 pp.). One plate and 23 maps and graphs.

[23] *Rouen, Étude d'une agglomeration urbaine* (Paris, Armand Colin, 1913, 8vo, 418 pp.). One plate of photographs, 24 figures, one map and one plan of Rouen.

[24] *Paris,* Éditions Ernest Leroux, publishers; *La Vie Urbaine* is a quarterly. The annual subscription is 30 francs.

[25] See also Leandre Vailat, *La Maison des Pays de France* (Paris, Flammarion, no date, with 80 sketches by André Ventre); and Georges Risler, "Les Villes à reconstruire, Plan d'aménagement et d'extension des villes," *Bull. de la Societé d'Encouragement pour l' Industrie Nationale,* CXXII, Jan.–Feb., 1915, pp. 51–70.

[26] *Annales de Géographie,* Sept. 15, 1919, pp. 321–341.

[27] *Geographical Review,* New York: Demangeon, X, 1920, pp. 277–296, and L. Gallois, XIII, 1923, pp. 345–367, 7 maps and 10 photographs.

[28] Chap. i, Paris; Chap. ii, *Région parisienne et Bassin de Paris,* pp. 1–25,

d'économie maritime."[29] Among the oldest papers we may mention that of Roger Peyre: "Coup d'œil sur l'origine des villes, sur les causes de leur situation, de leur développement, de leurs transformations et de leur décadence."[30]

We should mention also the most marked new tendencies which represent the extension of the spirit and methods of human geography to new types of investigation. Albert Dauzat, reviewing, consolidating, and promoting the researches of Gillieron, A. Longnon, Edmont, Jaberg, F. Brunot, A. Meillet, Antoine Thomas, Mario Roques, Maillardet, A. L. Terracher, G. Bertoni, etc., published *La Géographie linguistique*, Paris, 1922.[31]

In the category of prehistorical studies, which in France engage such men as Marcellin Boule, the abbé Henri Breuil, and Dr. Capitan, a young geographer, Pierre Deffontaines, is distinguishing himself; he proposes to investigate the relation between primitive history and human geography.[32]

Archeological and art studies will be enriched if not revolutionized by new geographical interests. J. A. Brutails has published a lecture delivered in 1922 on the geography of monuments in France from the Roman and Gothic periods.[33] R. Rey, who promises us a book on the geographical explanation of the cupola architecture of the churches of southwestern France, has written an article on geography and archeology which begins: "The title of this article may surprise the reader," but he shows its legitimacy.[34] E.

[29] *La Géographie*, March and April, 1924; M. A. Hérubel is the author of a series of works: *Le Port de Caen et la Basse-Normandie*, 1912; *La France au travail, En suivant les côtes de Dunkerque à Saint-Nazaire*, etc. Of course a very abundant literature has been devoted to the ports, but most of these studies do not take special account of human geography. We should mention at least the basic works of Paul de Rousiers and Georges Blondel, as well as those of Henri Lorin: *Bordeaux et la Gironde* (Paris, Dunod, 1921, in-8, 148 pp., 9 figures and maps); of Elisio Colin: *Le Port de Paris* (Paris, Dunod, 1920, 8vo, viii + 172 pp.); *Les ports de la Basse-Loire, Nantes et Saint-Nazaire* (Ibid., vii + 194 pp.), and that of Georges Weulersse, *Le Port du Havre* (Paris, Dunod, 1921, 8vo, 199 pp., 19 figures and a plan). A university man, René Moreux, directs the *Journal de la Marine Marchande* (a weekly) which is worth consulting from the geographical point of view.

[30] *Revue des Études historiques*, July–August, 1914, and January–March, 1915.

[31] Paris, Ernest Flammarion, 1922 (Bibliothèque de Culture Générale), 12 mo, 200 pp.

[32] "De la méthode géographique en préhistoire," *Revue archéologique*, 1921, XIV, pp. 171–176; and "Sur la géographie préhistorique," *Annales de Géographie*, January 15, 1924, pp. 10–29.

[33] In *Le Moyen Age*, 2nd series, XXV, January–April, 1923.

[34] In the *Bulletin de l'Université et de l'Académie de Toulouse*, 33rd year, no. 6, March, 1924, pp. 241–242.

Coquide announces a forthcoming volume on the geographical method and the art of Picardy.[35] I have already seen the manuscript.

Auguste Chevalier is a botanist who has been charged with several important missions in Africa and Asia. He is becoming more and more influenced by geographical conceptions;[36] he likes to work with geographers, who are very conscious of what they owe to botanical geography, the respected French leader of which is the learned professor of Montpellier, Charles Flahault.

Neveu-Lemaire, in his *Notes de géographie médicale,* shows that there is a very clear tendency toward geography in the numerous studies relating to diseases, especially tropical diseases.[37]

For all the more reason, certain economic and historical investigations reveal an interpretation and documentation which is becoming increasingly geographical in its nature. Pierre Clerget, Director of the École de Commerce at Lyons, has always been interested in geographical information.[38] René Musset, for example, has also dealt with general questions of economic geography.[39] A geographer, C. Robert-Muller, who in 1917 published *Le Charbon, nos besoins et les moyens d'y reprendre,*[40] delivered in 1924, at the Collège libre des sciences sociales at Paris, four good geographical lectures on coal. Also in 1924, Pierre Deffontaines delivered, in the École d'Administration et d'affaires (directed by Wilbois) a series of lectures on policies with regard to the important products such as wool, cotton, oil, water-power, etc.[41] Under this inspiration have come several geographical volumes of the small Armand Colin collection, especially J. Levainville, *L'Industrie du fer en France* (1922);

[35] The work is to appear in the *Bibliothèque géographique* of Jean Brunhes and Emmanuel de Martonne (Paris, Payot).

[36] See especially Aug. Chevelier, "Histoire et amélioration des pommiers et spécialement des pommiers à cidre," *Revue de Botanique appliquée et d'Agriculture coloniale,* I, 1921, pp. 149–215.

[37] See four articles by this author in *La Géographie* of 1923 and 1924.

[38] Compare several of his works: *Manuel d'économie commerciale, La technique de l'exportation* (Paris, 1919, Armand Colin); *Géographie économique, L'Exploitation rationelle du globe,* (Paris, O. Doin, 1912); and the more recent *Manuel de géographie commerciale,* Hatier, (1924).

[39] "La production de la bauxite dans le monde," *Annales de Géographie,* XXX, 1921, pp. 457–460; "La production de la bauxite aux États-Unis" *Bull. Soc. Géol. et Miner. de Bretagne,* II (1921), pp. 264–272, one figure and maps.

[40] In *L'Enquête sur la production française et la concurrence étrangère,* published by the *Association nationale d'expansion économique,* 23 Avenue de Messine, Paris.

[41] The review *Le Nord textile* has published "La Politique de la Laine" (March 22, 1924, pp. 551–557); and "La Politique du Coton" (April 5, 1924, pp. 653–657).

F. Maurette, *Les grands marchés des matières premières* (1922); M. Sorre, *Les Pyrenées* (1922); and H. Cavaillès, *La houille blanche* (1922). In the same spirit the earlier work of A. Demangeon, *Le Déclin de l'Europe* (1920), was written.[42] A former student at the Sorbonne and of the École des Sciences politiques, André Siegfried, took the initiative in applying the geographical method to the minute study of phenomena that are properly political and partially social.[43] A former student of the École des Chartes, Paul Roussier, has shown to what extent a navigable river is a work of man and how its history should be treated as a study of human geography.[44]

E. F. Gautier, in his very numerous publications on Madagascar, on the Sahara, on Algeria and Morocco, has always included in his researches in physical geography noteworthy observations on human geography, often of an original nature. Chassigneux has studied, as a true geographer, the complex problem, both technical and economic, of irrigation. E. A. Martel, the initiator of speleology, or the science of caves, has always been concerned with the social applications of his discoveries and ideas.[45]

Historians such as Henri Hauser,[46] and especially the brilliant writer Camille Jullian, the author of the *Histoire de la Gaule*, become, in certain parts of their works, almost as much geographers as historians.[47]

It is a significant fact that publishers of popular works appealing to the public at large consider it their duty to secure competent authorities to deal with the problems of human geography. We are familiar with the collection *Guides bleus* (formerly *Guides Joanne*) intended for travelers. Since the death of Paul Joanne, the firm of Hachette has entrusted the series to Marcel Monmarche, a very

[42] A. Demangeon, *Le Déclin de l'Europe* (Paris, Payot, 1920, in-12, 314 pages). See also *L' Empire britannique, Étude de géographie coloniale*, (Paris, A. Colin, 1923, 12mo, viii + 280 pp.).

[43] André Siegfried, *Tableau politique de la France de l'Ouest sous la Troisième République* (Paris, Armand Colin, 1913, 8vo, xxviii + 535 pp., 102 maps and sketches).

[44] Paul Roussier, "Une rivière navigable, La Maine ou Mayenne. Étude de géographie humaine," (*La Géographie*, Nov. and Dec., 1920, 32 pp. with maps and figures).

[45] See Chaps. xxviii and xxix of his *Nouveau traité des eaux souterraines* (Paris, Doin, 1921, 838 pp. and 384 figures).

[46] See especially Henri Hauser, *Les Régions économiques* (i. e., of France), with a preface by Clementel, *Le Fait de la Semaine*, 6th year, Nov. 9, 1918, 12mo, 77 pp.

[47] Compare especially Camille Jullian, *De la Gaule à la France, Nos origines historiques* (Paris, Hachette, 1923, 12mo, 256 pp.).

competent man, and at his desire, for example, such a volume as *Auvergne et Centre* begins with a geographical and historical summary, pp. xv–xliii) written by Pierre Deffontaines, in which human geography plays a very important part. The same publisher has published F. Maurette, *Pour comprendre les paysages de la France* (Paris, 1923) and has revived the series of short numbers by Birot, *Statistiques de géographie humaine comparée.*

It would be unfair to forget that Hachette has for half a century been the publisher of the two Reclus brothers, Elisée and Onésime, and of their brother-in-law, F. Schrader. The latter, to whom we owe important atlases, has always been interested in problems of human geography, particularly in his courses at the École d'Anthropologie. As for Elisée Reclus, he has left that great work, *Nouvelle Géographie Universelle,* comprising 19 volumes. He also published, at the end of his life, and with another publisher (Paris, Librairie Universelle), the six volumes of his *L'Homme et la Terre.* To be sure, the results of all these noble efforts are now out of date. Since the political transformation of the world after the Great War, they have, in part at least, become antiquated. But it gives us pleasure, in speaking of geography in France, to recall the name of this worthy, industrious man, who contributed much toward arousing the interest and respect of the educated classes for geographical studies.[48]

The Universal Geographies which are being, or will in future be published, will reveal new points of view to a large extent. This is already shown in the two volumes of the Quillet *Géographie Universelle* which have appeared (Paris, 1923).[49] It will again be shown with especial clearness in the Colin *Géographie Universelle,* for which the plan was worked out and the collaborators chosen by Paul Vidal de la Blache; this collection in twelve volumes will begin to appear in two or three years under the editorship of L. Gallois. It will represent preëminently the spirit and methods of the French geographical school.

[48] Compare Jean Brunhes and Paul Girardin, "Elisée Reclus' Leben und Werken (1830–1905)," *Geographische Zeitschrift,* Feb., 1906; and "Conceptions sociales et vues géographiques: La vie et l'œuvre d'Elisée Reclus," *Revue de Fribourg,* April and May, 1906.

[49] *Le Monde Français,* 2 large quarto volumes under the direction of Maurice Allain. See *La Bretagne,* by Camille Vallaux; *Les Alpes françaises,* by M. and Mme. Allix; and *Le Midi Méditerranéen et la Corse,* by Benevent.

IV. HUMAN GEOGRAPHY IN THE OTHER COUNTRIES AND ESPECIALLY IN THE UNITED STATES

In Belgium P. Michotte, professor of geography at the University of Louvain, has attentively followed the development of studies in human geography in France. He is also well informed on everything that has appeared in Germany. His discussion of the various methods, found in "L'Orientation nouvelle en géographie,"[50] will always be read with profit.

One of his students, Mlle. Marguerite Lefèvre, has published in France two papers in which she deals in an original manner with the problems of population. In the first she discusses a map of all Belgium, on which she has noted the zones of the various types of population;[51] in the second she discusses a map, which she has partially drawn up, of the density of rural dwellings.[52]

In Switzerland, at the University of Freiburg, Paul Girardin, whom we have already had occasion to mention, is a French geographer, who in his teaching as well as in his publications actively represents the spirit of French human geography;[53] among the works that he directly inspired is that of Hugues de Montbas, *Le peuplement des Alpes suisses, sa répartition et ses limites d'altitude*.[54] Charles Biermann, professor at the cantonal college of Lausanne, and now professor at the University of Neuchâtel, has published interesting monographs on the Valley of Conches and of the Jorat. Among his numerous articles there may be noted one on lacustrine policies.[55] In *Le Globe* of Geneva there have appeared some studies and summaries of lectures on human geography, and it may be said that such articles are being published with increasing frequency.[56]

[50] *Bulletin de la Société Royale Belge de Géographie*, 1921, No. 1, 39 pp.

[51] "Carte régionale du peuplement de la Belgique," *La Géographie*, June, 1921, pp. 1–34, 8 maps.

[52] "La densité des maisons rurales en Belgique," *Annales de Géographie*, XXXII, 1923, pp. 395–417. In Belgium, Kraentzel and Laurent Dechesne (see his *Économie géographique*, Liège, 1920), etc., also endeavor to generalize the principles of human geography.

[53] Paul Girardin collaborated in the first part of the *Géographie humaine de la France* with Jean Brunhes. He has published various studies on urban geography, notably on Freiburg.

[54] With a preface by Paul Girardin (Freiburg, 1919, in-8, xiii+81 pp.).

[55] *Bulletin de la Société Neuchâteloise de Géographie*, 1923, pp. 61–66.

[56] See for example the communications and studies of Raoul Montadon: "L'habitation indigène et paysanne dans ses rapports avec les conditions geographiques," *Le Globe*, LIII, pp. 16–23,

As works published, during and after the war in German Switzerland, we may mention two doctoral dissertations of the University of Zurich, one by Albert Schoch, *Beiträge zur Siedelungs—und Wirtschaftsgeographie des Zürichseegebietes,*[57] and the other by Walter Wirth, *Zur Anthropogeographie der Stadt und Landschaft Schaffhausen.*[58] These contributions and investigations were made under the direction of Prof. Hans Wehrli.[59]

Olinto Marinelli initiated studies in human geography in Italy.[60] Giotto Dainelli, Giuseppe Ricchieri,[61] Adriano Aug. Michieli, G. Anfossi and Almagia have contributed in various ways to this class of investigations. A special place should be given to Attilio Mori, who has written an exceptionally valuable paper on the distribution of population in Sicily,[62] and to Antonio Renato Toniolo, who has dealt especially with the upper Adige.[63]

The principal geographer of the Balkan peninsula is the Serbian Jovan Cvijic, professor at the University of Belgrade, who wrote the fundamental work *La Péninsule Balkanique, Géographie humaine,*[64] as well as very numerous articles, such as "The Geographical Distribution of the Balkan Peoples," and "The Zones of Civilization of the Balkan Peninsula.[65] He has dealt with physical geog-

[57] Zurich, 1917, 8vo, 296 pp. Appendices, map and plate.

[58] Zurich, 1918, 8vo, 174 pp. and 6 plates.

[59] In *La Géographie humaine* by Jean Brunhes (Paris, 2nd ed., 1912) there will be found a list and summary of all the oldest works on human geography dealing with Switzerland. See especially the passage concerning the great publication of J. Hunzika, *La Maison Suisse.* See Brunhes also for the works on Italy, particularly those of Olinto Marinelli, some of which are dealt with at length.

[60] Compare the preceding note.

[61] See especially G. Ricchieri on the conception of regions and boundaries in systematic geography (*Scientia*, July, 1920, pp. 1–12).

[62] A. Mori, *La distribuzione della populazione in Sicilia e le sue variazioni negli ultimi quattro secoli* (*Memorie geografiche di Grotto Dainelli*), Firenze, 1920, 8vo, 190 pp. and 4 maps. In this publication which he directed Dainelli had begun a series of papers on the distribution of population, and he himself wrote a paper on Tuscany: *La distribuzione della populazione in Toscana*, (1917), 260 pp., and 3 figures and maps.

[63] A. R. Toniolo, *Gli Italiani nell' alto Adigi, loro distribuzione ed Espansione in rapporto alle condizioni geografiche della Regione*, (Rome, 1917, in-8, 199 pp. and 3 maps); *L'Alto Adige* (Novara, 1919, 8vo, 75 pp. and 21 figures and XV plates; *Il Tirolo, Unita geografica? Studia di Geografia politica*, (Firenze, 1921, 12mo, 147 pp. and 9 maps).

[64] Paris, A. Colin, 1918, in-8, iv + viii + 532 pp., 31 figures and 9 plates.

[65] *Geographical Review*, V, 1918, pp. 346–361 and 1 map; and pp. 470–482 and 1 map. We must also call attention to the book of the editor of the *Scott. Geog. Mag.*, Marion I. Newbigin, entitled *Geographical Aspects of Balkan Problems in their relation to the Great European War* (London, Constable, 1916; 8vo, ix + 243 pp., with maps); and her *The Mediterranean Lands* (New York, Knopf, 1924, 8vo, 223 pp.).

raphy and also with ethnographical and political geography. He has formed a veritable school, to which should be ascribed the works of the late J. Dedijer [66] and Gaston Gravier [67] and also those of Jovan Erdeljanovic, Ljuba Pavlovic, Tihomir Djerdejevic, Milojevic, etc.[68] Y. Chataigneau, French lecturer at the University of Belgrade, is writing an important work on Bosnia.[69]

Alan G. Ogilvie, English geographer, Jacques Bourcart, geologist and geographer at Paris, and Eugène Pittard, anthropologist and ethnographer at Geneva, have paid much attention to the Balkan peoples, the first one especially to those of Macedonia, the second to those of Albania, and the third to those of Roumania and the various mixed groups of the Dobrüdja.[70]

The French professor Emmanuel de Martonne exercises a very strong influence on geographical studies on Roumania. For twenty-five years he has been publishing books and papers on questions relating to Roumania.[71]

In Poland the very active Eugen de Romer, professor at the university of Lvow; and in Hungary Ludwig von Loczy (died in 1920) and Eugen von Cholnoky have been and are true teachers of the science of geography. Although they have often intermingled problems of a physical, economic or political nature, they have touched upon many problems of human geography (especially Romer). In Czechoslovakia the learned ethnographer L. Niederle, as well as K. Chotek, J. von Danes, J. Moscheles and St. Nikolau, to whom we

[66] "La transhumance dans les pays dinariques," *Annales de Géographie*, XXIII-XXIV, 1914–1915, pp. 347–365.

[67] *Les frontières historiques de la Serbie* (Paris, A. Colin, 1919, 8vo, 164 pp., 6 figures and maps); "La Choumadia, Le Pays, and La Choumadia, La Foret," *Annales de Géographie* XXX, 1921, pp. 271–287 and 351–361.

[68] See the *Bulletin de la Société de Géographie de Belgrade*, Glasnik geografskog drustva.

[69] See Y. Chataigneau, "La Yougoslavie," *Annales de Géographie*, XXX, 1921, pp. 81–110 and 1 map.

[70] E. Pittard has just published, in the collection *L'Evolution de l'Humanité*, edited by Henri Berr, the work *Les Races et l'Histoire, Introduction ethnologique à l'Histoire* (Paris, La Renaissance du Livre, 1924, 8vo, xx + 621 pp., 3 maps and 6 figures). Read especially the first 17 pages of the Preface entitled *Race et migrations*, by H. Berr.

[71] *La Valachie, Essai de monographie géographique* (Paris, A. Colin, 1902, 8vo, 400 pp., 48 figures, 12 plates and 5 maps); "Recherches sur la distribution de la population en Valachie, avec une étude critique sur les procédés de représentation de la repartition de la population," *Bull. Soc. Geog. Rom.*, XXIII, 1902, pp. 1–61 and 2 maps; "The Carpathians, physiographic features controlling human geography," *Geog. Rev.* III, 1917, pp. 418–437, 15 figures and 1 map; "Essai de carte ethnographique des pays roumains," *Annales de Géographie*, XXIX, 1920, pp. 81–98 and a map); "La Nouvelle Roumanie," Ibid., XXX, 1921, pp. 1–31 and a map.

should join the French geographer A. Finchelle, constitute a group which is paying more and more attention to the detachment of properly geographical facts from works of a linguistic, archæological, ethnographical, and statistical nature.

In Russia before the war specialized investigations were pursued with such great success that they placed this country in the first rank for certain sciences, namely archæology, ethnology, and especially the study of soils, or pedology, which, without belonging to human geography, ought to support and favor it. Russia possessed in A. Woeikof a geographer of the first order, a man of vast learning and always lucid expression, who wrote equally well in Russian, German and French.[72]

The Atlas of Finland published by the Finnish Geographical Society is accompanied by two volumes of commentaries and represents one of the finest national geographical works. The conception as well as the execution is excellent. Human geography certainly is not missing in it, but is not sufficiently distinguished from urban and rural economics and statistics. J. Sederholm in a lecture delivered before the Geographical Society and summarized in *Fennia* (32, No. 11, Helsingfors, 1912), under the title "Purpose and Methods of Scientific Geography," has attempted to classify the various types of geographical investigations.

In the Scandinavian countries archæological studies and studies in primitive history are considered important. On the other hand, the progress of agriculture and of the hydro-electrical industries there is unequaled anywhere else. Certain geographers, especially the Swede; Sten de Geer [73] and the Norwegian Hagbart Magnus (of Bergen),[74] are endeavoring to ascertain new facts by means of observa-

[72] See, from the point of view of human geography, his work on Russian Turkestan (Paris, Colin, 1914, 16mo, xii + 360 pp., 16 plates and 1 map); various articles published in French reviews: "La Géographie de l'Alimentation," *La Géographie*, XX, 1909, Oct. 15 and Nov. 15; "De l'Influence de l'homme sur la terre," *Annales de Géog.*, X, 1901; "L'étude des sols," Ibid., XVII, 1907; and also "Verteilung der Bevölkerung auf der Erde unter dem Einfluss der Naturverhältnisse und der menschlichen Tätigkeit," *Pet. Mitteilungen*, LII, 1906, pp. 241–251 and 205–270, and 4 maps. See also for Russia A. Haumant, "Les Influences géographiques dans la formation de la Russie," *Annales de géographie*, XXVIII, 1919, pp. 360–372.

[73] *Befolkningens foerdelning i Sverige. Beskriforing till karta i skalan 1:500000* (Distribution of population in Sweden, represented on the map according to the scale of 1:500000) (Stockholm, 1919, 8vo, 296 pp., 18 figures and atlas). See the same author's "A map of the distribution of population in Sweden: Method of preparation and general results," *Geog. Review*, New York, January, 1922, pp. 72–83 and 2 maps.

[74] "Neue Städte in Norwegen," *Festschrift, Eduard Hahn*, (Stuttgart, 1917, pp. 136–149).

tions that are properly geographical. In Denmark the most interesting source for human geography is the very rich and learned collection of the *Meddelelser om Grønland.*[75] We must not leave the field of Scandinavian science without mentioning the invaluable critical information in the field of human geography which the Central Asiatic explorer, Sven von Hedin, introduces in his works.

Before entering upon the Anglo-Saxon countries we must declare expressly that here and there, in countries other than those mentioned, there have appeared tendencies of thought and of work which are in direct relation to those of human geography. We may be excused for not giving in this place a complete summary of the subject, which would take us beyond the limits of this short chapter. But as examples we may at least quote the Egyptian *Questionnaire préliminaire d'Ethnologie africaine* prepared by the president of the Sultanieh Geographic Society of Cairo, George Foucart,[76] and, in the Argentine Republic, the excellent paper of Artemia V. Lavelli, *Geografia Humana, La habitacion aborigen en la Republica Argentina, del punto de vista de la Geografia Humana.*[77] This work is a thesis presented to the National University of Buenos Aires for obtaining the title of professor of history, which in itself is a sign of the times and an indication of the progress made by human geography.

In the English-speaking countries human geography took some time to develop, but at present it is flourishing to a marked degree, especially in the United States.

In the United Kingdom, an undisputed authority on economic geography, George G. Chisholm, whose work in geography at the University of Edinburgh is well known and whose standard book, *Handbook of Commercial Geography,* has gone through numerous editions, has shown himself more and more concerned with the modern conceptions of human geography.[78]

[75] See especially H. P. Steensby, "Norsemen's Route from Greenland to Wineland," *Med. om Grønland,* LVI, 1917, pp. 151–202.

[76] *Imprimerie de l'Institut français d'Archéologie orientale,* Cairo, 1919, 8vo, xxxi, 152 pp.). See especially Chap. i, *Les conditions du milieu;* Chap. iii, *Vie materielle;* and Chap. iv, *Habitation.*

[77] Buenos Aires, 1917, 8vo, 87 pp.

[78] See especially Geo. G. Chisholm: "Economic Geography," *Scott. Geog. Mag.,* March, 1908, pp. 113–132, with maps and diagrams; "A Hundred Years of Commerce between England and America," Ibid., Nov., 1909; "The Geographical Relation of the Market to the Seats of Industry," Ibid., April, 1910; "Some Recent Contributions to Geography," Ibid., Nov., 1911; "Generalisations in Geography, especially in Human Geography," Ibid., Nov., 1916; *The Goal of Commerce* (The Herbertson Memorial Lecture, delivered at Cambridge, Feb. 28, 1924, reprinted from the summer number of the *Geog. Teacher,* 1924).

The Scottish Geographical Magazine also bears witness to this growing interest.[79] As far back as 1900 the English geographer Hugh Robert Mill had published in it a very interesting paper on comparative human geography.[80]

The *Geographical Journal* of London and the *Geographical Teacher* likewise publish studies in human geography.[81] At the annual meeting of the British Association at Hull, in 1922, Marion J. Newbigin, whose book on the Balkans we mentioned above, delivered before the geographical section an address entitled "Human Geography: First Principles and some Applications." An excellent review of the importance of the geographic factor in history has been executed by the Scottish geographer, James Fairgrieve, in his *Geography and World Power* (1921). Probably the most distinguished geographer in England is Halford J. Mackinder, who has edited a great series on world geography under the title of *The Regions of the World*, and contributed a valuable book on the importance of strategic geographical position in the history of nations in his *Democratic Ideals and Reality* (London, 1919).

In 1918 there appeared *Frontiers, a Study in Political Geography* by Fawcett,[82] and in 1922 there was published the remarkable general work by R. L. Sherlock, entitled *Man as Geological Agent.*[83]

But especial mention should be made here of the man who represents human geography best in England, namely H. J. Fleure, professor at the University of Wales;[84] also deserving of mention are the

[79] See the preceding note and also H. Crawford Angus, "The Geographical Distribution of Labor," *Scott. Geog. Mag.*, March 1908, pp. 133–140; Jean Brunhes, "The Specific Characteristics and Complex Character of the Subject-matter of Human Geography," Introductory lecture upon assuming the chair of human geography at the Collège de France, Paris, translated by E. S. Bates, Id., June, 1913, pp. 304–322, and July, 1913, pp. 358–374; Vaughan Cornish, "London as an Imperial Capital," Ibid., 1921, pp. 164–171.

[80] "The Development of Habitable Lands: an Essay in Anthropogeography," *Scott. Geog. Mag.*, Feb., 1900, p. 128 ff.

[81] A. Perry Brigham, "The Distribution of Population in the United States," *Geog. Journal*, XXXII, 1908; William Page, "Forms of Mediæval Settlements in England," *Geog. Teacher*, XII, 1921, pp. 20–24, a work which is not only historical, as its title might suggest, but genuinely geographical; Henry Toke Mums, "The Economic Life of the Baffin Island (Eskimo)," *Geogr. Journal*, April, 1922, p. 269–273; C. B. Fawcett, "Natural Divisions of England," Ibid., 1917, p. 124–141 and 1 map.

[82] Oxford, Clarendon Press, 1918, 8vo, 107 pp.

[83] With a foreword by A. S. Woodward (London, 1922, 8vo, 372 pp., 12 plates, photographs and maps).

[84] H. J. Fleure, "Régions humaines," *Annales de Géographie*, XXVI, 1917, pp. 161–174; *Human Geography in Western Europe, A study in appreciation* (London, 1918, in-8, viii+263 pp. 13 figures, maps and diagrams); *Geographical Factors* (London, 1921, in-16, 31 pp.); *Treaty Settlement of Europe, Some*

publications of A. J. Herbertson and the considerably older work of A. J. Herbertson and F. D. Herbertson, *Man and His Work*.[85]

In the United States Miss Ellen Churchill Semple, an almost too faithful but enthusiastic and intelligent follower of Ratzel, wrote, as far back as 1899, an article on "The Development of the Hanse Towns in Relation to Their Geographical Environment," in the Bulletin of the American Geographical Society (XXXI, 1899, No. 3); in 1903 she published *American History and Its Geographic Conditions* (Boston and New York, 8vo, 466 pp. and 16 figs.); and in 1911 she published *Influences of Geographic Environment, on the Basis of Ratzel's System of Anthropogeography* (New York, H. Holt, 637 pp.), an important, informative book.

In 1918, Armin Hajman Koller of the University of Illinois, in a short essay, has summarized in uneven fashion the whole history of the theory of environment: *The Theory of Environment: Part I, An Outline of the Idea of Milieu, and Its Present Status* (Menasha, Wis., George Banta, 16mo, 104 pp.). A much more comprehensive work on environmental theories is now being published by Franklin Thomas, entitled: *The Environmental Basis of Society* (New York, Century Co., 1925).

The two well known American geographers, Isaiah Bowman, the explorer of the Andes and director of the American Geographical Society, and Richard E. Dodge, the learned theorist of the teaching of geography, have published an American translation of the *Géographie humaine* of Jean Brunhes, which they had translated, under their vigilant control, by I. C. Le Compte, then professor of French at Yale University. The translation was published by the Rand, McNally Company in 1920.[86]

I can hardly express my great satisfaction with the scrupulous

Geographia and Ethnographia Aspects (London, 1921, 16mo, 83 pp., 11 maps); "Some Types of Cities in Temperate Europe," *Geog. Rev.*, New York, X, 1920, pp. 357–374, 15 figs., photos and plans; "Cities of the Po Basin, An Introductory Study," *Geog. Rev.*, New York, XIV, July, 1924, pp. 345–361, 12 figs., photos and maps.

[85] *Man and His Work, An Introduction to Human Geography* (London, 1899, 8vo, viii + 118 pp.).

[86] *Human Geography* (Chicago and New York, 8vo, xvi + 648 pp., 77 maps and 146 figs.). This American translation has enjoyed a wide diffusion, a fact which has been brought home to me in the following manner. In Tokio I met a Japanese geographer, Professor Odanchi, of the Free University of Waseda, who did not know French and was acquainted with my *Géographie humaine* only in the English translation. He has dedicated to me copies of several of his publications, which are inspired by my methods and ideas, on the rural house and village in Corea (Chosen). The Japanese Government has conducted an official investigation on these same subjects and according to the same principles.

conscientiousness with which the translation was made, and the elegant and exact form in which even shades of meaning have been expressed in a language other than my own.

Professor Bowman has added a new distinctive chapter devoted to the "islands" of the range of the Central Andes. (Chapter VII.)

Human Geography was followed a year later by the *Principles of Human Geography*, written by Huntington. It appeared in 1921,[87] and is a didactic work of high quality, the first truly American treatment of general human geography. Ellsworth Huntington had previously written several works, which, to be sure, seem to us a trifle too dogmatic and deductive. We mention especially *The Pulse of Asia, Civilization and Climate*, and *World Power and Evolution*. But this writer's gift of persuasion and his power of conception should not be underestimated. These qualities, as well as other genuine pedagogical merits, are found also in his recent work.

In 1922 J. Russell Smith published his two profusely illustrated elementary volumes on *Human Geography*. Here the regional tendency appears very strongly, while his previous works are of a more general character.[88] In 1925 he brought out his monumental *North America*, the long awaited treatment of the regional geography of this continent.

The best geographers in the United States, beginning with the physiographer W. M. Davis of Harvard, and R. E. Dodge, professor of geography at Teachers College of Columbia University, realize the importance of human geography. A. P. Brigham,[89] Mark Jefferson,[90] Wallace W. Atwood, [91] who is now president of Clark University, Worcester, Mass. (and one of whose principal objects is to establish there an important center for geographical studies),[92] M. Aurousseau,[93] and several of their colleagues and students, are about

[87] Ellsworth Huntington and Sumner W. Cushing, *Principles of Human Geography* (New York, John Wiley and Sons, 1921, 8vo XIV + 430 pp., and 188 figs.).

[88] Philadelphia, The John C. Winston Co., 1922, 8vo, Vol I, vi + 354 pp. 502 figs. and maps; Vol. II, viii + 434 + 38 pp. and 648 figs. and maps.

[89] *Geographic Influences in American History* (New York, 1903).

[90] See especially: "The Anthropogeography of some Great Cities," *Bul. of the Amer. Geog. Soc.*, XLI, 1909, pp. 537–566; and "The Distribution of British Cities and the Empire," *Geog. Rev.*, IV, 1917, pp. 387–394 and 2 maps.

[91] "Geography and World Relations," *Journal of Geography*, XXI, March, 1922. This paper is the Presidential Address presented at the meeting of the National Council of Geography Teachers, held Dec. 28, 1921, in Washington.

[92] See W. M. Davis, "A Graduate School of Geography," Commencement Address at Clark University, June 12, 1922, Worcester, 1922, 8vo, 26 pp.

[93] M. Aurousseau, "The Arrangement of Rural Population," *Geog. Rev.*, Oct., 1920, pp. 223–240; "The Geographical Study of Population Groups," Ibid., April, 1923, pp. 266–282; "Recent Contributions to the Urban Geography: A Review," Ibid., July, 1924, pp. 444–455.

to create a very important trend of ideas in favor of human geography. W. D. Jones and D. S. Whittlesey have just produced the best American work on economic geography (University of Chicago Press, 1924).

By virtue of the authority and importance of their works, two scholars seem to us to deserve special mention, namely Isaiah Bowman and Douglas W. Johnson.

Isaiah Bowman, the very competent expert on South America,[94] has published studies in human geography dealing with that continent.[95] Having served in the Peace Conference at Paris as chief of the geographical experts attached to the American Delegation, he wrote, in 1921, an authoritative and wonderfully informative book, which for the present, at least, is unique in its class. It describes the situation of the world as a result of the Great War and the treaties that terminated it. The work is entitled *The New World* and offers above all a critical study of political geography, supported by substantial treatment of physical geography and by the most recent facts on economic, linguistic, ethnographic and religious geography.[96] An article on "The Mohammedan World"[97] published by the same author in 1924, may be regarded as supplementary to one of the chapters of this book.

Douglas Wilson Johnson, professor of physiography at Columbia University, who was also one of the American experts at the Peace Conference, published in 1921 a very original book on military geography entitled *Battlefields of the World War, Western and Southern Fronts*, with a preface by General Tasker H. Bliss.[98]

In the *Geographical Review* for April, 1922, under the title "The Geography of History: a Review," D. W. Johnson has set forth

[94] See: *South America, A Geography Reader* (Chicago and New York, Rand-McNally, 1915, 12mo, x + 354 + xxli pp.); *Desert Trails of Atacama* (New York, Amer. Geog. Soc., Special Publication No. 5, 1924, in-8, 362 pp.). The work is well written and profusely illustrated.

[95] "The Distribution of Population in Bolivia," *Bul. of the Geog. Society of Philadelphia*, VII, 1909, pp. 28–47; "The Highland Dweller of Bolivia: an Anthropogeographic Interpretation" (Ibid., VII, 1909, pp. 1–26); "Trade Routes in the Economic Geography of Bolivia," *Bul. of the Amer. Geog. Soc.*, XLII, Jan.–Feb., 1910, 43 pp.

[96] *The New World, Problems in Political Geography* (Yonkers-on-Hudson, World Book Company, 1923, 8vo, vii + 632 pp., 215 maps and 65 figs.) This work, which is very timely, is being translated by Henri and Annette Collin-Delavaud, and is to appear at Paris (Payot) in 1925, as one of the first volumes of the new *Bibliothèque Géographique* edited by Jean Brunhes and Emmanuel de Martonne.

[97] *Geog. Rev.*, Jan., 1924, pp. 62–74, with a plate and six maps.

[98] New York, Oxford University Press, 1921 (American Geog. Soc., Research Series, No. 3, W. L. G. Joerg, editor) 12mo, xxvi + 648 pp., very numerous figures and maps, and one volume of special maps and plates.

in a long article all the essential ideas of the French book *La Géographie de l'Histoire*. He has added to this exact summary a critical discussion which is a model of good faith and courtesy, clearly reflecting the character of the man himself.[99]

In a general way it may be said that the *Geographical Review*, the quarterly organ of the American Geographical Society, is one of the best geographical periodicals in existence. Often half of an entire number is devoted to various papers on human geography.[100] By virtue of the fact that its contributors are selected from all countries, it is becoming more and more an international organ of geographical science.

V. THE DISCUSSIONS RAISED BY THE FIRST SYNTHETIC WORKS ON HUMAN GEOGRAPHY AND SOME OF ITS MOST OPPORTUNE TASKS

It is naturally around the works of Ratzel and Jean Brunhes that the principal discussions developed and that the principal battles of ideas (if we may use so strong a word) were waged.[101] For they are the two authors who have really presented, for the attacks of their opponents, groups of new ideas which are more or less systematic and in any case coördinated.

In Germany and in Austria the initial work of Ratzel was strongly criticized, and although it found many admirers and numerous followers, it had to withstand repeated criticism. In France it was vigorously attacked by E. Durkheim [102] and several of his pupils.[103]

As for the *Géographie humaine* of Jean Brunhes, it has aroused controversies some of which have not yet subsided. In order that the substantial exposition of this subject may be as impartial as possible,

[99] *Geog. Rev.*, April, 1922, pp. 278–293.

[100] See, for example, some of the articles in the number for Jan., 1924: T. T. Waterman, "North American Indian Dwellings," pp. 1–25, 1 map and 20 photos; Isaiah Bowman, "The Mohammedan World," pp. 62–74 and 1 plate; L. H. Dudley Buxton, "Malta, an Anthropogeographical Study," pp. 75–87 and 1 map; Raoul Blanchard, "Geographical Conditions of Water Power Development," pp. 88–100; D. S. Whittlesey, "Geographic Provinces of Angola," pp. 113–126 and 1 map. See in the number for July, 1922: Griffith Taylor, "The Distribution of Future White Settlement," pp. 375–402.

[101] See, for example, the book of Lucien Febvre, quoted above.

[102] *Année Sociologique*, III, 1898–1899, p. 550 ff.

[103] F. Simiand, Méthode historique et Science sociale (Revue de Synthèse historique, 1903). To human geography is opposed "social morphology." To "social morphology" we owe some excellent works, among which we should like to mention as exceptionally good the monograph of M. Mauss and H. Beuchat, "Essai sur les variations saisonnières des sociétés eskimos, Étude de morphologie sociale," *Année Sociologique*, IX, 1904–1905.

we shall quote G. A. Hückel, who before his death had prepared a study on this subject which has not been published. We reproduce the following pages with scrupulous respect for the original text, without any omissions:

"Moreover, what are the 'essential facts'? Where does human geography stop? What are its relations to the sciences of man, which in themselves study these facts of population and of material, economic, social, political and historical civilization, which it adopts as its own object? In the critical part of his *Géographie humaine* Jean Brunhes is especially concerned with circumscribing these new studies. In general he has been reproached, by the geographers, for having made his limits too narrow. In reality he is consciously circumspect and remains rigorously faithful to his positive method. Assuredly there is something systematic in calling attention incessantly to the 'essential facts' as a criterion and touchstone. But the principle of delimitation, which is also that of Vidal de la Blache, is that every human act not presenting a visible relation with the earth or its exterior is excluded. To establish this principle, therefore, means to claim in the first place for geography all the complex human facts which in this sense are more or less geographical. After their preliminary studies the anthropogeographers should accordingly pursue their investigations to that extent, which takes them to the confines and the domain of the neighboring sciences.

"This is precisely what has given rise to controversies. Not with the economic sciences, however. Since most of the economic facts have a geographical character and since most of them come into the category of 'essential facts,' no debate has developed from that source with regard to the limits of human geography. In this connection it is only a question, for the geographers, of borrowing from economic and commercial geography their purely utilitarian and practical considerations. Let us also note that we shall not witness a renewal of the discussion on the auxiliary or independent character of statistics in relation to human geography. Jean Brunhes has settled this question once for all by recognizing statistics as a distinct science, to the method of which geography resorts, as other subjects do too, in order to determine the coefficient of statistical value which, as it has been stated, all the facts of human geography possess.

"Likewise the character of an independent science must be restored to ethnography (or to ethnology, which is a more rational ethnography). But precisely because Jean Brunhes, while recognizing this autonomy, claimed in this respect everything which belongs to the domain of the 'essential facts,' in the first place all the facts of habitation, and everything which, in the more complex facts, depends upon the environment or modifies it, leaving to the ethnographers the clothing, effects, etc., that is, all the accessories which are only in a very relative measure dependent upon geography, he has aroused the protests of the specialists, who were already disturbed by the encroachments of the 'monstrous hybrid' conceived by Ratzel. Again it would be

necessary to agree upon definitions. According to Van Gennep, ethnography is the study, by the method of direct observation and the comparative method, of the present populations or present groups which have not yet reached the stage of production characterized by modern industry. To this will necessarily be added, with the help of the historical method, all the cases of survival, in our civilization, of elements belonging to previous stages of civilization. As for ethnology, it follows upon anthropology, or the study of physical man, the documents of which it utilizes for the purpose of determining the relations of affinity between the various anthropological varieties and of arranging them in a scheme of classification.[104]

"According to Father Guillaume Schmidt, ethnology is a science of groups which has as its object the development of the human mind and the development of external activity guided by the mind, both manifesting themselves externally in the collective life of the peoples.[105] Of the two authors of these quite different definitions, the former claims that the whole field of human geography is a province arbitrarily taken away from ethnography; the latter finds that Jean Brunhes has traced the limits of ethnography and human geography with an exactness and precision which could not be surpassed.

"On the question of races Jean Brunhes has found himself at odds with those who on the other hand reproach him with being too circumscribed. Geography, they say, cannot abandon the specific study of races. But Jean Brunhes excludes the study of races in so far as it is based on somatic observations and considers only the distribution of races. In our opinion it is he who is right. When G. Sergi, R. Biasutti, etc., study the characters, types, and varieties in the ethnic groups, they are anthropologists and ethnologists, and they become anthropogeographers only when they study the distribution, delimitation and dissemination of these facts over the surface of the earth. The fact 'race' is not explained by environment, except in some of its particular circumstances. On it the terrestrial world has not acted and does not act, or at least acts in such an infinitesimal manner that our means of observation are incapable of measuring this action. But it should be well understood, according to us, that the distribution of races and their mixtures are human elements which modify the physiognomy of the globe and that the proportion of the black, yellow, and white races at a certain point is, for example, an anthropogeographic fact. The comparison of the linguistic limits with the geographical boundaries seems to us likewise a question of human geography, although a secondary one.

"In the field of social facts Jean Brunhes is very moderate from our point of view when he claims the right to attach to human geography a certain number of observations on complex social facts, in so far as the 'essential

[104] See A. Van Gennep, *Religions, mœurs et légendes. Essais d'ethnographie et de linguistique*, (4 série, Paris, Mercure de France, 1912, pp. 9–31).

[105] G. Schmidt, "L'ethnologie moderne," *Anthropos*, I, 1906, pp. 134–163, 318–387, 592–643 and 980–997.

facts' explain them by their localization and their own modalities (questions of labor, division of labor, localization of industries, property, parceling out and cultivation of the soil, hygiene, etc.). As was to be expected, a very serious discussion arose as to the respective limits of human geography and sociology. The continuators of the school of Le Play, claiming priority in the discovery of the importance of environment, have lately gone so far as to discuss the very principle of human geography and to claim that its purpose is confused with that of 'social science' and that there is no room between the latter and physical geography for an independent category of research. While recognizing the value of the work of this school, which has to a certain extent appealed to the geographical method, we may judge this opinion just as severely as that of the geographers who, some twenty-five years ago, sought to exclude by every means the human element from geography. Perhaps there is nothing to be changed in the following definitions (excepting a delimitation and understanding between sociology and ethnology): 'Social science has as its object the conditions and laws of the various groups which are required among men by most of the manifestations of their activity.' (Henri de Tourville.) It studies their organization and functioning; it applies itself to the knowledge and determination of the relations existing between the various component elements. But this is on condition that there must be an agreement, so that the relation of coördination of the social facts with the earth may be dependent upon the geographical method, and not upon the sociological method."[106]

"Concerning the relations between geography and history there is nothing in Jean Brunhes which is very different from the conception of Ratzel, except that he explains it and restricts it in the light of the system of the 'essential facts'; however, his thought has never been completely expressed on this point. It tends toward a 'geography of history' which he will give us later.[107] This expression is surely better than 'historical geography.' Furthermore, Jean Brunhes recognizes in the states 'works of human art which partake of the soil and in a certain measure stamp it with their image.' In any case, it is not contestable that in the historical field, human geography has already found favor, and that the historians who complained of its incursions have already been succeeded by the generation of Jullian, Ferrrero, etc., who have the geographical spirit, feeling and vision.

"To collect and condense this geographical spirit which is invading and diffusing not only history but all the various sciences dealing with man, is the next great task of human geography. But it could not be a final delimitation. In tracing the provisional limits, Jean Brunhes has suffered the common lot of those who are guided by moderation. He has been accused

[106] See Philippe Robert, "Le progrès contemporain en géographie humaine, en sociologie, en histoire et l'antériorité des découvertes de la Science sociale," *La Science sociale*, 28e année, 1913, fasc. 100 and 101, 119 pp.; P. Roux, "Guide pratique de science sociale," Ibid., fasc. 102, 74 pp.); "Réponse à Philippe Robert par Jean Brunhes," Ibid., fasc. 103, pp. i–xv.

[107] See a preliminary paper published under this title in the *Revue de Géographie* for 1914.

both of encroaching upon the territory of others and of yielding territory of his own.

"Human geography has become conscious of its object and its method, but it is still in process of elaboration. Such is our twofold conclusion. A certain doubt yet obtains with regard to its bounds, and its classification is still incomplete. Finally there are still fluctuations in its terminology, as for example 'causes, influences, connections, interpenetrations, repercussions, correspondences,' etc., which are used in the analyses of the 'relations.' Can it be said that it has as yet formulated laws? Not if we mean mathematical laws, but it has verified general laws, such as that of the adaptation of all living beings to their common environment and the determination of the geographic conditions. It has been asked whether it is a science or not. It is surely a science, by the very fact that it formulates relations and that its ideal investigation is the coördination of the earth and of mankind. Furthermore, it is an integral part of the science of geography, which could eliminate the human element only by an absurd blindness. 'The idea that the earth is a whole, whose parts are coördinated, furnishes geography with a principal of method, the fecundity of which appears in proportion as its application is extended.' (Vidal de la Blache.) In the class of positive investigations constituting anthropogeography, it is always the earth which is the objective reality. Man, considered in his activity, is regarded at the same time as a subject undergoing influences and as a factor producing modifications and even upheavals on the surface of the earth. We must note that he effects a change even by his presence, by the very fact of the existence of population." [108]

As Hückel rightly says: the geographical spirit has spread to various disciples, while previously it had been almost unknown. "Researches on human facts, such as languages, proper names, and legends, have often been revised and renewed by the historical spirit, that is, by that spirit which considers the succession of forms in time and in their evolutionary sequence. To this inspiration, in itself so rich, there has been added, and is still being added in increasing measure, a new one. . . . To witness the precise forms of terrestrial reality, to witness them in all their material extension and as far as their limiting zones, and to determine their various representations in different points of space—such are the conditions of the geographical spirit. . . . The geographical spirit proceeds from the primary attention to the simultaneous juxtaposition, in space, of distinct types. These types do not necessarily succeed one another, but they may be contemporaneous, and each may correspond to a different geographical environment." [109]

[108] G. A. Hückel, unpublished manuscript written in 1918.

[109] Jean Brunhes, *La Géographie humaine*, Chap. x, Sec. 1, entitled: "L'esprit géographique dans les sciences économiques, sociales et historiques."

By virtue of such general statements, it will be found very profitable to reread attentively the two articles by Vidal de la Blache on the genera of life;[110] it may be said that it is in the directions indicated by these very suggestive pages that geographers should turn some of their future investigations in social, historical and ethnographic geography. If they succeed in deriving inspiration from a teacher such as he was, whose erudition was always marked by penetration and wisdom, they will be assured of fruitful discoveries in fields still quite confused and unfamiliar lying between, and disputed by, history, primitive history, ethnology, "social science," and "social morphology." "A constituted genus of life," declares Vidal de la Blache, "implies a methodical and continued action (hence a very strong one) upon nature, or, to speak in terms of geography, upon the physiognomy of countries." He recognizes that up to the present time the true value of this geographical factor has not been appreciated and that its function has not been studied, "no doubt because of the lack of sufficient terms of comparison."[111] After having, by numerous examples, shown the complexity of the problem and of the many cases offered us by what might be called "the human earth," he has good reason to conclude: "Nothing is less similar to categories and compartments in which nature has designed 'spheres of civilization.'"[112] But it is these "genera of life" which, when they have "prevailed over great territorial sections" and attained "highly developed forms," representing a series of accumulated efforts, now consolidated, determine in their turn definite physiognomical groups and hence true terrestrial units. Thus, on the one hand, it is true that "the genera of life are inscribed in general limits, which are the great natural regions. But they represent something distinct.

They have an autonomy which is attached to the human person and follows it. It is not only the Bedouin and the fellah who consider themselves of different complexion, it is also the Vallachian shepherd and the Bulgarian farmer. Thus with us it is the sailor and the peasant. The soul of the one seems forged of different metal than that of the other."[113] And, on the other hand, there are those dissimilar and contiguous genera of life—now set off in opposition and now closely associated—which not only mark but engender and even

[110] Vidal de la Blache, "Les genres de vie dans la Géographie humaine," *Annales de Géographie*, XX, 1911, pp. 193–212, and pp. 289–304. See also *Principes de géographie humaine*, Part II. Chaps. i, ii, iii and iv, pp. 103–167.
[111] *Annales de Géographie*, XX, 1911, p. 194.
[112] Ibid., p. 212.
[113] Ibid., p. 304.

reinforce the distinctive physiognomy of these small or large groups which we call "regions." By "genera of life" we mean, then, definite possibilities of human labor and possibilities of existence which normally correspond to these types of labor.

In a very exact study Mlle. Andrée Choveaux has described and analyzed a small English "natural region," situated on the Welsh frontier, the Forest of Dean.[114] A splendid example of a physical region, it is a small wooded country which stands out in the midst of the surrounding plains. It has remained, even in our day, a forest with an adapted and traditional genus of life, that of the "foresters." But by the exploitation of iron ore and coal, the Forest of Dean has also become an industrial region. After having held, up to the end of the eighteenth century, one of the first places among the metallurgical regions of Great Britain, it has become to-day almost exclusively a coal region. To the original "genus of life" of woodcutter there has now been added that of "miner-forester." The genera of life remain very distinct, and yet it is the juxtaposition of these very definite genera of life which not only maintains but emphasizes, indicates, and increases the present specific character of this "region." "Foresters" and "miners" consider themselves equally different from their neighbors of the plains.

In view of these conditions we must determine by what means, direct and indirect, the questions of human labor and of "genera of life" are connected with the questions of "regional unities." To be sure, these two types of problems are not in general connected with one another. But we believe firmly that they should at least be logically connected, if not closely bound together.

These questions seem to us to open the two very vast and complex questions toward which the next efforts of investigation should be turned.

In these groups which we call "regions" to-day, the human part is in fact most frequently, if not always, preponderant. A French geographer, René Musset, examining what is called Le Perche, formulates the following striking conclusion: "The name of Perche furnishes a good example of the name of a section the meaning of which has varied with time. It was first a name of a forest or forest country; it has become a country name of agricultural significance, designating a section devoted essentially to breeding, especially as opposed to Beauce, which is particularly a grain country. It is now about to become a country name (as yet not well defined) both agri-

[114] *Annales de Géographie*, XXXI, 1922, pp. 215–233.

cultural and commercial, applied to the section which breeds and sells race horses of the Percheron breed." [115]

It is quite certain that the foundation of the natural regions depends in part upon a certain number of characteristics of a physical nature (soil and climate). But it was the exaggeration of an eminent teacher, A. de Lapparent, to seek almost only physical bases (and especially those of a geological nature) for the definition and explanation of the "countries" of France.[116] We owe to this geographer the rehabilitation of our old French "country" names, but he believed too firmly in the fixity of connections binding these "regions" to the soil, and, in the second place, in the permanence of these "regions." It is in this sense that the very learned and prudent criticism of Lucien Gallois was exercised in his *Régions naturelles et noms de pays. Étude sur la région parisienne.*[117] He showed, as did several others after him for numerous French regions, the "vicissitudes of provinces and countries." [118]

Before all these various works and before his splendid *Tableau géographique de la France,* Vidal de la Blache wrote for the professors of geography, in a review, the *Bulletin Littéraire,* several very significant pages which he used again later, placing them at the head of a manual for secondary instruction.[119] He entitled them "Fundamental divisions of the French soil." Here he discussed for the first time in a concise manner the idea of "natural region," and he attached it principally to geological conceptions. He said:

"It is not by chance that these five fundamental divisions" (he proposed the following: 1. Basin of Paris, including the Morvan; 2. Central Plateau; 3. West; 4. South; 5. Valley of the Rhône and the Saône) "correspond almost exactly with the geological divisions. But it must be admitted that they are justified also by reasons connected with the appearance of the soil, the character of the vegetation, and the grouping of the inhabitants, that is, reasons of an essentially geographical order. Such is indeed the close and profound connection between the two sciences. It is in this relationship that the teachers should seek the principles of method which,

[115] René Musset, "Le Perche, nom de pays," *Annales de Géographie,* XXVIII, 1919, p. 359.

[116] *La Géologie en chemin de fer. Description géologique du Bassin Parisien et des régions adjacentes,* (Paris, Librairie Savy, 1888, 12mo, 608 pp. and 2 maps). See also in his *Legons de Géologie physique* (Paris, Masson, 3d ed., 1907) the regional description of France, pp. 386–457.

[117] Paris, A. Colin, 1908, 8vo, 356 pp. and 8 plates.

[118] See in Jean Brunhes, *Géographie humaine de la France,* Vol. I, Chap. xii, entitled: "Characteristic Examples of the Vicissitudes of Former Territorial Divisions and Names," pp. 369–398.

[119] *La France,* by Vidal de la Blache and P. Camena d'Almeida, Paris, Armand Colin.

in our opinion, can alone give the teaching of geography a character of accuracy and truth.

"Such then is a part of human geography in which it is essential that numerous and minute observations be made with a view to arriving at absolute clearness.

"As for us, we are of the opinion that we must above all distinguish and sometimes even contrast the historical regions and the geographical regions.

"Above the multitude of secondary facts there appear two types of regions which we may be permitted to contrast in designating them by simplified terms, namely geographical regions and historical regions.

"The geographical regions (such as the simplest of the countries) correspond to more or less extensive unities, in which all the parts have a certain number of common characteristics. As a whole they are or tend to be homogeneous. They are therefore legitimately regarded as natural unities. The systematic diagramming of the maps, and especially geological maps, has emphasized and strengthened, in our minds, this distinctive unity.

"The historical regions are on the other hand characteristically composed of several incongruous natural unities. From this point of view they are heterogeneous. They have been fashioned into political unities by the human will (examples: Normandy, Burgundy, Lorraine); but human societies of a political character have such varied needs that the political solidarity not only agrees with but relies upon the disparity of the terrestrial morsels which become their territory, that is, their entire field of construction and provisioning, their zone of defense and their basis of expansion."[120]

In the following manner we may conceive, develop and apply the foregoing principle with regard to a definite section.

"For several years it has been planned, with good reason, to make a study of a vast humanized territory, such as France, according to the regional plan. But these regional studies have often been forced and have become complicated because it has been the desire to superpose, in too rigorous a manner, regions of an historical and human nature and 'regions' or 'countries' of a physical order.

"A sensible method requires that we begin by distinguishing very clearly the type of physical geography and that of human geography, in order to arrive, in a more certain manner, at the study of their connections and repercussions, which after all is the end and crowning achievement of every geographical study. In physical geography the sections are divided into natural regions and into 'countries' which have in general a certain homogeneousness and which rest upon similar or analogous characteristics, geological, topographical or climatological. There are other regions which are what might be called the 'historical regions' and which are in general composed of different or incongruous 'regions' or 'countries.' These groups,

[120] Ibid., p. 484.

usually heterogeneous, have been united by human will into traditional unities.

"With regard to the North East of France, the first description and explanation of the three principal physical regions is found in the present volume: 1. Old mass (Vosges); 2. Lorraine plateaus; 3. Depression of the Rhine; and the two historical agglutinations of those different morsels which have resulted in 1, Alsace and 2, Lorraine.

"Intentionally we emphasize in a strong manner this analytical classification of regions in two groups (physical and historical); for we feel that, after the happy inauguration of the regional method, it is essential to introduce in future this supplementary critical principle for the purpose of maintaining, developing and improving the former." [121]

VI. CONCLUSION: HUMAN GEOGRAPHY, GEOGRAPHY OF HISTORY AND POLITICAL GEOGRAPHY

AN ATTEMPT AT A GENERAL RECAPITULATIVE CLASSIFICATION OF THE SUBJECTS IN THE FIELD OF HUMAN GEOGRAPHY

In closing, we deem it useful to dispel possible confusion of the designations which are very similar to one another and which have often led to misunderstandings. These designations are: History of Geography, Historical Geography, Political Geography, and the Geography of history.

1. The History of Geography is merely a chapter in the History of Sciences. There is a history not only of discoveries, but of systems, ideas and geographical syntheses, as there is a history of physics, or a history of ceramics, or a history of aviation, and, still better, a history of the social sciences, such as has been here undertaken by Harry Elmer Barnes and his fellow contributors.

Often "historical geography" has been called the history of geography, and this expression has been applied notably to the history of discoveries. In such a sense the designation "historical geography" should be absolutely rejected.

2. Historical geography is for us geography studied in its historical development, that is, in the exact sense of the word, the description of the earth through the ages. Let us explain this still more clearly: it is the study of the regional development of a part of the earth's surface either from the point of view of its physical conditions, or from the point of view of the transformations of the political or administrative organization. Hence it seems to us that

[121] From the preface written by Jean Brunhes for the little volume of P. Deffontaines and Andrée Choveaux: *La Région du Nord-Est*, (Paris, Hatier, 1921).

works like the following should be classified as coming under the head of "historical geography":

Joseph Wimmer: *Historische Landschaftskunde. Geschichte des deutschen Bodens mit seinem Pflanzen—und Tierleben von der keltischrömischen Urzeit bis zur Gegenwart* (1905).

Bodo Knüll: *Historische Geographie Deutschlands im Mittelalter* (Breslau, F. Hirt, 1903).

Konrad Kretschmer: *Historische Geographie von Mitteleuropa* (Munich and Berlin, R. Oldenburg, 1904).

We may also mention in this connection the *Historische Geographie* published by Wilhelm Goetz (Leipzig and Vienna, 1904) and various studies published by E. Clouzot, such as: "Anciennes Forêts de la France," *La Géographie,* XVII, 1908; and "Le problème de la formation des villes," Id., XX, 1909; as well as the two volumes devoted by Auguste Himly (the immediate predecessor of Vidal de la Blache as incumbent of the chair for geography in the Faculty of Letters at Paris) to the subject: *Histoire de la formation territoriale des États de l'Europe centrale* (Paris, Hachette, 1894, 2 vols. 8vo). This last work indeed belongs to historical geography. It examines and analyzes the transformations of the political organization of a part of Europe, exactly as one would examine and analyze the transformation of the landscape or population of a region.

In this we find ourselves in agreement with the eminent German geographer, A. Hettner, who in his *Geographische Zeitschrift* (IV, 1898) has defined historical geography as "the geographical description of the countries in the various periods of history." We are also in agreement with such critics as Lucien Febvre (in the work already quoted), as well as with Camille Vallaux in his last work *Les Sciences géographiques* (Paris, Alcan, 1925, see pp. 370–382): also with historians such as the Englishman E. A. Freeman, who has entitled his study on the historical development of the European States: *The Historical Geography of Europe.*

Finally we add that when it is a question not so much of political facts as of material facts which constitute the landscape of a region, we could also call these studies "topography" or "historical chorography." Examples are: A. Grund, *Die Veränderungen im Wiener Walde und Wiener Becken,* Leipzig, Teubner, 1901; and Gradmann, "Das mitteleuropäische Landschaftsbild nach seiner geschichtlichen Entwickelung," *Geographische Zeitschrift,* VII, 1901, pp. 361–377, and pp. 435–447).

3. So far as we are concerned, we ask that the name of "political geography" be reserved for the general and synthetic study of the

geographical conditions of the development of political societies, that is, of the States (see chaps. vii, viii and ix of the *Géographie de l'Histoire* which we have published with Camille Vallaux and which was analyzed above—they deal with geographical factors and conditions of the States: 1. the territory, 2. the road and the frontier, 3. the capital).

But "political geography" properly so called is only, and can only be, a part of this general type of studies devoted to the rôle and the importance of geographical facts in the development of history as a whole, not only political but also economic and social. To this critical examination of the part due to geography in history, it seems to us that we should apply in future the name "Geography of History." It is a phrase reversed, but copied exactly from "History of Geography." The preposition "of" has here its most correct and most normal meaning, namely denoting possession. The "history of geography" is that part of history which belongs to geography, while the "geography of history" is that part of geography which is included in history.

Human geography still remains the most general study of the humanized surface of the planet, that is, of all the facts of the surface which are due to this agency, namely human activity. Human geography, which could be called "first" or "initial" or "essential,"—or more simply "human geography" only—should begin with the positive study of these facts considered in themselves and for themselves. But it could not afford to stop there, for it must still be crowned by the "geography of history," which is the study of the repercussions, economic, political, and social, of some of these facts on the historical development of human societies.

Human geography, in its most general sense, includes therefore the geography of history, and the geography of history includes political geography.

This is a hierarchy, both positive and logical, which, we hope, will satisfy everyone.

For the sake of clearness, we desire to close this history of human geography up to July, 1924, by presenting for the first time an attempted general classification of the subjects in the field of human geography. We need not say that we do not mean to impose it as an absolutely fixed or unchangeable one. But this recapitulative classification will at least make it possible for the young student inclined toward these studies to choose a certain section of them with an understanding of its proper relation to the whole. It will also make clear to all the special sphere of human geography. Although these

studies may border on other neighboring fields, as do all spheres of scientific investigation, they nevertheless clearly preserve their limits and their own characteristics. In any case we deem it important, as will be seen, to warn geographers against any unreasonable encroachments:

RECAPITULATIVE CLASSIFICATION OF THE SUBJECTS IN THE FIELD OF HUMAN GEOGRAPHY

First Part: Initial and Essential Human Geography.

Introduction:—

1. The physical scope of human activity: Soil (structure, relief, topographic form, hydrography), Climate (temperatures and seasons, rains and winds), Natural vegetation and fauna.
2. Man as geographical agent, that is, agent modifying the natural facts of the terrestrial surface. Human geography studies the facts resulting from the possibilities of this activity.

Section I: First series of essential facts: Facts of unproductive occupation: Houses and roads (with study of the connected facts: villages, scattering of population, urban geography and elementary geography of intercourse).

Section II: Second series of essential facts: Facts of creative occupation: Cultivation and breeding (with study of the connected facts, such as rotation of crops, selections, domestications, nomadism, semi-nomadism, to the extent that these facts are directly related to fields, gardens and flocks).

Section III: Third series of essential facts: Facts of destructive occupation: Fishing and hunting; quarries and mines (with study of the connected facts, such as transformation of fishing into pisciculture, industrial activity, types of agglomerations and of transports in direct relation with the mineral exploitations).

Section IV: Fundamental and first elements of ethnographic and social geography: men and human activity in their direct relation to the three series of essential facts: the genera of life.

Section V: Fundamental and first elements of regional geography, as it can be determined physiognomically by the various combinations of the three series of essential facts.

Conclusion: Consequences of human geography of essential facts: the positive philosophy of relations between man and the natural sphere; the capital rôle of the psychological factor.

Second Part: Geography of History.

Section I: Geography of population.

1. The static facts or facts of fixation of the population (total, limits, density, possibilities of population).

To this static geography of population should be added as a logical supplement the general geography of food-supply.

2. The facts of movement (evolution of population, displacements, migrations and emigration, infiltrations and invasions).

To the geography of movement there could and should be attached that great and specialized study which deals with violent and abrupt movements and struggles of masses in their relations to the geographical conditions of soil, climate, hydrography, natural resources, etc.: Military geography.

Section II. Economic geography.

1. General geography of production:
   a) production and distribution of raw materials;
   b) transformation of raw materials, or Industrial geography (an immense field the logical place of which we indicate here, without stopping to note all its subdivisions).
2. General geography of transports (the means and networks of intercourse, material and spiritual, as well as by land and by sea).
3. General geography of exchanges:
   a) the markets for raw materials,
   b) principles and foundations of financial geography.

Section III. Geography of a properly political nature (or geography of political societies).

1. The states and their territories (administrative geography).
2. The states, roads and frontiers.
3. The states and their capitals.
4. The geographical foundations and conditions of the federations of states: agreements and conflicts, peace and war.
5. Geography of raw materials in relation to political geography, policies of monopoly, protection, prohibition, etc., and colonial policy.
6. The struggle for the exchanges; the political character of maritime intercourse and of transcontinental intercourse.

Section IV. Geography of civilizations (or, in its most extended and highest sense, social geography).

1. The nationalities, races, languages and religions, in so far as these facts are connected with or related to the essential facts of human geography and the more complex facts of the geography of history.
2. The manifestations of the intellectual, artistic and technical sphere, in so far as these facts are connected with or related to the essential facts of human geography and the more complex facts of the geography of history.
3. The facts of collective aptitudes, of common mentality or of juridical or social organization, either rudimentary and primitive or developed and belonging to civilization, in so far as these facts are connected with or related to the essential facts of initial human

geography and the more complicated facts of the geography of history.

Section V. Ultimate Regional Geography (Landerkunde, Corografia).

1. This includes: a synthetic summary of the general geography of lesser natural unities, forests, natural regions, districts, states, and grand divisions of the world in their relation to the geography of population (Section I), economic geography (Section II), political geography (Section III), and the geography of civilizations (Section IV).

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CHAPTER III

BIOLOGY

By Howard Madison Parshley

I. INTRODUCTION

Biology—the scientific study of animate nature—deals with the structure and activities of living things, including plants, the lower animals, and man; and hence no aspect of the living world is foreign to the interest of the biologist, from the physico-chemical fundaments of life in general to the spiritual manifestations of the human intellect. Man himself, in the light of modern knowledge, stands revealed and explained as one among the animals, intimately bound to his lowly relatives by the strands of chemical, anatomical, and physiological homology, although he is markedly superior in the possession of an image-forming, articulate, and ideational mentality—the functional evidence of a uniquely developed nervous mechanism. Let us try to keep continually in mind the ineradicable, underlying animalism of humanity as we look for those biological principles which may seem to admit of general application; for it is only by approaching the subject in this spirit that we can hope to survey the history of man's curiosity regarding nature with any rational expectation of finding such wisdom as may serve to increase the welfare—that is, the happiness—of human existence.

II. THE EARLY HISTORY OF BIOLOGY

Far back in prehistoric days when the biologically perfected mind of primitive man was engaged in founding the social heritage, certain discoveries of first importance resulted from the effort of mentality to extract ease and comfort from the environment. The domestication of animals and the cultivation of useful plants together made for a dependable food supply and led to the development of modern agriculture; the recognition of individual differences

gave rise to tribal organization and subsequent forms of government; and an early modification in sexual behavior constituted the basis for æsthetic developments of vast import in the evolution of human beauty and spirituality. But these steps in man's progress, while obviously fundamental, were empirical, emotional, almost instinctive manifestations rather than conscious efforts toward scientific knowledge, and so we may take them for granted—along with subsequent progress in medicine and the sanitary arts among the early Egyptians, Babylonians, and Hebrews—as we review very briefly the course of biological history.

1. THE GREEKS

The extensive but disorderly knowledge of nature accumulated by early man and the ancient Oriental and African civilizations was assimilated and codified by the Greeks,[1] who, appreciating knowledge for its own sake and being capable of realizing the regularity underlying natural "laws," became the founders of Natural History or Biology. Plato (429–348 B. C.) had some notion of the workings of heredity and even advocated a severe eugenic system much like that attributed to the Spartans by Plutarch; but his pupil Aristotle (384–322 B. C.), one of the most learned of men, was the real founder of biological science. He was industrious in gathering and arranging the scattered knowledge of his predecessors, and—more important than this—he founded the scientific method by insisting upon direct observation, exact record, and inductive reasoning as opposed to the Platonic procedure by intuition. In his three hundred works he treated almost every aspect of human knowledge, but it was in the field of natural history that he made his most enduring contributions. He knew by investigation the life histories of insects, fishes and birds, and he looked deep into the anatomy and physiology of some of the many species with which he was acquainted. All such detailed knowledge of fact was to Aristotle a stimulus to generalization—the orderly statement of natural laws—and so it is not surprising that he came to a belief in what we would call the evolutionary gradation of animal life, expressed in a systematic classification of the species known to him. This classification, which is implicit in the group names and distinctions adopted, corresponds

[1] For further information on the biology of the ancients see C. Singer, *Studies in the History and Method of Science*, Vol. II; W. A. Locy, *Biology and Its Makers*; H. F. Osborn, *From the Greeks to Darwin*; and L. C. Miall, *The History of Biology*.

with that of Linnæus in the arrangement of the vertebrates and is distinctly superior in the treatment of the insects and worms, so that we have in this one item a significant measure of Aristotle's mental power.

Theophrastus (370–286 B. C.), a pupil of Aristotle, worked after much the same fashion with plants, discovering a vast array of botanical facts and enunciating principles many of which remain among the fundamentals of the science. Somewhat earlier Hippocrates (460–370 B. C.) organized scientific medicine and left a body of doctrine which is still the main inspiration of the physician. Thus in the great age of Grecian civilization were founded three major branches of biology—zoölogy, botany, and medicine; and it is significant in more ways than one that from this promising beginning almost no progress at all was made for more than a thousand years.

2. THE ROMANS

The citizens of Rome were a practical people, prone to ask, like many honest souls of our own time, What is the use of it? How much is there in it? when an idea was submitted to their consideration. The opposite spirit, the spirit of original and independent research, the love of knowledge for its own sake, seems to have been singularly lacking, and so scientific investigation made little progress among the Romans. This spirit, of course, is always and everywhere the concern of a few nonconforming individuals, but scarcely one such is known to have existed under the Empire. Pliny the Elder (23–79 A. D.), however, holds a place in biological history because his thirty-seven volumes of anecdotes, facts and fables, while unreliable and even retrogressive as compared with the work of Aristotle, had a wide and lasting influence through their popularizing power. They long held place as the standard natural history, passing through about eighty editions after printing was invented.

One Roman who made a genuine contribution was Galen (131–201 A. D.), the famous physician. He organized the knowledge of his time, adding facts derived from his own dissections of animals, and he recognized the importance of vivisection and experiment. His works constituted almost the sole source of anatomical and physiological information for 1500 years, and his experimental method remains the basis for progress in physiology. Slightly before Galen's time Dioscorides had notably forwarded our knowledge of

the materia medica, and in particular indicated the use of mandragora as an anæsthetic during surgical operations.

3. THE MIDDLE AGES

When the barbarians extinguished the already fading light of ancient civilization and Western Europe fell under the blight of early Christianity with its shunning of the things of this world and its preoccupation with metaphysics and superstition, science came to be generally regarded as an impious affront to God, just as secular art was held to constitute an obscene idolatry or at least a sinful and wasteful misuse of the earthly span.[2] Knowledge was in the hands of the priesthood, theologians wrote the books, all questions were referred to authority, and therefore independent observation of nature, like independent thought, was forgotten or forbidden, save only in a few rare instances.

It is true that before the rise of Christianity the ancient world had undergone a psychological transformation[3]—exemplified in Platonism, the emotional mystery cults of later Rome, the dominance of dialectic and rhetoric, and the rise of the compiling trend—which of itself might have done away with science almost completely; but it is equally true that Christianity, developing saprophytically on the debris of Pagan culture and absorbing Persian dualism along with Judaistic morality, far from introducing a new and uplifting view of the cosmos, simply intensified preëxisting antiscientific modes of thought by its insistence on asceticism, authority, and the transcendent importance of post-mortem salvation. Such biological writings as were permitted circulation are well represented by the *Physiologus,* in which religious symbolism and the effort to bend all things to the glory of God reached the ultimate limits of absurdity. Here is a brief quotation:

> The Pelican is distinguished by its love of its young. As these begin to grow they strike at their parents' faces, and the parents strike back and kill them. Then the parents take pity, and on the third day the mother

[2] For more details on mediæval conditions see H. E. Barnes, "The Historical Background of Mediæval Intellectual Interests," in *Pedagogical Seminary,* Vol. XXIX (1922), pp. 105–138; L. Thorndike, *A History of Magic and Experimental Science during the First Thirteen Centuries of Our Era;* and Osborn, op. cit.

[3] Discussed by Barnes with ample bibliographical references, loc. cit., pp. 105–120.

comes and opens her side and lets the blood flow on the dead young ones, and they become alive again. Thus God cast off mankind after the Fall, and delivered them over to death; but he took pity on us, as a mother, for by the Crucifixion He awoke us with his blood to eternal life.

The Phœnix lives in India, and when five hundred years old fills his wings with fragrant herbs and flies to Heliopolis, where he commits himself to the flames in the Temple of the Sun. From his ashes comes a worm, which the second day becomes a fledgling, and on the third a full-grown phœnix, who flies away to his old dwelling-place. The Phœnix is the symbol of Christ; the two wings filled with sweet-smelling herbs are the Old and New Testaments, full of divine teaching.

In spite of the generally unfavorable cultural setting of mediæval science, there was, of course, some progress achieved. The Arabic students of optics, conserving the results of Greek investigation, improved the manufacture of lenses and mirrors; and Roger Bacon (1214–1294) continued this work, developing the use of lenses in the form of spectacles and possibly in that of the compound microscope. Meanwhile the Arabic and Christian alchemists were discovering such chemical substances as alum, arsenic, ether, and corrosive sublimate and were producing distilled alcohol, essential oils, and tinctures—all important for later biological advancement. Medical practice and descriptive biology of a crude sort were cultivated here and there, often secretly; and finally, what is perhaps of fundamental importance, Roger Bacon advocated the observational and inductive method of acquiring and accumulating knowledge and insisted that such observation should be concentrated on the "commonplaces" of nature.

Human intelligence, therefore, was not extinguished, nor even wholly confined to the sacred orders, for intelligence, like other hereditary traits, is highly stable and can withstand harsher treatment than patristic and mediæval repression. Not only was the sterilizing effect of theoretical celibacy in the intelligent clergy nullified to a considerable extent by widespread illegitimacy, but the germplasm of mentally competent family lines flowed on in the population at large, undestroyed though temporarily restrained from expression by environmental difficulties. And so the recrudescence of interest in free intellectual pursuits began and developed into the scientific and artistic renaissance as circumstances became favorable through the invention of printing, the revival of travel, the rise of the universities, and the weakening of inquisitorial supervision.

III. THE RISE OF MODERN BIOLOGY

1. TRANSITION FROM THE MIDDLE AGES

The German Cordus (1515–1544) led botany out of the herbalist era, disregarding ancient authority and teaching that it is necessary to "describe plants anew from nature"; and the Belgian Vesalius (1514–1564) similarly abandoned Galen and founded modern human anatomy by looking into the body rather than into books. Then Harvey (1578–1657) devised the important scientific scheme of quantitative experimentation, discovering the circulation of the blood and complementing Vesalius' anatomical contribution with the beginnings of an exact physiology.[4]

Meanwhile the microscope was developing from the simple spectacles of Roger Bacon and the system of lenses suggested by Galileo (1564–1642) to the elaborate instrument of Hooke (1635–1703) which enabled him to study and publish in some detail the minute structure of animals and plants. His most striking discovery was that of the "little boxes or cells,"[5]—the first glimpse given to man of the units of organic structure. Hooke's contemporaries, bringing greater concentration to bear on the exploration of the infinitely little, ventured somewhat along the divergent ways of specialization and accomplished results which may be exemplified as follows: Leeuwenhoek (1632–1723) discovered the human spermatozoon; Swammerdam (1637–1680) overthrew the notion that the lower forms of animals are of crude, simple construction; Redi (1626–1698) disproved the theory of spontaneous generation, i. e., the belief that maggots arise *de novo* in decaying meat; and Malpighi (1628–1694) demonstrated the capillary circulation, thus giving the finishing touch to Harvey's contribution.

The microscopists may perhaps be regarded as the group of pioneers most important of all in the historical development of the science, since it is their work which made modern biology possible by leading up to the cell theory and its enlightening developments. From the year 1700, when biology had become finally freed from authority and frankly devoted to the observation and interpretation of mundane phenomena, the science grew so rapidly and into so many diverse fields that we can do no more than touch briefly upon some

[4] For a more detailed discussion of the advances in biology made during this period see the works of Singer, Miall and Locy, and F. H. Garrison, *A History of Medicine*.

[5] Figured in his *Micrographia*, 1665.

of the more important of these developments, before considering rather more in detail the practical bearing of biologic research upon human affairs.

2 CLASSIFICATION

A species is a group of similar individuals which interbreed freely and transmit their characteristics to their offspring. As there are about 650,000 known species of animals and more than 200,000 plants, it has been clearly a major concern of biology to name and arrange this multitude of forms in an intelligible and natural system. Although Aristotle appears to have recognized structural similarity as the true basis for classification, it was only after the lapse of seventeen centuries that the incubus of utilitarian and habital groupings was finally thrown off, permitting the rapid development of the modern system on the principle of anatomical affinity. Ray (1628–1705) gave definiteness to the term "species," pointed out many of the errors and absurdities of mediæval natural history, classified plants, fishes, quadrupeds and serpents, and had some time left to devote to natural theology. His work was most important as preparing the way for the greatest of taxonomists.

Linnæus (1707–1778) was born in Sweden, traveled for a few years in poverty, and became at the age of thirty-four professor of natural history in the University of Upsala. Here he had enormous success, as his cataloguing mind, his talents for "classifying, coördinating and subordinating" made him the recognized master in the field, which, just growing popular, was to dominate biology for a century. He and his disciples, faced with the multiplicity of animal and plant species and provided with vast materials brought back by expeditions of world-wide scope, addressed themselves to naming and pigeonholing, full of the collector's frenzy and fired with the holy zeal of those who discover and make known.

Linnæus believed that each species represented an idea and fiat of God and was therefore immutable, and he attributed the varying degrees of similarity recognized in his categories to the logic of God's thinking. Hence his classification was inflexible and in part unnatural, but it possessed a supreme merit—its system of nomenclature. Each animal and plant was given two Latin names denoting its genus and species, and thus at a stroke taxonomy was provided with a universally comprehensible, extremely simple, and infinitely adaptable scheme of naming. This "binomial" system is now official, and modern biological nomenclature takes no cognizance of names published

before 1758, the date of the *Systema Naturæ* (in zoölogy), and 1753, that of the *Species Plantarum* (in botany). The influence of Linnæus is still powerful: many naturalists still feel the urge to name and classify and there is still much for them to do. But other and perhaps more important aspects of the study of nature have come to hold a greater place in the attention of biologists—the namer of species no longer typifies the tribe. [6]

3. STRUCTURE AND DEVELOPMENT

Anatomy was long in attaining the maturity of generalization. Aristotle saw that "whatever parts a man has before, a quadruped has beneath" and Theophrastus recognized that a flower is a modified leafy stem. But two thousand years elapsed before the comparative method—by which discrete facts are correlated—was successfully applied throughout the animal kingdom by Cuvier (1769–1832), who was the first fully to grasp the principle that form and function are interdependent. "Give me a tooth," he said, "and I will construct the whole animal," by which he meant to emphasize the intimate relationship existing between one part and every other in the living frame. A tooth of a certain form indicates an animal of a certain size, form, and manner of life. Cuvier had a vast knowledge of fossils as well as of recent species and his researches were important in founding the study of palæontology. In this way he helped indirectly to prepare for the general acceptance of the evolutionary idea —an idea which he vigorously and with reason contested on the ground that the evidence for it available at that time was inadequate. For a while comparative anatomy superseded taxonomy as the prime interest of biologists, with the result that the structure of animals and plants from the lowest to the highest was made precisely known and an elaborate web of homologies was shown to exist in each of the major groups and even to extend its strands from one division to another.

Meanwhile the microscopic study of minute anatomy developed into the modern subscience of histology, culminating in the protoplasm theory of Schultze (1825–1874) and the cell theory of the botanist Schleiden (1804–1881) and the zoölogist Schwann (1810–1882).[6] This recognition of protoplasm—a complex, polymorphic colloid—as the common physical basis of life and the cell as the unit of anatomy and physiology, alike in plants and in animals, brought

[6] See any standard modern text on biology, e. g., L. L. Woodruff, *The Foundations of Biology* (1922).

zoölogy and botany together and thus gave validity to biology as a single, integrated department of knowledge. Quite naturally there was aroused a great curiosity to learn the workings of this elaborate anatomical mechanism, which grew into the biophysical and biochemical branches of physiology—the study of function. This study, after the critical reorganization of Haller (1708–1777), progressed through the ignorance-shielding fog of vitalistic "animalization" to the modern view that animal and plant functions depend on physico-chemical processes, acting under the law of the conservation of energy; and under the stimulus of this idea the physiologists of the present day are achieving results which have scarcely been equaled for theoretical and practical value in the history of natural science. This does not mean, of course, that every act of the living being or even every process going on within it can be traced at present to a plain mechanistic cause; but as a working hypothesis the mechanistic view has proved of unexampled fruitfulness.

With the development of microscopical technique and the clearing up of various fundamental mysteries by the cell theory, there came a new interest in the study of embryology—the early development of the individual—and it was possible to advance beyond Aristotle and Fabricius (1537–1619) in the matter of what goes on inside the eggshell from which a bird is hatched. But the idea of preformation, the notion that the sperm or the egg contains the individual in miniature, came in to hinder progress; and this, together with the opposite and equally erroneous belief in the blank homogeneity of the egg as maintained by Aristotle and Harvey, made embryology unreliable until Von Baer (1792–1876) instituted his comparative studies and brought it into consonance with the cell theory through his discovery of the mammalian egg and his proposal of the germ-layer theory. The identification of egg and spermatozoon as single cells which conjugate in fertilization, the discovery and interpretation of the chromosomes, and the recent development of experimental methods in physiological embryology ensued in due time and fell naturally into place among the converging threads of biological investigation which are now anastomosing in the new unity of genetics.

4. EVOLUTION

How life arose in the first place is unknown; the question falls in all probability outside the scope of science, like the subject of first causes in general. When did time begin? How long is eter-

nity? Why do oxygen and hydrogen combine to make water? What, indeed, is life itself, or electricity, or sin? On such questions the scientist has little or nothing to say since he is devoted to the observation of natural events and relations and enunciates his "laws of nature" merely as statements of what has happened repeatedly—like the rising of the sun or the dividing of the chromosomes—and is therefore predictable, or "certain" to happen again under like circumstances. It is known, however, that all observed life resides in material of a colloidal nature and that certain low types of bacteria can live on pure mineral or inorganic matter. Hence it is reasonable to suppose that life arose in, say, colloidal iron and soon took shape in something like the iron or sulphur bacteria.[7] This process may still be going on; but it is unlikely in view of the obvious hazards confronting such unformed creatures when thrown into instant competition with existing types. However this may be, *it is clear that all known animals and plants come from preëxisting* organisms of similar nature—a generalization, which, abundantly supported by observation and experiment, supplanted long ago the notion of spontaneous generation. That maggots in meat and bacteria in sour milk come only from antecedent flies and bacteria, and not from the decomposing substances was proved by Redi, Pasteur (1822–1895), and many others.

The principle of continuity thus established cannot be restricted in time and so it has gradually become clearly recognized that the whole organic world, as represented by the individuals of any given epoch, is but the end product of long lines of descent, extending unbrokenly into the shadows of the past. If we consider the species of such an epoch, say the present, in the light of classification and morphology, we find that they can be arranged in an imperfectly graded series from simple or "low" to complex or "high"—the "ascending steps" of Aristotle, the "scala naturæ" of Linnæus, the "evolutionary sequence" of to-day. If now we examine the organisms of some previous epoch as represented by fossils, we discover that almost every one was different from anything now existing, although the same gradation from simple to more or less complex is again in evidence. When these three ideas—continuity of descent, gradation in complexity, and diversity at different periods somewhat corresponding to that gradation—are considered together and the question is asked, How do organisms come to be as they are? the instant conclusion is reached that there has been *descent with modification*, that diversification has occurred during the lapse of time through

[7] Cf. H. F. Osborn, *The Origin and Evolution of Life* (1918).

a gradual proliferation of heterogeneous types from a relatively homogeneous and simple origin.

This, of course, is the theory of organic evolution, the doctrine that links the living world from bacterium to man in the bonds of blood relationship and gives meaning to the 'affinities'' of taxonomy, the "homologies" of comparative anatomy and physiology, the useless vestigial and rudimentary characteristics exhibited by every species, the serial arrangement of fossils from low to high observed in passing from early to more recent strata, the facts of geographical distribution, the universality of such cytological phenomena as cell division and Mendelian segregation, and the findings of comparative psychology. This is perhaps the greatest generalization of the human mind; it is the one biological principle of supreme importance, for it has changed the course of thought in every department of intellectual interest and given to thinking man a new heaven and a new earth.

The proofs of evolution are hinted at in what precedes. They are now common knowledge and may be found fully elaborated in every textbook of elementary biology. Let us therefore turn at once to a brief consideration of the concept itself.

Among primitive men and even in the great civilizations of antiquity nature was almost universally regarded as the handiwork of divinity—the idea of special creation by divine fiat held the field; but among the Greeks there were some who, in their efforts to replace the prevalent superstitions with a historico-naturalistic explanation of things, glimpsed the notion of a continuous development of life from simple, primordial origins to the highest forms and even held that the process was still going on. Aristotle put it most clearly, Lucretius gave the idea poetic expression, the Arabs were not strangers to it, and it may be traced more or less vaguely through the Middle Ages (cf. the teachings of St. Augustine) to the extravagantly imaginative productions of the Renaissance naturalists and the philosophical speculations of Francis Bacon, Leibnitz, Goethe and Kant.[8] Bacon (1561–1626), indeed, was perhaps the first to raise clearly the question of the mutability of species by variation, while Leibnitz (1646–1716), adopting the entelechy of Aristotle as the teleological dogma of perfectibility, applied his doctrine of continuity to life with the statement that "all natural orders of beings present but a single chain." Kant (1724–1804) retained the teleological view because evidence for any mechanistic explanation of the development of the blade of grass was in his time lacking; but he clearly

[8] Summarized in Osborn, *From the Greeks to Darwin*, pp. 86 ff.

recognized the existence of "continuous and connected relationship" and thus held to the central element in the evolutionary scheme.

Linnæus and Cuvier failed to give direct aid in the growth of the concept, since they maintained the special creation theory in an almost pure form, but they unwittingly contributed indispensable factors in gathering and ordering data to be interpreted by their successors. Buffon (1707–1788), a broad and influential naturalist, came to hold a clear belief in the mutability of species, at least by way of variation from the originally created type, and he was the first to suggest a cause for such transformation in the effects of the environment. Moreover, he spoke of elimination—"Les espèces les moins parfaits . . . les moins armées, etc., ont déjà disparu ou disparaîtront"—and raised many questions which were to be solved in the next century. These heretical suggestions he advanced in a still, small voice, often between the lines, for his ambition was to entertain Paris by his writings, not by his contortions at the stake; but they did not escape the eyes of later naturalists and thus served as the stimulus to more fruitful labors.

Erasmus Darwin (1731–1802) has a place in what might be called the anthology of evolution, for like Empedocles, Lucretius, and Goethe, he put into verse many of his ideas on transformism. Gathering his facts from his predecessors as well as from his own experience, he elaborated a clear evolutionary view of nature as developing gradually from a simple origin, and in his explanation of the process advanced the theory that new characters arise through reaction to new circumstances, become fixed in the individual, and are then handed on to posterity through inheritance. This and all other such argument was violently contested not only by theologians but also by the intelligentsia of the time: the evolutionists were still a radical and very small minority, although their cause was rapidly gaining inherent force and plausibility.

In France by 1800 a number of active evolutionists were openly publishing transformist essays—each greeted by Cuvier as a "*nouvelle folie*"—and they were aggressively joining in debate with the great exponent of special creation. Chief among these was Lamarck (1744–1829) who, at first a firm believer in the immutability of species, became at last the founder of the modern theory of descent with modification. He proposed a complete philosophy of evolution by uniform progression, postulating in the beginning space, time, and matter with a "certain order originally imposed by its author," and explaining the subsequent development of nature as a result of environmental influences acting on and molding

organisms—directly in the case of plants, indirectly in that of animals—so that they came to fit into new circumstances and then passed on their acquirements ("changements") to their offspring. He thus reached the same conclusion as Erasmus Darwin, but his work is so much more extensive and philosophically satisfying that in spite of a temporary eclipse due to the influence of Cuvier and the not wholly unjustified ridicule to which some of his illustrations laid him open,[9] he holds the highest place between Aristotle and Charles Darwin. Indeed, his notion of environmental action is still entertained in modified form by some biologists, the neo-Lamarckians. His theory was, in brief, that circumstances influence the forms of animals. Changes in environment and changes in wants cause changes in habits, involving the use of new parts or a different use of old parts, resulting finally in modifications which are inherited. This doctrine of the inheritance of acquired characters—essential in Lamarckism—is, as we shall see, still a matter of lively controversy, and it is a question of the highest sociological importance.

So Charles Darwin (1809–1882) came upon the scene at a time when on the one hand theological and philosophical prejudice, as well as some of the highest biological influence, maintained the dogma of special creation in an apparently impregnable position, while on the other the intellectual world was well aware of evolutionary doctrine and was in reality impregnated with a vague but pervasive idea of development as a general principle. What was needed, it is now clear, was a new and extensive body of scientific data, gathered and ordered in an impartial manner and accompanied by a minimum of presupposition and speculation. This is just what Darwin presented in his great work on *The Origin of Species* (1859)—and more. From his data he caused to emerge, not as a supplementary speculation but as an integral and inevitable outgrowth, the first and only convincing explanation of how the evolutionary process actually works. It is no wonder that in spite of popular outcry and priestly fulmination this definitive treatise at once and for all won over the vast majority of thinking men and closed forever one of the bitterest controversies of human philosophy. Transcendental

[9] The following significant passage from Lamarck's *Zoölogie Philosophique* is translated in Osborn's *From the Greeks to Darwin*: "The snakes sprang from reptiles with four extremities, but having taken up the habit of moving along the earth and concealing themselves among bushes, their bodies, owing to repeated efforts to elongate themselves and pass through narrow spaces, have acquired a considerable length out of all proportion to their width. Since long feet would have been useless, and short feet would have been incapable of moving their bodies, there resulted a cessation of use of these parts, which has finally caused them totally to disappear."

notions of "affinity" gave place to a knowledge of genetic continuity, the linear "scale of nature" was replaced by the dichotomously branching tree of descent, the facts of classification, animal and plant breeding, and adaptation were brought to a clear and burning focus. Instantly convinced, Huxley (1825–1895) in England and Haeckel (1834–1919) in Germany threw themselves with the pugnacity that Darwin lacked into public debate and propagandist writing, so that with the aid of Herbert Spencer and others, in a few years an intellectual revolution was accomplished which fundamentally altered the point of view and even the very nature of thought in every branch of human interest and learning.

Without attempting to analyze Darwin's body of data let us rest content with a clear conception of his special contribution, the theory of natural selection—in a word, Darwinism. The merits of this idea, glimpsed by certain predecessors and actually enunciated in brief outline by Wallace (1822–1913), are two: it is based on a series of simple, almost self-evident propositions and it accounts for progress without the assistance of any extrinsic, supervisory Power.

The propositions which underlie the thesis of natural selection are as follows:

1. All organisms produce more young than can survive to maturity: *the population tends to increase* in geometrical ratio.

2. This involves competition among the offspring for a share in the limited means of subsistence—*the struggle for existence*—and results ordinarily in a mortality rate sufficiently high to keep the number of survivors in each generation about equal to the number of their parents.

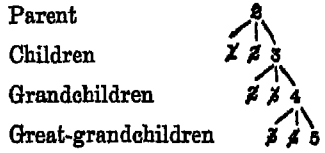
3. No two individuals are exactly alike in structure and capability, since *variation is universal.*

4. Given the struggle for existence and the inequality of individuals, it follows that on the average the ones to survive will be those which happen to have the better adaptational qualities, which means *the survival of the fittest.*

5. Through *heredity* these better qualities will be transmitted to a majority of the next generation, which will thus vary around a new and slightly higher norm.

All legislators, newspaper editors, fundamentalists, and others who are told, hope, or believe that "Darwinism is dead" should commit these simple statements to memory, for they and not something about ancestral monkeys are the essence of Darwinism, i. e., the theory of natural selection. They were advanced by Darwin with the support of innumerable facts, but common experience and rudimentary

logic are quite sufficient to establish their truth. How the process of natural selection works to effect a steady improvement in the race, without the aid of any guiding principle from the Beyond, is shown in the accompanying diagram, the numbers representing the varying development of any given quality, the cancellations indicating the losers in the contest for the means of living, and the oblique line of survivors manifesting the trend of the race; the environment here remains stable, offering rewards for high numerical standing as, for instance, in the schoolroom.



With the fact of evolution established by all the data of natural science and with its modus operandi thus clearly set forth by Darwin, there remains for consideration one outstanding question, to wit: "What causes variation?" Let it be said at once that this question remains unanswered; it is perhaps the major problem of modern theoretical biology. But within recent years some progress has been made. Analysis based on breeding experiments and the study of cellular phenomena has narrowed the field in question from the bodies of animals and plants to their germ cells, and in consequence a new, synthetic, broadly biological science of heredity has rapidly taken shape.

5. GENETICS

The beginning of the present century witnessed the birth of this newest child of biology—genetics, the science of heredity—and the twenty-four years of its independent life have been marked by a certainty and vigor of growth perhaps unique in the annals of intellectual progress. There was, of course, a prefatory, embryonic period—with which indeed we have been to a large extent concerned hitherto, for genetics is synthetic in the sense that it draws heavily upon every field of traditional biology—and it is to certain previously unmentioned aspects of this prenatal period that we shall first turn our attention.

Mendel (1822–1884) devoted the leisure of his early monastic life to the cultivation of garden plants and applied his mathematical

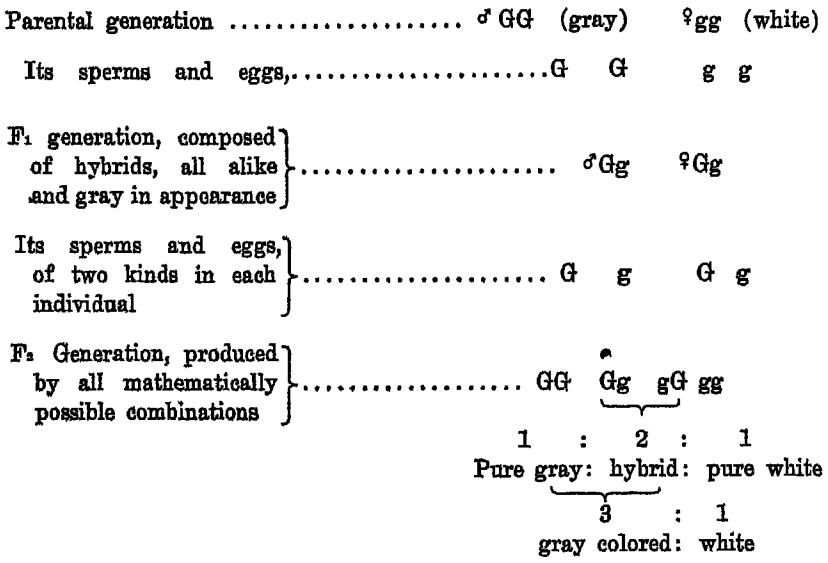
intelligence to devising and interpreting experiments in hybridizing or cross-breeding a number of races which differed in certain clearly marked characteristics, or "characters." In this work he followed the methods of practical breeders of plants and animals except in one very important respect. He saw that in order to discover the mathematical laws of heredity, if any existed, it would be necessary to preserve and take account of *all* the offspring in each experiment, including those that the fanciers were accustomed to discard and disregard as "failures." Armed with this sound principle and fortunate in the choice of material, he raised his plants in statistically significant numbers and finally published, in 1865, an extraordinarily clear and penetrating analysis of his results.[10] This paper, which remained in obscurity until 1900, contains in definite form the verbal and arithmetical summaries now known as the laws of Mendel: propositions which have only been strengthened by numerous apparent exceptions, invariably proved susceptible of consistent explanation on close analysis. Since the Mendelian principles are clearly set forth in every modern text[11] it will be sufficient for our present purposes to present no more than two very simple examples of their working.

If a thoroughbred gray rat is mated with a pure albino the offspring will all resemble the gray parent whether it be the father or the mother. Grayness and whiteness are the "characters" concerned and it is evident that each of the offspring (the F_1 generation) contains the factors or "genes" for both. This is expressed by saying that the F_1 individuals are hybrid or "heterozygous," whereas the parents are each "homozygous," having identical "genes" from each of their parents. But these offspring are gray; they look like only *one* of their two diverse parents. This is explained by the theory that one of the genes is in some way more effective than the other in bringing itself to somatic or bodily expression—it is "dominant," the other "recessive." But is the latter destroyed or modified—

[10] There is a translation of this paper in W. E. Castle, *Genetics and Eugenics* (1920).

[11] The best text for the general reader is H. E. Walter, *Genetics: An Introduction to the Study of Heredity* (1922). Almost equally readable is E. G. Conklin, *Heredity and Environment* (1923), which includes more than what is strictly genetics. Much more detail is given in T. H. Morgan, *The Physical Basis of Heredity* (1919), and *The Mechanism of Mendelian Heredity* (1922); and Castle, *Genetics and Eugenics*. M. C. Coulter, *Outline of Genetics* (1923), presents the botanical aspects of the subject. For the cytological basis in detail see the collaboration in E. V. Cowdry, *General Cytology* (1924), and for the effects of inbreeding, etc., E. M. East, and D. F. Jones, *Inbreeding and Outbreeding: Their Genetical and Sociological Significance* (1919).

"contaminated"—by the former? Not at all, as the next generation will show. If now an F_1 brother and sister are mated the offspring (F_2) will on the average consist of grays and whites in the ratio of 3:1. Further breeding of these grays indicates that they are of two kinds: pure grays like the gray grandparent and heterozygous individuals like the parents. The accompanying diagram shows how these results are brought about, capitals representing the dominant genes (gray), and their somatic consequences; lower-case letters the recessive (white).



Here we have illustrated the first law of Mendel—the segregation of the genes. This means that when a hybrid forms germ cells (eggs or spermatozoa) each germ cell contains one or the other of a pair of contrasting factors, not both. These factors are derived from two sources (the two parents, which were pure), they are associated in the body of the hybrid, and they emerge unmodified from it. The heterozygous individual thus produces two kinds of germ cells in equal numbers and it is the chance combination of these germ cells in fertilization that gives rise to the observed ratio in the next generation, according to the mathematical laws of probability. The phenomenon of dominance results in the production of individuals that may differ in their genetic factors or constitution although they appear superficially to be exactly alike. Hence

it is useful to distinguish these conditions by referring to the genetic constitution as the "genotype" and to the somatic character or superficial appearance as the "phenotype." For instance, a certain type of feeble-mindedness appears to be produced by a single recessive factor.[12] A heterozygous individual therefore seems to be of normal mentality—he is *phenotypically* normal, and if he marries a genotypically normal woman, i. e., one who has no gene of feeble-mindedness in her constitution, their children will all be phenotypically normal, although half of them will be genotypically hybrid. Thus the defect may be carried along unseen for many generations; but when two hybrids (who appear to be normal) happen to mate, their children, if numerous enough, will average three normals to one feeble-minded. The latter is of course homozygous, since a recessive character appears only when pure, and in all matings between such pure feeble-minded genotypes all the offspring will exhibit the taint. Any exception which may appear is to be credited to illegitimacy—the casual injection of normal germplasm which often happens in the best of feeble-minded families.

Our second illustration, drawn from the plant kingdom, will illustrate the fact that dominance is not an essential, invariable feature of Mendelian heredity. This is worthy of especial note because the phenomena of blending inheritance have often been called upon by those who have attempted to discredit the Mendelian theory. If red and white flowered varieties of the garden four-o'clock (*Mirabilis*) be crossed, the offspring are not red or white, as would be the case if redness or whiteness were completely dominant, but pink—just as the offspring of a negro and a white are intermediate in color. This would appear to indicate that the genes for redness and whiteness were contaminated by their association in a single individual and at first sight seems to cast doubt on the conclusions drawn from the experiment with rats. But when these phenotypic intermediates of the F_1 generation are crossed *inter se* (or what amounts to the same thing, self-fertilized), the 1:2:1 ratio appears among the offspring even more clearly than before, for there are obtained white-flowered plants, twice as many pink ones, and red equal in number to the white. It is now known that dominance may be complete, or partial, or lacking; and it has nothing to do with essential Mendelism, being merely a physiological matter pertaining to developmental processes in the soma or body. For this and other more complicated reasons blending inheritance (such as that of many size-

[12] See R. R. Gates, *Heredity and Eugenics* (1923), pp. 149-160. This is a new compendium of human heredity.

characters) can no longer be held to constitute a challenge or even an exception to the Mendelian theory.

These are the simplest cases, but there are infinite complications which have been discovered and interpreted in the course of recent investigation. Mendel himself undertook experiments in which more than one pair of contrasting characters were involved—such as crossing peas when one variety had round, yellow seeds, the other wrinkled, green seeds—and found that here, while either pair when viewed by itself, say round vs. wrinkled, produced the 3:1 ratio, the offspring in F_2 displayed a new ratio, namely 9:3:3:1, when both pairs were taken into consideration (e.g., 315 round-yellow, 101 wrinkled-yellow, 108 round-green, 32 wrinkled-green). The mathematically inclined reader may be interested to work this out for himself, with the information that roundness and yellowness are dominant and that the contrasted pairs of factors segregate independently. The F_1 hybrids are all phenotypically round and yellow. What are they genotypically? And what sorts of germ cells do they produce? Three or more pairs of characters may be worked out similarly: and there are various developments such as interference with free segregation (linkage) and the interaction of factors concerning which the reader is referred to the manuals.

There is one special topic, however, which deserves some consideration, since it serves especially well to show that the human animal enjoys no exemption from the laws of heredity. The process of sex-linked inheritance, which appears to be explicable only on a chromosomal basis, demonstrates clearly that the workings of the Mendelian processes are exactly alike in *Drosophila*, the tiny fly that swarms about fermenting fruit, and in man, and hence that the findings of genetic research have a direct bearing upon human affairs.

If a male fly having red eyes is mated to a female having white eyes, the males among the offspring will have white eyes (like the mother) and the females will have red eyes (like the father). If a man with normal vision marries a color-blind woman their sons will be color-blind (like the mother) and their daughters will have normal eyes (like the father). This type of inheritance, which has equally peculiar and quite consistent results when the sexes are reversed, has long been recognized in man. That it occurs in the fruit-fly in precisely similar form is not due to coincidence; the correspondence is fundamental and is due to the specific behavior of the sex-chromosomes.

In *Drosophila* the sex of an individual is determined at the time of fertilization by the arrangement of two special chromosomes (denominated X and Y) with respect to the others. If the latter are normal in number and the fertilized egg contains two X's the embryo will grow up to be a female; if one X and one Y, a male. Since the behavior of the character "white eye" in hybridization, as just described, follows exactly the distribution of the X-chromosome, the conclusion is drawn that the gene causing the eyes to be white is located in this particular chromosome; hence the term "sex-linked inheritance." The occurrence in man of several hereditary traits behaving in the same peculiar manner led to the prediction that the human chromosome group would prove to be like that of the fruit-fly in regard to the X and Y elements. This theory has been brilliantly confirmed in recent years by Painter's studies upon the germ cells of man.[13] The X and Y chromosomes are there, as was foretold, and a new evolutionary link between man and a distant Arthropod is thus firmly established.

All such hereditary phenomena, on careful analysis, have been found to be consistent with the fundamental Mendelian processes, and so it is well that certain proposals to distinguish the later refinements, often fallaciously regarded as "exceptions," under some such term as "neo-Mendelism" should have failed to gain general acceptance. It appears, in fact, quite safe to say that, aside perhaps from the larger, general features determined by the organization of the egg and the major requirements of embryological development, all heredity of specific characteristics is Mendelian or chromosomal heredity, and that this holds good throughout the living world wherever sexual reproduction occurs. The scope of investigation has been sufficiently broad to put this generalization beyond reasonable doubt.

The uproar over Darwinism prevented any general notice of such apparently minor heresies as Mendelism, and so the reverend abbot's paper lay neglected for forty years while cytological, embryological, and statistical studies were advancing toward readiness for the awakening of 1900.

The most important item in this preparation was the establishment by Boveri and Weismann (1854–1914) of the chromosome theory. Boveri and his followers demonstrated through microscopical researches a cellular mechanism[14] exactly suited to produce the results

[14] Described in all biological and genetic texts; see Cowdry, op. cit. for the most recent elaboration, and E. B. Wilson, *The Cell*, new ed. (1925).

[13] For a diagram of the human chromosomes see Conklin, *Heredity and Environment*, p. 163.

observed in Mendelian breeding; while Weismann elaborated the theory of the germplasm,[15] one of the most fruitful of biological generalizations, which may be stated concretely as follows. The *germplasm* is a continuous stream of hereditary material (appearing periodically in the form of eggs and spermatozoa) which carries the genes or factors for hereditary traits and so causes these traits to develop repeatedly in the body or *somatoplasm* (soma) of individuals constituting successive generations. The germplasm is thus the only connecting link between parents and offspring, and the son is like the father not because the son's body is derived from the father's, but because both owe their characteristics to the same source. The controlling importance of the germplasm—the determiner of the genotype—may be illustrated by the case of the white and gray rabbits (of a certain genetic constitution), which, when crossed, produce only black young, or that of two white sweet peas, which, when cross-bred, produce only purple. When the fertilized egg divides to build up the embryo, some of the cells remain relatively undifferentiated, and these persist until maturity when they give rise to the germ cells of the individual in question; and so the germplasm may be envisaged as producing and temporarily inhabiting the soma, in which it remains in a way a foreign substance, transported, nourished, and deeply insulated from the impingement of the external world until the time when it emerges to produce the next generation. This statement of the theory of the continuity and isolation of the germplasm is confessedly oversimplified, but it has the merit of presenting clearly one of the greatest of biological generalizations and of representing diagrammatically the hereditary mechanism. In particular, it must be kept clearly in mind when we come to consider a little later a question of the greatest practical importance—that of the inheritance of acquired characters.

To prevent misconception we should note here certain results of very recent research, which, although they have no important bearing on the subject last mentioned, seem to demand some revision of our rather bald and uncompromising statement of the germplasm theory. In some species, at least, (such as certain Amphibia) it appears that the functional germ cells arise in part from the peritoneum, the primordial germ cells having degenerated. All the cells of the body, to be sure, come from the fertilized egg and thus all contain germplasmic qualities; but those which undergo considerable differentiation (such, probably, as nerve and muscle cells) cannot return to the state of

[15] A. Weismann, *The Germ Plasm.*

germplasmic non-specialization and so share in the production of gametes, which alone are responsible for the next generation. In those animals where the germ-track cannot be clearly traced from embryo to adult and where germ cells are in part at least produced from body tissue (somatoplasm), it is still from inner, protected, relatively unspecialized substance that the gametes arise and not from organs (like the brain, the muscles, and the digestive tract) that meet the environment directly and are often profoundly affected by it.

Almost coincidentally with the discovery of Mendel's forgotten work, the idea of *mutation* was advanced by the Dutch botanist de Vries.[16] As currently developed the mutation theory teaches that inheritable changes are primarily manifested *not* by the infinitesimal bodily variations of Darwin but rather as transformations (probably involved with chemical reactions) in the units of the germplasm responsible for the development of given somatic characters; and these transformations may produce effects of any magnitude, from minute to large. For instance, early in Morgan's work on *Drosophila* an individual was noticed which had white eyes, instead of the usual red, and from this individual a white-eyed race was easily developed—the first of more than two hundred true-breeding races to appear within this single wild species. Some of these strains are marked by very striking characters, anatomical and physiological, others by very slight divergences from the wild or normal type. And similar genetically stable novelties have appeared in many other species of animals and plants under the close scrutiny of genetic research. Once in existence these mutations breed true, and it is likely that they afford the basis for evolutionary progress, since in primitive stocks the odds would certainly not be prohibitive against any given modification being advantageous to the species, although in highly specialized types, such as *Drosophila,* it is only to be expected that changes—rearrangements of a complicated and already finely adjusted mechanism—should be almost invariably unsuccessful and hence destined for instant elimination by natural selection unless preserved by segregation under human care.

There remains a general question of first importance: What causes mutations to arise? As we have already observed, the old question of what causes inherited bodily variations has been answered by pushing it back from the soma to the germplasm; and this is a great gain because it has made possible a definite application of genetic knowledge to human affairs. But there is as yet no

[16] H. De Vries, *The Mutation Theory.*

answer to the fundamental query. We do not know what provokes the transformation of genes. However, it is beyond question that all hereditary characteristics have been acquired at some time during the course of evolutionary history, and this no doubt as a result of forces, working directly or indirectly, which are in the last analysis environmental, extrinsic to the germplasm itself. But this does not mean that heritable modifications have any comprehensible relation to environmental conditions or that they are adaptive or beneficial otherwise than by accident. It is absurd to suppose that the white-eyed fruit-fly, the hornless cow, or the black sheep makes its appearance as a result of any gross and palpable experience of the individual. Such types arise sporadically and of course no one has ever succeeded in producing them at will; in their absence the race breeds obstinately true. Intimately related to these matters is the famous problem of the inheritance of acquired characters—the Lamarckian hypothesis—which demands attention because it is of basic importance for the welfare of mankind. Let us put the question in unmistakable terms and then discuss it in some detail.

If we exercise and thus improve our qualities of body, mind, or soul, will our children manifest a similar elevation without having to face the harsh necessity of sweating and toiling through a similar period of effort? And if, conversely, we debauch our talents through sloth and riotous living, will our progeny display a similar degeneration in virtue and health, even though they themselves may try to live upright and free of evil? In brief, are newly acquired, or better, impressed characters inherited?

As we have already seen, all characters are in a sense acquired; but it is equally true, and may as well be stated at once that "the inheritance of acquired characters" is a myth, if the phrase is to be understood in the sense of the preceding paragraph, the only sense in which it has any practical bearing on sociological problems. It may be said without undue dogmatism that on the whole the modifications which constitute the evolutionary process have come about with inconceivable slowness: the insects of three million years ago, as preserved for our instruction in the Baltic amber, are scarcely to be distinguished from contemporary species, in some cases, by so much as a single hair; and even in more rapidly evolving groups, like the higher mammals, ten thousand years can hardly suffice to bring forth significant change. But modification has occurred in geological time and mutations do appear occasionally in races now living, so that it seems reasonable to suppose that these sudden and heritable transformations in the germplasm have provided the basis

for evolutionary advance, even though they may seem to have no relation to environmental conditions. In some species, indeed, these mutational novelties occur with such frequency that through rigorous artificial selection, combined with hybridization, new and valuable or peculiar types, like the various breeds of domesticated animals and races of *Drosophila* can be rapidly developed and maintained under especially favoring circumstances; but no practical breeder supposes for a moment that he is calling forth these new developments by the virtue of his feeding methods, his protective housing, or his scheme of training. Is the social reformer as clear-sighted?

Now in addition to these fundamental differences, or *germinal* variations, which may be small or large and are due to inherited factors, there are always manifested in every species, race, and family differences of a more superficial character, which are due to circumstances or individual experience in the widest sense—such as bodily and psychic injuries, athletic training, educational culture—and which are referred to as *somatic* variations or acquired characters. It is recognition of the importance of this distinction which has led biologists, from the time when Weismann first chopped the tails from nineteen generations of mice, to devise and perform innumerable experiments calculated to test its validity.[17] And with what outcome?

Such experiments, in ninety-nine cases out of a hundred, have produced merely negative results: the most outrageous and bizarre treatment of the parental generation—starvation, freezing, X-raying, dosing with alcohol, whirling in continuously or intermittently rotated cages; in short, exposure to every known chemical and physical influence, carried out with superhuman patience in the face of repeated failure and with sublime indifference to the frenzied protests of the Humane Society—all such manipulation has for the most part resulted in—nothing. The offspring subsequently produced by the victims of these experiments have in no single well authenticated and confirmed instance given rise to a homogeneous and stable hereditary line possessing new traits, such as is regularly obtainable from a true mutation. In the few cases where some of the young, even for several generations, have exhibited increased vitality, degenerated or regenerated eyes, movements suggesting vertigo, or the like, there is almost invariably a joker to be discerned by the critical eye—an alter-

[17] Many of these experiments are discussed by Conklin, *Heredity and Environment*, pp. 237–249. In Paul Kammerer's new book *The Inheritance of Acquired Characteristics* (1924) will be found almost all that can be said for the affirmative.

native explanation at least as plausible as the Lamarckian hypothesis. Extreme treatment with alcohol and X-rays (in such work as that of Stockard and that of Little) may possibly act directly and destructively on both soma and germplasm—"parallel induction"—and thus cause sterility or a varying incidence of defect among the offspring; or a less drastic administration of alcohol (as in Pearl's experiment with fowls) may result in a permanently improved progeny, due in all probability to the selective elimination of inherently weaker eggs or embryos. An unsuspected infectious disease of eye or ear (as in recent work on rats) may exist in the experimental animals and thus vitiate apparently conclusive results; and finally coincidence, pure and simple, cannot be disregarded as a possibility, especially in unconfirmed instances, e.g., the serum work of Guyer and Smith, where some of the offspring appear to exhibit hereditary defects exactly corresponding to the acquired lesions of the parents.[18]

But let us assume that special treatment, such as violent poisoning with alcohol or foreign serum, may occasionally cause some real degenerative change in the hereditary substance; let us accept the possibly correct view that instinct has arisen somehow in the course of time by the gradual congealing of newly adopted habits into inherited and perhaps unconscious modes of behavior. Do such assumptions warrant the hope that the education and uplifting of this generation can cause the next or any of those following to consist exclusively or largely of supermen, captains of their souls, creatures beyond good and evil—men done once and for all with the petty problems and weaknesses, the innumerable imbecilities that have previously afflicted the race? By no means. The notion is absurd. For whatever effect the environment may seem to have on the hereditary substance, under exceptional conditions, one general principle is clear, deduced alike from the teachings of palæontology and the sum total of human experience. This is, in brief, that the germplasm is perhaps the most stable compound in nature. Its transformation has been extremely slow, on the whole, and probably accomplished, as we have seen, by the sporadic and apparently random steps called mutations. Moreover, new hereditary factors almost without exception, when they do make their appearance, produce no discernible effect on the generation in which the germplasm has been modified, but only in its immediate offspring or their descendants. This should be clear even to an uplifter, if he pauses to reflect that

[18] In this case, too, hereditary disease may be involved, for quite recently corresponding abnormalities have been found in stock not treated with foreign serum

the qualities of the parental generation are the expression of the unaltered germ cells, while the changes observed in the young are the first manifestations of the new régime. And it may now be argued conversely that if the altered cells produce no effect on their enclosing soma, then a modification impressed upon the body, such as may result from drinking deep of the Pierian Spring or of post-bellum gin, will in turn produce no permanent and corresponding transformation in the germ cells which may survive the vicissitudes of the carcass that contains and nourishes them. Thus experiment and logic combine to enforce the conclusion that the race of man cannot be elevated nor yet debased intrinsically and permanently by the assaults of untoward circumstance, the folly of misspent youth, or the universal application of the pedagogic rod. If alcohol or disease really affected the germplasm in the way commonly assumed by the reformer, our race would have been extinct long ago; or, to view the question from the other side, with the assumption that Divine Providence had stayed the forces of destruction, we should have so profited by the mental gymnastics of our ancestors that the intelligence of the average man of to-day would as far overshadow the intelligence of Aristotle as Aristotle's mentality does actually overshadow the mentality of the existent average citizen of our republic.

Let us summarize briefly the results of research in genetics before we turn, in conclusion, to the application of biological principles to human affairs. The theory of organic evolution may be regarded as fully established, since all the facts gathered by Darwin and his predecessors as well as those which have been discovered since fall naturally into place under this point of view. Genetics is one of the most important of the new fields of inquiry laid open as a result of evolutionary thought and it is an especially direct consequence because heredity is the central feature of the evolutionary conception. From a vague and almost metaphysical mystery the process of biological inheritance has now become as definite and clear as any branch of knowledge, so that the prediction of results from known causes is one of the commonplaces of laboratory routine. By means of breeding experiments and often directly correlated study of the chromosomes of the germ cells it has been demonstrated that individual differences in plants, the lower animals, and man are passed on unchanged from one generation to another and that new characteristics now and then arise by mutation or rearrangement of the chromosomal complex and are thus added to the hereditary stream. Finally the stability and overwhelming importance of the germ-

plasm and the biological position of man as one among the animals have been established on grounds that seem to be beyond reasonable question. Beginning some twenty years ago with a sound, threefold foundation—a knowledge of chromosome behavior, the mathematical principles of Mendel, and the conception of mutation—genetics has grown and prospered amazingly, and the subject at the present moment affords illimitable scope for original investigation in regard to details. In this brief review we have been concerned with established principles: it has been impossible even to mention a score of specialized, highly technical aspects of research, some of which have already grown beyond the grasp of any save the mathematical or cytological expert.

IV. BIOLOGY AND SOME SOCIAL PROBLEMS

Agriculture, medicine, eugenics, marriage, the growth of populations are obviously biological matters; in fact, the various sciences treated in this volume are as really, if less directly, biological at bottom since they are concerned with the behavior of the human animal. But we have here too much to discuss in detail in one short chapter—we can scarcely hope to indicate even the most general of the relations implied in this (it is hoped) quite clearly valid thesis. And so let us choose a few topics of general interest for consideration in the light of biologic knowledge.

1. EUGENICS

The aim of eugenics has been well defined as "the improvement of mankind, the augmentation of the teachable minority":[19] to this end eugenics applies the teachings of genetics to humanity. We have found that man is essentially animal—biological—in nature, and so we may accept the fundamental postulate of the eugenic scheme, namely, that what is found to be generally true of animals and plants will be found to be true of *Homo sapiens*. But we began with the admission that man is unique in mental powers and in the artistic, emotional, and intellectual qualities which he in consequence possesses. It is therefore to be expected that man should elaborate somewhat on the simple artifices by which animals seek to satisfy their fundamental urges of hunger, sex, and fear, that he should find a part of his satisfaction in far-sighted plans for the happiness of his declining years, of his friends, or even of his posterity. The

[19] H. L. Mencken.

ultimate purpose of eugenics is, of course, to make life more agreeable and it is to this extent at one with Theosophy, Socialism, Prohibition, and all the other expressions of human aspiration toward a better life; but here the similarity abruptly ends, for eugenics stands in the bright company of movements dedicated to the reform of humanity, as the somewhat austere representative of modern science, at once confident in the knowledge of some basic facts, devoid of appeal to the mass emotions of the general run of men, and skeptical of sudden or spectacular renovation.[20] Genetics, as we have found, teaches that humanity consists of numerous hereditary strains, good, mediocre, and bad, which are for all purposes of practical sociology unchangeable; and that this principle applies alike to physical, mental, and spiritual qualities. With this basis of scientific truth, what are the proposals for the improvement of mankind which eugenics has to offer in place of the environmentalist philosophy of the reformers?

Disentangled from the overpowering mass of statistical data and technical verbiage with which the eugenists habitually clothe their thoughts, and freed from the timid qualifications and weak concessions to current prejudice which they too often employ in tempering their harsh doctrines to the public ear, the general plan is very simple. It is proposed that the principles underlying the production and maintenance of the highly perfected breeds of domesticated animals and plants be applied to the improvement of *la bête humaine*. That is to say, the process which Darwin called artificial selection is to be employed in segregating and multiplying the already existing stocks which are known to produce men of ability, and a sharp watch is to be kept for such new and better types as may appear from time to time in the Providence of God. In practice the program will include five elements, as follows: 1, identification of the good and bad among existing strains; 2, repression of the bad; 3, encouragement to reproduction of the good; 4, determination of the influences, if any, capable of vitiating good stocks; 5, provision of favorable circumstances for the good. There are two outstanding features of this scheme which should be borne clearly in mind, to wit: (a) the first four proposals are based uncompromisingly upon the

[20] For more on eugenics see F. Galton, *Essays in Eugenics;* K. Pearson, et al., *The Treasury of Human Inheritance;* and Pearson, *National Life from the Standpoint of Science;* P. Popenoe, and R. H. Johnston, *Applied Eugenics;* C. B. Davenport, *Heredity in Relation to Eugenics;* H. H. Newman, *Readings in Evolution, Genetics and Eugenics;* Publications of the Eugenics Record Office; the Eugenics Congress Reports; and the related texts already referred to in earlier footnotes.

theory that good and bad qualities are virtually fixed possessions of certain hereditary strains; and (b) the fifth, which is the whole law of the environmentalist uplift, is here but the finishing touch, subsidiary but nevertheless essential to the fulfillment of the eugenic aim. We may now enquire briefly into the *modus operandi* of these elements in the plan of improvement. Is there any reasonable likelihood that they embody a feasible course of action, assuming that human nature will remain about as it is and that they must be carried out under democratic institutions; or are we here bemused once more by a vague and nonsensical idealism?

The first and obviously fundamental element in the eugenic crusade has been distinctly recognized as such from the time when Galton (1822–1911) first grasped the bearing of Darwin's pronouncements upon the destiny of mankind. It was a simple matter to begin by inspecting the records of European royalty and of the eminent families whose achievements were common knowledge.[21] The results of such studies, of course, showed that ability was overwhelmingly a matter of breeding. The subsequent development of biometry—the application of statistical methods[22] to biological research—has vastly enlarged the scope of this type of investigation, until at the present time the archives of eugenical institutions[23] are bursting with data, of varying worth no doubt, drawn from every conceivable field of human activity. Whenever a competent student undertakes the detailed study and interpretation of any particular set of these records —the history of the "Jukes" or of the Edwards families, the mores of the New England hill-folk, the incidence of musical or other artistic gifts, the occurrence or feeble-mindedness or manic depressive insanity—in all such studies it has been shown conclusively that the characteristic in question appeared in some one individual or family and then spread abroad among later generations in correlation with consanguinity, regardless of environmental fluctuations.[24] And as an important corollary to such conclusions, it has usually been clearly evident that the material circumstances of the persons investigated

[21] See Galton, *Hereditary Genius;* H. Ellis, *A Study of British Genius;* and F. A. Woods, *Mental and Moral Heridity in Royalty, a Statistical Study in History and Psychology.*

[22] Elaborated in C. B. Davenport, *Statistical Methods with Special Reference to Biological Variation* (1904); R. Pearl, *Modes of Research in Genetics* (1915), and *An Introduction to Medical Biometry and Statistics* (1923); and, above all, in the work of Pearson and his associates in London.

[23] E. g., the Eugenics Record Office (of the Carnegie Institution) in this country; the Francis Galton Laboratory for National Eugenics in England; and others on the continent.

[24] Gates, op. cit., includes many pertinent cases.

owed their character—prosperous or miserable, favorable or injurious—to the inherent qualities of the families to which they belonged. The first item in the eugenic scheme is then a matter of scientific research: a gathering, sifting, and interpretation of data. This is now well under way, in almost every civilized country. It is the primary business of certain endowed or state supported institutions, in which the curious visitor will find cloistered a few strange persons who seem to find the breath of life in files, computing machines, and ordered tabulations.

The second proposal—concerned with the elimination of the unfit—has likewise had a long and honorable history, and the recent development of the idea is simply a natural modification and extension of practices generally approved: such, for example, as the segregation and confinement of the insane, the violently criminal, and the hopelessly feeble-minded.[25] But of late the new realization that propagation of hereditary defects is bound to entail human misery and public expense has given rise to the suggestion that the problem can be most easily and certainly solved, with least hardship to the individual, by simply insuring that the defective does not reproduce. Incarceration, prohibition of marriage, and denial of free association are harsh measures to apply in any but extreme cases, and those who care for liberty are quite right in viewing with suspicion any scheme involving such an assault upon human freedom; but modern eugenic research has something better to offer, namely sterilization.[26] This, in brief, is accomplished by a simple surgical operation which, while it effectually prevents any share in the production of offspring, imposes no hardship upon the person concerned, permits of normal human relationships, such as marriage, and usually appeals to the common sense of the defective sufficiently to gain his consent. The plan has been worked out in minutest detail and from every aspect—medical, legal, and moral—and it is in practical operation in certain states and countries. It seems destined to become a commonplace of civilized living.

Another and somewhat less drastic repressive measure now receiving wide public notice under the rather inaccurate name of "birth control" may conceivably be employed by the intelligent to replace

[25] Feeble-mindedness has been extensively treated from the biological and sociological standpoint by H. H. Goddard, *Feeble-mindedness; Its Causes and Consequences;* and *The Kallikak Family, a Study in the Heredity of Feeble-mindedness;* and by A. F. Tredgold, *Mental Deficiency.*

[26] In H. H. Laughlin, *Eugenical Sterilization in the United States* (1922), the reader will find an extraordinarily thorough treatment of the subject considered from every point of view.

sterilization as a means of stopping the propagation of hereditary defects, but in actual practice, because of a combination of religious taboos, outmoded legislation, and educational deficiencies, the artificial prevention of conception has resulted dysgenically in a differential birthrate. This simply means that the more intelligent and prosperous classes have few children per family, while the ignorant, inferior, and poverty-stricken continue in exuberant fecundity; so that the proportion of the ill-born and tainted is steadily increasing with no promise of benefit to society in general. Here we are confronted with a difficult and indeed a somewhat delicate situation. The propagandists for birth control—now exceedingly articulate, zealous in research, and venturesome enough to display their journal[27] in public—advocate the teaching of their arts to the poor, through free clinics and the medical profession; but before they can accomplish very much they must effect the repeal of the laws which, except in cases of therapeutic necessity, make such education a crime of the order of beer-drinking and highway robbery; and even then the full success of their scheme must for long remain dubious in the face of human swinishness and superstition.

The question of immigration is, to the eugenist, largely a matter of elimination (assuming that the inflow of foreigners is not to be entirely stopped at present), for it is in general the inferior rather than the superior, socially if not always physiologically, who are currently attracted to the land of the free. Since so large a subject cannot be fully treated here it must suffice to give briefly the gist of recent investigation.[28] With intelligence tests and medical examinations giving good average results it is deemed possible to restrict immigration to the best individuals and families, or at least to prevent the entrance of the highly undesirable; and thus it is recommended that prospective immigrants, whatever their race or nationality, be carefully examined (preferably, it would seem, before they take ship for the land of promise), and that the admitted be rigor-

[27] *The Birth Control Review*, edited by Margaret Sanger, and published by the American Birth Control League, 104 Fifth Avenue, New York. Similar magazines appear in Europe.

[28] Regarding the practicability of individual tests for prospective immigrants see H. H. Laughlin, *Europa as an Emigrant Exporting Continent and the United States as an Immigrant Receiving Nation* (1923), 68th Congress, First Session, Serial 5A. This includes the results of studies recently made abroad. For a criticism of Laughlin's statistical methods see Gillman, "Statistics and the Immigration Problem," *American Journal of Sociology*, Vol. XXX, pp. 29–48. See also C. Brigham, *A Study of American Intelligence* (1923), which stresses racial rather than individual differences, basing the conclusions on the data afforded by the Army Intelligence tests.

ously chosen primarily on the basis of intelligence and health, without too much regard for political expediency in the matter of "discrimination." And when they reach these shores let opportunity be freely offered to all and urgently presented to the best, to the end that innate qualities may be fully developed through the interaction of personal initiative and environmental resources. This is admittedly a scheme difficult and expensive of execution, if not wholly visionary, but under these auspices the stewing of the melting-pot could be watched in peace and tranquillity of mind; for thus, surely, the venerable average of American ability would hardly suffer from the assimilation of the newcomers, whatever their race.

So the eliminative and preventive aspect of eugenics, which takes cognizance alike of major and minor defects, evidently promises far more in the way of immediate benefits than do the others. It is quite unnecessary and probably impossible within a reasonable time to develop men higher than Aristotle, Da Vinci, or Havelock Ellis, but it is both immediately feasible and highly desirable to put an abrupt stop to the multiplication of the inherently diseased and mentally deficient, and thus to increase decidedly the proportion of first-rate men in the population at large.

The third thesis—urging the bearers of good hereditary qualities to accelerate their reproductive activities—has unfortunately given rise to an extraordinary display of grotesque buffoonery, which often tends to cast dark doubts upon the good sense of the eugenists and thus to wreck the whole movement. It is hardly to be believed that a single instance exists or is likely to exist of a eugenically "good" woman who has demonstrably produced the statistically requisite minimum of four children, purely as a result of her altruistic concern for democracy, the Nordic race, or abstract progress as represented by posterity, when, lacking such enlightenment, she would have produced in the course of modified nature a brood of lesser mathematical adequacy, if any at all. Still, there is no telling just how much the deplored infecundity of the better classes depends upon economic factors, and if each additional child born of a certified mating could be made by some sort of subsidy to represent a clear economic advantage instead of a new burden, it is possible that the graduates of Vassar and of Harvard might be induced to repair the fractionary offspring which they are said to produce in defiance alike of patriotic obligation and the laws of embryology. Even the younger university and college teachers might be persuaded, under vastly different circumstances, to take a hand in the worthy work of producing superior voters and cannon-fodder. But in all serious-

ness, this third item in the scheme of improvement undoubtedly contains a germ of sense, and with a more sound and practical groundwork for its propaganda it may conceivably meet with measurable success. It is really the concern of the instructed individual.

The fourth theme—on the influences which may effect the degradation of good germplasm now in active practice—is purely a matter for scientific research and the concern solely of expert geneticists. Great difficulties are to be met with in the thorough study of this question, and all the resources of animal experimentation, sociological surveying, and mathematical computation must be drawn up to the attack. In view of the wealth of evidence, which, as we have seen, attests the relative stability and insulation of the germplasm, it would seem the part of wisdom to leave this topic for the present in the hands of the investigating scientists; and there is little likelihood that the sociologist, dealing, say, with prohibition, education, or venereal disease, will go far astray in assuming that for the purposes of his immediate activities environmental influences have little power either to debase or to improve the hereditary lines which he finds already in existence.[20]

The fifth and last item in the scheme—looking toward the provision of optimum living conditions—is often set apart from eugenics proper as *euthenics;* and, indeed, it is necessary in the heat of battle with the reformers to insist on the Galtonian antithesis of nature *vs.* nurture. But poverty of environment—faulty training or meager schooling—whether or not it can of itself cause hereditary degeneracy, will inevitably defeat the eugenic aim by retarding the development in the individual of worthy traits and often by preventing even their recognition as such; and thus the eugenist has a vital interest in any intelligent enterprise for human betterment, if only it does not involve a waste of necessarily limited resources through neglect of the innately superior in favor of the weak. It would obviously be futile, for instance, to devise and put into operation an elaborate scheme for selecting and admitting none but the most intelligent and healthy among Sicilians ambitious to enter upon the duties of American citizenship, only to make prosperous fruit merchants and white slavers of persons equipped by nature for high attainment in music, say, or sculpture: evidently it falls within the scope of the eugenist to make sure that the chosen are offered appropriate education and are not confronted by slum conditions so impossible as to crush all but the most extraordinarily gifted. It is

[20] See H. H. Goddard, *Human Efficiency and Levels of Intelligence;* and E. H. Starling, et al., *The Action of Alcohol on Man, etc.* (1923).

here that the biologist can at last make common cause with the environmentalist reformer and watch with warm approval the activities of those who so earnestly believe in a millennium to be ushered in through night schools, the open forum, and sanitary plumbing.

Such, in outline, is the eugenic scheme for the uplift of humanity. Based as it is on scientific fact and general experience, tolerant of a reasonable altruism, its single aim the recognition and preservation of quality and ability, and promising immediate as well as future benefits, the eugenic gospel above all and finally is consistent with liberty. Thus the eugenist holds views—and if sufficiently free and honest expresses them—which are absolutely antithetical to many of the prime phenomena of democracy, such, for example, as the brutal oppression of dissenting individuals and aspiring minorities by the timorous and mediocre majority, without regard for intrinsic merit and on the traditional and ever popular grounds of envy, distrust, and fear; and he is equally opposed to the maintenance of power and privilege on any other basis than that of proved superiority. It can be maintained in criticism, of course, that a highly intelligent man may employ his talents for subversive ends, against the higher good: he may conceivably go in for profiteering, censorship, or safe-blowing. But this is rarely to be expected; for there is no denying that a high correlation exists between mental ability and the social virtues. Moreover, it is to be admitted that the fundamentally important criteria of examination, the machinery of testing, are capable of improvement. But enough has already been accomplished in this direction not only to give promise for the future but also to justify present action. It would seem, therefore, that among the countless schemes for reform born of the restless and dissatisfied strivings of man to better his earthly lot—it would seem that eugenics may reasonably be regarded with a more than ordinarily hopeful eye; if, indeed, improvement in the inherent qualities of humanity, as distinguished from mere progress in invention, is at all possible, if it is anything, let us say, beyond a futile and utopian aspiration.

2. INDIVIDUAL DIFFERENCES

All men are created free and equal. . . . Here indeed would be an unique and striking taxonomic character of the human species—if it were true. For as we have seen the universality of variation among animals and plants is one of the basic facts of biology; and by this is meant not mere somatic variability but the inherent dif-

ferences by which whole family lines as well as individuals are to be distinguished. Indeed, among Nordics, among "Kallikaks,"[30] among Edwardses are to be found divergences of wide sweep and enduring genetic potency; in fact among, say, blond Englishmen the gulf fixed between the highest and the lowest in mental capacity is many times as great as that between the average of the white and of the negro race.[31] If anyone doubts the existence of inherited differences among men—physical and mental—exactly like those familiarly observed among domesticated animals, let him first ask himself why he is a miserable clerk while his neighbor is a successful artist or captain of industry, let him note the hierarchy of employees in a business house or of students in a schoolroom class, and then let him look into the facts of human inheritance in some recent compendium like that of Gates.[32] The idealism of democracy, the confusion of *qualities* with political "rights" or privileges, is responsible in large part for the hazy notion that one man is "as good as another, if not better." In truth, since the day when some primitive savage realized his own superiority, and, impressing that great truth upon his more or less unwilling companions by *force majeure*, had himself set up as the first chieftain, there has always been a class to rule and a class to obey, an aristocracy and a mob. And in these enlightened times when the proletariat (that is, a few intelligent and probably ruthless chieftains) hold Russia in a new despotism, and Labor (that is, a few intelligent and cautious chieftains) maintain the institutions of the British Empire infinitely close to the *status quo ante*—in these latter days the old rule is seen to be still in force. But perhaps there is, under democratic organization, a new opportunity for insuring that rulers shall be well qualified: it should be the concern of intelligent men to see that an aristocracy of ability shall be maintained, open to proved capacity and untenable by incompetency irrespective of either birth or wealth. This is an ideal worth while, for it is biologically sound and sure to result in widespread and lasting benefit.[33] But perhaps we had better leave this pleasing and

[30] H. H. Goddard, *The Kallikak Family.*

[31] E. M. East, *Mankind at the Crossroads* (1923), pp. 131 ff.; in this chapter East includes a reasonably sensible statement of the race question. For statistics see Brigham, op. cit. The whole history of the racial hypothesis is contained in T. Simar, *Étude critique sur la formation de la doctrine des Races* (1923). The best critique is contained in F H Hankins, *The Racial Basis of Civilization* (1926). See also his summary in C. E. Merriam, and H. E. Barnes, *A History of Political Theories: Recent Times* (1924), Chap. xiii.

[32] Gates, *Heredity and Eugenics*, gives the data of human inheritance.

[33] A. E. Wiggam's *The New Decalogue of Science* (1923), is an effective, if dogmatic and impassioned, plea for this ideal. L. Stoddard, in *The Revolt against Civilization*, presents in an eloquent manner the case against the "under man."

possibly illusory prospect and turn to a concrete instance in which individual differences may be profitably considered with a view to immediate action—the subject of education in the United States

Book-learning has quite properly constituted the major, almost the sole aim of American education: reading, writing, and arithmetic, together with the higher intellectual pursuits to which they give access, still form the main substance of schooling from the primary grades to the university. And this is as it should be, for under civilization intelligence may be defined in a general way as the ability to profit by book-learning. On the whole, the individual who can make his way successfully through this course of training is the individual who is fitted to take a proper place in the cultured world. But experience has shown that this course of study is an instrument of severe selection: only ten per cent of the people, so it is said, succeed in completing the work of the high school, while perhaps four per cent can do college work with distinction. The rest drop out of the procession sooner or later and go to work as clerks, laborers, sailors, and small business men. This process is strikingly reminiscent of Darwin's principle of natural selection as it works out among animals in the wild state, and it is entirely explicable in the light of what we know regarding individual differences—mental as well as physical—among men. The fact is that when a hundred children enter the first grade they constitute not a homogeneous assemblage fitted for one special type of education, but rather a graded series —with respect to innate mental capacity—from the definitely feeble-minded to the four superior individuals who will be left to represent the group when high honors are awarded some sixteen years later Until recently the school system provided but a single course, at least during the early years, for this motley company, although a dim sense that all was not well sometimes led educators to dilute the stream of book-learning with manual-training, calisthenics, stenography, and other such busy-work, and here and there something wholly new was introduced in the form of the Gary system or the Montessori method. The most able pupils were allowed to skip grades, it is true, but although they thus made rapid progress their training was uneven and in later years they failed of their proper experience in leadership because their companions while inferior mentally were older and superior in bodily prowess; and meanwhile the less able frequently failed of promotion, acquired an inferiority complex, and before long left school without any training of practical value in the humble spheres to which they were called. Such a scheme is obviously unsatisfactory in some ways, though its selec-

tive effect is salutary. Lately an anthropologist of the environmentalist persuasion was heard to cry from the lecture platform: "If only ten per cent of the people can succeed in high school studies, let us reform the high schools!" In other words, let us relax the stringency of selection, so that the mentally inferior may receive diplomas and thus seem to be no longer inferior! This scheme has already been in operation in many schools and in the state universities, where all who are certified save by the laxest of high schools may enter undeterred by the entrance examinations which form the bulwark of the better universities. The result of all this is that the schools are overcrowded by pupils unfitted for and unable to profit by the type of education provided, able individuals are neglected when they should be the prime care of the teachers, the professions are infested by moronic alumni of the second-rate state colleges and one-building universities, and taxes are ruinous. The solution of these difficulties is not to "reform the high schools" but to shift the burden of selection from the school system as a whole to the first two or three grades. And this is now possible through the recent development of intelligence tests. Let us examine briefly the workings of the scheme, as developed in actual practice in the schools of Detroit.[34]

The authorities in charge frankly recognize the biological fact of diverse inherited mental levels, and so all pupils entering the first grade are given a special test by specially trained teachers, assisted by psychologists. According to the result of this test, the pupils are classified in three divisions as follows: X, individuals of high ability (A and B of the army tests[35]), about twenty-two per cent; Y, mediocre (C+, C, and C−), about sixty per cent; and Z, low (D and E), about eighteen per cent. Ultimately, those who are unable to do even the Z work (many of whom are feeble-minded) are put in special classes for the deficient, denominated A and B. All these groups are put in separate rooms without regard to the wishes of parents (protests have been rare and ineffectual), and divergent courses of study are entered upon. At first sufficient similarity is maintained to provide for retarded development and mistakes in classifying by easy and immediate transfer of misplaced pupils from one division to another; but ultimately the lower groups will concentrate upon manual training and the simpler mechanic arts, while the higher make rapid and even progress toward the higher learning, the intermediate

[34] Fully described in articles by Dr. C. S. Berry.

[35] See R. M. Yerkes, *Psychological Examining in the United States Army* (1921). The import of this work is well summarized by Brigham.

going as far as may be on the road of book-study. This plan is of great significance as indicating the direction in which elementary education is sure to develop, for the principles underlying it are sound biologically and its practical workings are bound to result in obvious benefits to all concerned. The best pupils are free to advance speedily under instruction which is not distracted by the presence of dullards, the pupils of the lower groups are freed from hopeless and humiliating competition with their superiors, they have the satisfaction of passing into the next higher grade each year, and before long they emerge equipped with mechanical training sufficient to bring them success and contentment in their appropriate fields. No serious obstacle has arisen so far in the carrying out of this enterprise, and some such method should be given a thorough trial in every community.

Attention may be drawn here to the clinical work on individual differences now being carried on by Dr. George Draper and collaborators. It appears that susceptibility to many diseases, like pernicious anæmia, tuberculosis, and gastric ulcer, is strikingly correlated with various anatomical characters of anthropometric value and, in many cases, of known hereditary quality, such, for example, as facial proportions. These new results (see Selected References) are obviously of great importance, not only for preventive and diagnostic medicine, but also for genetics. They seem to have a direct bearing, for instance, on the argument often advanced against the value of selection by disease, i.e., that one type is quite as likely to become infected as another, that the plague smites the just and the unjust with a fine impartiality. It is becoming clear from these investigations that immunity (and susceptibility) is by no means a haphazard matter, and that epidemics are highly selective. Whether this process works eugenically or dysgenically is a question to be determined by working out in each case the correlations involved, in order to discover what characters accompany susceptibility to particular diseases.

3. POPULATION AND THE FOOD SUPPLY

There are more than twice as many people in the world as there were a hundred years ago. The fertile areas of the world have been largely taken up and will be fully occupied within fifty years. The power of agriculture to call sustenance from the soil is not susceptible to great and sudden augmentation. And the rapidity of human reproduction, the increase in world population, is now at its greatest.

Here in a few sentences we have described a situation unique in history and fraught with inevitable consequences for human happiness. The increase and spread of human populations and the growth of food-plants are matters as purely biological as can well be imagined; and the solution of the problems involved depends upon the application through man's intelligence of biological knowledge. Detailed statistical proof of these statements and full consideration of their world-wide, national, family, and individual implications cannot detain us here; they will be found in East's recent work,[36] and in the papers of Malthus,[37] Pearl,[38] and many other investigators. But we can set forth in brief the condition which confronts us and the remedy.

Man affords no exception to Darwin's first principle: All organisms tend to produce more young than are needed to replace the parental generation. His reproductive instinct, largely unmodified by intelligent control, has now all but filled the world. There are already too many people, even white people, for comfort; before the top of Pearl's curve is reached, before absolute saturation is attained, the struggle for existence will assume a complexion of unexampled ferocity and human happiness will be reduced to a mere abstraction. The industrial revolution gave a great impetus to population increase simply because machinery facilitated the cultivation of new and distant virgin soils; but there is no prospect that this can happen again through the progress of invention, because, as East explains, there are practically no more virgin soils to conquer and the processes of metabolism, the biologic chemistry of plants, are susceptible of only limited acceleration as a result of intensive cultivation, be the sweat of man's brow never so copious. The white race, if we may so designate a certain portion of mankind, now holds the remaining arable areas as well as the power to finance and defend them; so the propagandist of "race suicide" may be permitted to stand neglected upon his soap-box. His notions, indeed, are exactly contrary to the teach-

[36] East, *Mankind at the Crossroads;* A. M. Carr-Saunders, *The Population Problem* (1923); H. Cox, *The Problem of Population* (1923); E. B. Reuter, *Population Problems* (1923). Haldane, in his *Dedalus* (1924), presents a suggestive, though fanciful, set of prophecies concerning hitherto untapped sources of food-supply.

[37] T. R. Malthus, *An Essay on the Principle of Population* (1798, 1803). For a consideration of Malthusianism in the light of the developments of the nineteenth century see W. O. Thompson, *Malthusianism: A Study in Population* (1915).

[38] R. Pearl, "The Biology of Population Growth," in *American Mercury*, November, 1924; and many more formal articles.

ings of modern biology and the practical recommendations which the biologist has to offer.

In his recent lectures on China, Mr. Bertrand Russell repeatedly asserted that Christianity, hygiene, and machinery are working practical harm in that overcrowded land; what is needed, he affirmed over and over, is "a solution of the population problem." That must come first. The misery of the Chinese masses is our warning.

What is to be done? "If the human race really desires a continued progress, a fair chance, and a longer and happier life for every individual" [says East], "the birth-rate must come down faster and faster; and it must come down throughout the whole population and not merely within the one section which furnishes those of greatest social worth. To accomplish this, parentage must not be haphazard." That is, birth control—the deliberate prevention of conception—must be perfected, freed of its nonsensical incubi of tradition and prejudice, and made a household custom of all the people. In this way the amative and procreative functions will quite properly come to be generally regarded as pertaining to very widely separated aspects of life, a fortunate outcome in more ways than one. The propagandists for birth control are well organized, and, as we have seen, publish a technical journal [39] as well as books [40] and pamphlets; but these publications are prevented by law in the United States from discussing methods, so that their value depends upon their effectiveness in awakening public opinion. It is to be hoped that woman suffrage may fulfill the expectations of those who labored to bring it about, at least in accomplishing the repeal of the hypocritical, discriminatory, and altogether ridiculous legislation which classes contraceptive knowledge with obscenities.

4. PUBLIC HEALTH

Within the last few years several of the great universities have established graduate schools of hygiene and public health, with the idea that the health and welfare of communities often depends quite as much on general, purely biological measures as on the personal ministrations of the physician. Such schools are set up not in competition with the medical colleges but in coöperation with and as com-

[39] See above, footnote 27.

[40] M. Sanger, *The Pivot of Civilization;* W. J. Robinson, *Birth Control;* L. A. Vilbiss, *Birth Control;* M. C. Stopes, *Contraception: Its Theory, History and Practice;* and many other works of similar nature.

plements to them, for there are many subjects of inquiry that require biologists and biological methods as well as resources foreign to the already overloaded schools of medicine. Parallel with these foundations for the advancement of hygienic theory are the various organizations for practical effort which have grown out of the old boards of health and which function with more or less efficiency and manifest a greater or lesser degree of regard for the newest theoretical advances according to the enlightenment of the communities that maintain them.

Public health despite its relative newness has already become a large subject, and we must content ourselves with no more than a brief mention of some of its more important aspects. Some of these aspects are predominantly medical, like quarantine, school inspection, and vaccination; others involve engineering problems, like the regulation of housing conditions and the development of public sanitation; while still others, and some of the most important, are distinctly biological and require the equal coöperation of theorists in the institutions and officials in the field. Of the latter one of the most fundamental is vital statistics, that is, the collection and mathematical treatment of data on such topics as rates of birth and death, the incidence of epidemic disease, marriage and divorce, immigration, the alcohol problem, and infant mortality. Census reports and actuarial records have long been concerned with these matters, but significant truth can be extracted from these sources only through the guarded analysis of specialists trained in biometry (biological mathematics), using such methods as are set forth in Pearl's recent books on the subject.[41] Another aspect of public health which clearly belongs here is the study on a large scale of pathogenic organisms and the mass treatment of populations and regions for bacterial and animal-borne diseases like tuberculosis, malaria, and ankylostomiasis.[42] In such cases the biologist investigates the habits and life history of the organism concerned, the medical specialist seeks out means for destroying it without killing the patient, and the health officer sees to the elimination of natural breeding places and instructs the populace in methods of avoidance. Finally we may note with especial emphasis two elements in public health work which must come to be, if they are not already, among the chief concerns of the hygienist, viz., the universal application of venereal prophylaxis and the prac-

[41] R. Pearl, *The Biology of Death*, and *Introduction to Medical Biometry and Vital Statistics*. For the general field of public health see M. J. Rosenau's *Preventive Medicine and Hygiene* (1921).

[42] Chandler, *Animal Parasites and Human Disease;* and E. O. Jordan, *A Text-book of General Bacteriology.*

tical carrying out of such eugenic measures as may prove to be feasible and worth while.

The field of hygiene and public health thus affords scope for the highest abilities of men and women trained in biology and ambitious to ameliorate the lot of man while making "an articulate noise in the world." This comparatively new department of human endeavor has already, while establishing itself, achieved remarkable triumphs in abolishing the plagues that ravaged the mediæval world and conquering yellow fever; and it may be expected with confidence that in the near future it will similarly rid mankind of "influenza" and venereal disease, along with a host of minor evils.

5. RACIAL THEORIES

The human species, called *Homo sapiens* in the terminology of Linnæus, consists like many other animal species of several subspecies or races, distinct in germinal and somatic characters and occupying in general separate areas of the earth's surface, although they can and do interbreed, producing fertile offspring. There have been distinguished, moreover, several racial (or more properly subracial) stocks among what we may refer to as the white race, the type responsible for European civilization; and much has been made of this classification since the significance of hereditary qualities came to be recognized. To restrict ourselves here to the biological aspects of the matter, we may simply refer to the Nordic hypothesis as the probably sound notion that Europe was once peopled by three races, the Nordic, the Alpine, and the Mediterranean; moreover, that these three races can still be identified by certain bodily and even immunological and mental characteristics, in spite of much admixture; further, that the Nordic has contributed a large share in the discovery and early development of new territories. But granting all this it remains difficult for the judicious to accept whole-heartedly the thesis, passionately supported by Grant,[48] Brigham, and some of the eugenists, that almost or quite all of the hereditary qualities of value in modern civilized life are the practically exclusive possession of persons descended from Nordic ancestry. For undoubtedly the Alpine and Mediterranean stocks exhibit some traits of supreme value for a civilization which has outgrown the pioneering and witch-burning

[48] M. Grant, *The Passing of the Great Race* (1916, 1921). This doctrine has been espoused, among others, by Brigham, op. cit., Stoddard, *The Rising Tide of Color;* W. McDougall, *Is America Safe for Democracy?;* C. W. Gould, *America: A Family Matter;* C. H. Burr, *America's Race Heritage;* H. J. Eckenrode, *Jefferson Davis.* See the critique by Hankins, op. cit., and loc. cit.

stage and they afford, in consequence, even among our present immigrants many individuals capable of appreciating the privileges of modern life and of contributing worthily to it, especially in the arts. Indeed, it is admitted by some of the Nordic mythologists themselves that actual superiority in intelligence and in the generous virtues is, in fact, to be found below the Mason and Dixon's line of Europe![44] And yet we are asked to give obeisance to this pale idol, who, to quote his votaries, is typically morose and introspective, or "introvert"; full of the sterner virtues and not a little stupid; apt for solitary pioneering, scientific warfare, and repressive legislation; and destined, as the statistical maps so clearly show, for suicide as the only solution of the dense riddle presented by a world wherein the biological urge to enjoy life and the metaphyiscal taboo against beauty and pleasure are in eternal conflict.[45] Even if we find that a great majority of recent immigrants from southern Europe are apparently inferior and undesirable—likely to breed at best dangerous and undisciplined leaders intent on the overthrow of our cherished institutions and at worst a mob of discontented and destructive followers for such leaders[46]—if this is in fact the truth there is still no good reason to embrace the Nordic revelation, with its simple faith in the blond credo and its simple solution for dark problems; all that is needful to exorcise the phantasmagoria that so affright the neo-Norsemen is a rigorous application of two of our eugenic principles—selection and education.[47] For what the world needs is not statistical averages, of whatever complexion, or even the elevation by a few notches of the general level of popular intelligence; but rather "the augmentation of the teachable minority," an increase in the number of individuals possessing marked ability—with the eminent family lines they may be expected to found. Such an increase may be accomplished much more rapidly by the selection of individuals than of races, because of the fact already noted that average differences between races are insignificant in comparison with individual differences within a single race.

Let this be the answer to those who misguidedly believe that the eugenic demand for conservation of good germplasm means that we "are bound to enter the realm of the Nordic myth" and that "*provision of favorable circumstances for the good* [stocks] . . . will, of course, then come to mean cakes and ale only for the white, Protestant

[44] Grant, op. cit., p 229.

[45] McDougall, *Is America Safe for Democracy?*; and H. L. Mencken, *A Book of Prefaces*, pp. 197–283.

[46] L. Stoddard, *The Revolt Against Civilization.*

[47] Dealt with above in the section on eugenics.

Nordics, a reduction to absurdity."[48] There is not the slightest prospect that biology is about to join forces with the Ku Klux Klan.

6. GLANDS

Of late the public has been favored with a great deal of sensational information about glands. Novels,[49] more or less scientific books,[50] magazine articles, and newspaper stories dealing with the subject have suddenly become numerous; and the public, ever thirsty for new perunas, seems ready to turn from psychoanalysis to gland therapy and surgery as a means of acquiring a more compelling personality, new youthfulness, and an empty pocketbook. All this, to be sure, is pathetic nonsense—the Fountain of Youth is to be found no more in monkey glands and the Steinach method than in Florida—but there is a biological basis underlying these manifestations, and a new branch of science, called endocrinology, is gradually assuming importance as the results of exact experimentation become available for analysis and codification. This subject has already become rather extensive, but its essentials may be rehearsed in a few words.

A gland is an organ in the animal body which produces a specific secretion or substance of definite physiological value. Ordinary glands usually produce enzymes of unstable, protein nature and discharge their products through ducts into some cavity; their functions are relatively plain and have long been commonly understood. There is, however, another type of secretory organ—comprising what are called the endocrine, or more loosely, the ductless glands—which elaborates a relatively simple and stable substance, an internal secretion or hormone, of nonprotein composition, and discharges its product by way of the capillary walls directly into the blood stream. The more important of the endocrine glands are the thyroid, the parathyroids, the pituitary, the adrenals, the ovaries and testes, and a portion of the pancreas. In general these glands control growth and development and exert a powerful regulatory effect on the metabolism or chemistry of the body; but their action is often insidious and always dependent upon the interrelated effects of the entire endocrine system; so that the acquisition of exact knowledge in this field, since

[48] *The Medical Times*, July, 1924, pp. 163–164.

[49] G. Atherton, *Black Oxen*, an interesting and suggestive, but exaggerated and absurd story of the rejuvenation of an aged society woman.

[50] L. Berman, *The Glands Regulating Personality* (1921); W. B. Cannon, *Bodily Change in Pain, Hunger, Fear and Rage, etc.*, (1915); J. T. Cunningham, *Hormones and Heredity* (1921); P. Kammerer, *Rejuvenation and the Prolongation of Human Efficiency* (1924).

Berthold first transplanted the sexual glands of fowls in 1849 and noted the resultant modification in the secondary sexual characteristics of his birds, has been slow and accomplished only through carefully controlled and cautiously interpreted experimental work. To illustrate the endocrine functions we may review briefly a few well established instances.

The first endocrine experiment was performed in remote antiquity, when it was discovered that a eunuch instead of a man would result if the testes were removed in early youth. More recently it has been shown that complete reversal of sex instincts can be accomplished by engrafting an ovary into a castrated rat, which thereupon not only loses his virile instincts but even takes on such female attributes as the tendency to mate with normal males and to care for new-born young. Thus it has become clear that not only sexual structures but also sexual behavior are determined in man as well as in animals at least in part by internal secretions. A curious, unintentional experiment was carried out by the Blazek twins, two sisters who were organically connected from birth in the manner of the Siamese twins. When one became pregnant the other shared in the development of the mammary glands usual at such a juncture, thus confirming the theory that this phenomenon is due to a hormone (probably secreted by a part of the ovary) which reaches the breast by way of the blood. The tadpole develops into the mature frog by a process of metamorphosis: if its thyroids be removed this metamorphosis is indefinitely postponed; if thyroid tissue is restored the change at once sets in. The thyroid gland in man exerts an extraordinary influence over general metabolism: "it regulates the rate of oxidation in the body and through this regulation, it indirectly influences the activity of the heart and the nervous system and, indeed, the activities of the whole body. The internal secretion of the thyroid is the kindling which makes the fires of the living animal burn intensely."[51] In abnormal cases strange results follow. If the thyroid is too active the hyperexcitability, general derangement, often fatal conclusion, and other symptoms of toxic goiter appear; if it is deficient congenitally the feeble growth, general flabbiness, and defective mentality of cretinism are manifested. Both these pathological conditions may be cured or alleviated: the one by reducing the size or blood supply of the thyroid by surgical means, the other by feeding thyroid substance to the patient.

It is evident that endocrinology is a promising branch of physiology, both for theoretical biology and for practical medicine; but its

[51] P. H. Mitchell, *A Textbook of General Physiology* (1923), p. 698.

progress must wait upon the experimental disentangling of the interrelations we have already noted—the obscure ways in which one endocrine organ affects the action of another. It is likely that the scope of glandular therapy will prove to be decidedly limited, with all due respect to the extravagances of the armchair endocrinologists, for after all the brain, the muscles, and the liver have their own definitive structure, which, given a normal glandular system, will work well or ill according to its inherited degree of quality and capacity. The discovery that the ductless glands have something to do with regulating personality does not, as has been suggested, in the least weaken the theory of human heredity or affect its usefulness; on the contrary this new knowledge is important in helping to bridge the gap between the gene and somatic characteristic—one of the great open spaces in the biologic landscape. The condition of cretinism, say, is not itself inherited and therefore fixed, for it can be corrected in the individual by appropriate treatment; what is heritable is the defect in the thyroid gland (as represented, of course, by its germinal determiners). The point at issue is clearly brought out if we regard the fact that the disease may be and has been controlled in two ways: in the individual by feeding thyroid, in the family line by preventing reproduction. Once in existence the individual should have the best of attention, but it is even more important that defectives should not be born—a general principle to be kept in mind in all discussions concerned with the problems of eugenics *vs.* euthenics. Even if large racial criteria and smaller individual differences are generally dependent on endocrine characters, as Keith [52] and Berman [53] somewhat extravagantly maintain, then such characters are simply new material for the geneticist to work with, a more fundamental category of traits of which the exact mode of inheritance becomes an inviting subject for investigation.

7. PURITANISM AS A BIOLOGIC FORCE

Whatever its earlier ideals and practices may have been, Puritanism as a living, contemporary phenomenon may be defined as the *tendency to impose* upon mankind a set of rigid repressions, a tendency developing naturally out of the ascetic view of life. These re-

[52] A. Keith, "The Differentiation of Mankind into Racial Types," in *Report of the British Association*, 1920, pp. 275–281; and "The Evolution of Human Races in the Light of the Hormone Theory," in *Johns Hopkins Hospital Bulletin*, Vol. XXXIII, pp. 155–159, 195–201.

[53] Op. cit.

pressions are based primarily upon the theory (essentially superstitious in character, since it derives from Calvinism) that right and wrong are absolute and ascertainable through revelation, that man has a higher, spiritual nature independent from and essentially opposed to his corporeal nature, and that those who profess Pauline Christianity are thereby rendered competent to adjudicate for themselves and others all questions in art, science and conduct which may appear to have an ethical connotation. Under the operation of well-known psychological laws the individual obsessed with this theory often runs morally amok and devotes his sublimated forces to a fanatically extreme execution of the injunction to "go out and compel them to come in." Hence the militant vice crusader, the censor of books and public entertainments, the acrobatic evangelist, the prohibitionist, the Ku Klux Klanner, and the village gossip. Whenever such pathological specimens become numerous and powerful enough to impose their will upon the community—especially upon the young—they cause a whole train of injuries, æsthetic, social, biological. Let us look for a moment at some of the last, bearing in mind the while that there are many God-fearing and harmless persons who, holding religion to be an inner, private experience, view with equanimity, if not with approval, the failure of others to make of this world a door-mat for the Beyond.

The prohibitionist by conviction is a shining example of those who are obsessed with an essentially emotional and derivatively ethical urge to interfere with the rights and pleasures of others, holding every means (however opposed to generally accepted ethical standards) to be legitimate if only his special purpose be furthered thereby. Thus he is impervious to reasoned argument and apparently unaware that the one and only rational way to settle the problem of alcoholism is by studying the effects of alcohol on animals and on human beings of all types and under all conditions. This, to be sure, is a matter of scientific research, a problem suitable, as we have seen, for the student of public health; and it is therefore insoluble through hasty legislation, which is satisfactory only to office-holders and bootleggers. Such research is and has been quietly going on and the interested reader is referred to Starling's recent work on the subject.[54] Here he will learn that, as might be expected, such a universal human tendency as the desire for alcoholic beverages is founded not on a debased appetite but on certain very definite virtues in the thing desired. How to insure the maximum benefits involved and how to avoid misuse is a matter for individual judgment guided by scientific knowl-

[54] Op. cit.

edge. Here as elsewhere the pagan philosophy of moderation accords better with scientific recommendations than does the puritan philosophy of repression.

But the biologically evil results of the repressive ethic are more clearly evident in the field of sex perhaps than anywhere else; here the almost inevitable *reductio ad absurdum* of puritanism—the idea that whatever is physically or æsthetically pleasant is presumably bad—is ever to the fore. From the pronouncements of St. Paul upon woman to the passage of the Mann Act the puritanical attitude toward the sexual question has been scientifically unsound and hence morally subversive. In the first place the prevalent mores of Christendom have been essentially degrading in their effect upon the social status of the feminine half of humanity, in spite of much hypocritical ranting of the sacredness of womanhood and the sanctity of the home. It is unnecessary to labor this point: no other result could be expected so long as purely biological processes were viewed in the light of sinful indulgence at worst, and vulgar, brute necessity at best—with man forever in danger of falling from his high estate through woman. In the second place, on those of normal instincts who married late or not at all this artificial ethic has imposed a life of chastity, i. e., repression, the vicious effects of which are scarcely recognized even yet by the general public, although modern psychology and medicine have clearly set them forth.[55] Neurasthenia, inefficiency, remorseful brooding, impotence, religious mania—in short, untold measures of human misery flow directly from this ethical flouting of man's biological constitution. Genuine strength of character, of course, must involve self-control—vagrant impulses of a distinctly antisocial nature, those which lead to crime, must be restrained—but puritanic repression pertains typically to a wholly different sphere, the metaphysical sphere of "sin," and when it runs counter to fundamental and really innocent instincts, as is so often the case, the "complexes" begin to sprout and the damage is done. A subsidiary but none the less important manifestation has been the puritanic opposition to the spread of knowledge concerning methods of birth-control and venereal prophylaxis, on the ground that such enlighten-

[55] See the sane and untechnical discussion of the subject in W. J. Robinson, *Sexual Problems of Today;* E. S. Sanborn, *A Liberal Code of Sexual Ethics;* H. Ellis, *Little Essays of Love and Virtue;* W. J. Fielding, *Sanity in Sex;* F. L. Wells, *Pleasure and Behavior;* E. R. Groves, *Personality and Social Adjustment;* W. F. Robie, *Sex and Life* (1924). The pathological aspects of the matter are set forth from the biological and psychological standpoints by R. von Krafft-Ebbing, *Sexual Psychopathology;* and H. W. Frink, *Morbid Fears and Compulsions.*

ment would go far to nullify the sacred law that the wages of sin is death. The practical necessities of war made short work of the objection to prophylaxis:[56] the practical application of biologic and psychological knowledge will do as much (if not so promptly) for voluntary parentage. And there are signs that an ethical revolution is even now in progress.

The new ethics[57] will be founded on principles diametrically opposed to those which we have associated with the puritanical philosophy: it will recognize that man is a mammal, subject to biological laws not only corporeally but mentally; that the laws of human behavior are properly an outgrowth of his bodily structure, not a code to be imposed upon it;[58] that the aim of life is happiness here and now, to be pursued in a great variety of ways according to the requirements of man's unique mentality; and that "right" and "wrong" are dubious guides to conduct, which, being metaphysical abstractions, will give place to *good* and *bad* as determined scientifically on the basis of needs to be filled. There is, perhaps, no loftier ideal than that of individual freedom, and surely none more difficult of full attainment; but if the new freedom is to be genuine—if it is to include freedom from shipwreck—it must be accompanied by individual knowledge. The wages of ignorance are disease, disaster, and death. It is very encouraging to note evident progress in the synthesis of the social sciences—a necessary step in the evolution of a genuine science of conduct; but it is still more heartening to observe that indispensable changes in intelligent opinion—especially a more receptive attitude toward new ethical concepts—may be confidently counted upon, if we are not completely deceived by the spirit of liberation which informs the art, the literature, and the youth of to-day. This spirit of the times is not degenerate, however deplorable it may appear to those inclined to cherish indiscriminately the concepts of the past; in it may be glimpsed the promise of a new and better day.

[56] J. McCabe, *Human Life.*

[57] Some recent works pertinent to this subject are H. E. Barnes, "Sociology and Ethics," in Journal of Social Forces, Jan., 1925; S. Paton, *Human Behavior;* H. L. Mencken, *In Defense of Women;* E. S. Sanborn, *A Liberal Code of Sexual Ethics;* and Groves, op. cit. See also F. Kirchwey et al. *Our Changing Morality* (1924). C. C. Josey, in his *Race and National Solidarity,* (1923) argues for enlightened selfishness, based on the concept of race unity, as the proper foundation of international ethics.

[58] This idea is fully elaborated in R. C. Givler, *The Ethics of Hercules* (1924). Much attention is given to the physiology of ethical antonyms. "The well-being of the physiological organism," says Givler, "is the final criterion of whatever is ethically valuable."

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CHAPTER IV

SOCIAL PSYCHOLOGY

By Kimball Young

I. INTRODUCTION

To delimit the fields of the newer social sciences is much more difficult than to locate the boundaries among the older natural sciences. Social psychology, since it touches both psychology and sociology, is experiencing some especial difficulties in the definition of its scope and method.

We may, at the outset, define psychology as the science of behavior and of associated conscious processes. Psychology has advanced remarkably since it was defined as the "science of consciousness" only. To-day this science takes into account the whole response system of the individual and has even extended its study to include the fertile field of motive that lies outside the focus of attention, that which is often called the unconscious. Psychology persists, however, in remaining fundamentally concerned with the individual as the unit of its observation and experimentation.

Sociology, on the other hand, has dealt with larger units, men in groups: family, clan, class, state, religious or industrial organizations. It has traced the interrelations of institutions, their rise, maturity and decay. In order to accomplish this it has resorted to biology, psychology and philosophy for aid. Even Comte, the father of formal sociology, while he denied psychology a special place in the category of the sciences, made use of feeling as an important principle to explain social advancement, and his notion of a rational society based on positive science is a psychological one at root.

In large part in fact, sociology, up to recent date, has been founded either on biology, as with Spencer and Schaeffle, or upon psychology as with Ward, Giddings, Tarde, Small, Sumner and others. For instance, the "Consciousness of Kind" theory of Giddings, and Tarde's emphasis on imitation are decidedly psychological. Certainly Small's doctrine of interests and Ward's social telesis are psychological at base, while Sumner's insistence upon impulses and instincts as pri-

mary in the formation of mores and folkways puts his system, whatever we may say of it, under the interpretation of psychology. Aside from Ellwood's social psychology, which has obvious connection with our problem here, we shall not deal with the psychological interpretations of systematic sociology. We shall concern ourselves for the most part with a topical survey of the pertinent theories and viewpoints of social psychology. We shall only incidentally touch in the content of our field: crowd phenomena, prejudice, psychology of leadership, public opinion and the like. Rather we are concerned with indicating the standpoints of social psychology, on the one hand, and with the contributions of psychology to the social sciences on the other. In a final section the writer will attempt to give his own viewpoint and to make suggestions for particular reorientations.

What, then, is social psychology? The reader, to answer this fully, must await the final discussion. At the outset we may say that social psychology employs psychological concepts in explaining the life of individuals in groups or of individuals as affected by other persons, or themselves affecting these persons. The approach to the field is really twofold. The one takes its lead from group behavior. This deals with the actions of crowds, assemblies, sects, castes, classes and nations conceived as units. The individual is lost in the mass. Yet such pyschological concepts as suggestion, imitation, feeling, habit, reasoning and will are applied to the action of the total ensemble. The other approach has for its basis the individual but indicates how he is affected by the presence or absence of other persons, or how he affects these others. It traces the social influence upon the direction of his attention, upon the formation of his habits, sentiments and attitudes. In short, it is concerned with individual processes under the modification of stimuli of other members of one's group. The first treats, really, sociological data, the second, the psychological. Both, it must be noted, make use of the concepts of psychology. The first angle is represented by the work of Sighele, Le Bon, Durkheim, Ross and Ellwood; the latter approach is typified by the writings of Baldwin, Cooley, Thomas, McDougall and others.

If there is any conflict about the proper locus of social psychology, whether in sociology or as a phase of general psychology, it is to be understood only in terms of this background. Both sociologists and psychologists have touched the field, and both in a sense lay claim to it. Whether social psychology should be allocated to psychology or to sociology is largely an academic question. Its function above all else is to form a nexus between psychology and the various social sciences.

If we look into the history of man we find that he exists only in groups, not in isolation. Man possesses a true simian tendency to run in herds or groups, to hunt or to fight in common with others. Moreover, in man, as with the higher anthropoid apes, the family is the true matrix of society. Certainly, when we study the life of the most primitive peoples we find them living in small blood-related groups. Throughout all anthropology social life is everywhere an accepted fact.

It is perfectly natural, therefore, that when, under the stimulus of advanced cultures, men began to think about themselves, one of the first questions to which they addressed themselves was how they came to live in groups, under custom or government. Certainly Aristotle had the notion of an instinct of sociability as well as the idea of social contract in society. So too, sympathy, as held by Polybius and later by Spinoza, Hume, and Adam Smith is decidedly an attempt to understand social life by means of psychology.[1] One could expand the instances at length. The vital point for us is that men have long recognized that men living in groups are under the influence of factors which do not control them when alone and that the action of men in groups is quite different at times from individual actions. This lays a basis, then, for a psychological interpretation of society which is the crux of the social psychology problem from the angle of the group. This basis is attempted in the theory of the "Social Mind."

II. LEADING PROBLEMS IN THE DEVELOPMENT OF SOCIAL PSYCHOLOGY

1. THE SOCIAL MIND THEORY

Although Lazarus and Steinthal touched on the social mind concept in discussing the province of folk psychology in their journal which they established in 1860 for the study of *Völkerpsychologie*, these writers have only indirectly affected the main current of what is now known as social psychology and need not be considered here. Students of society, however, had long pondered over the curious actions of mobs, crowds and assemblies under the sway of emotion. The im-

[1] Cf. H. E. Barnes, "Some Contributions of American Psychology to Modern Social and Political Theory," *Sociological Review*, 1921: Vol. XIII, pp. 153–56, for an excellent summary of the rise of psychological interpretations of society.

portant work of French medical psychology, after 1850, under Bernheim, Charcot and Binet, upon hypnotism and suggestion, furnished certain clews to the explanation of this sort of crowd behavior which the sociologist might make use of.

The first development of the social mind thesis which is connected with the history we are tracing came during the nineties when under Scipio Sighele, Gustave Le Bon and Émile Durkheim the continental school of "collective psychology" was developed. Sighele claims to have been the first to attempt to study the crowd from the standpoint of *psychologie collective* which term he borrowed from his teacher, E. Ferri, who had used it in 1891. Following Sighele, who wrote in 1893, Le Bon began writing on similar topics in 1894.[2] Both these men had an organic view of the crowd, a view quite as biological as psychological so far as analogy goes. Sighele remarked of the crowd that it is the "primitive social protoplasm" from which sects, castes, classes and nations arise.

Le Bon seems to have caught the implication of a relation between the crowd mind of Sighele and his own earlier idea of a folk "soul." He writes of the crowd, however, much as one would of a psychiatric patient. The crowd is very primitive and under the sway of instincts and emotions of the most direct sort. This makes the crowd, like the insane patient, cruel, chaotic, irrational and untrustworthy. Not only is the crowd thus emotionally unstable, it is in most instances marked by "a singularly inferior mentality." While Le Bon does not seem to consider the crowd as possessing a super-individual mind, and while the crowd does not possess the permanent "soul" of a nation, still his whole treatment of the crowd as a mental entity, places him definitely among those who adhere to the social mind concept. The best exposition of his materials for the English reader is his *The Crowd* (1897).

It is Émile Drukheim who has carried the notion of collective psychology to the greatest length. To understand his theory of the group mind, one must review his individual psychology, a psychology decidedly intellectualistic and structural in form. Sensations, he holds, are surely correlated with neural processes, but then sensations compound themselves into higher units which are not explainable in neurological terms. These compounds are images which in turn produce concepts. These two latter exist therefore *sui generis* and are

[2] Cf. S. Sighele, *La Foule Criminelle* (French translation) (1901), p. i, in which the author accuses Le Bon of having appropriated his phrase and ideas without due acknowledgment.

not subsumable under the laws of biology or physiological psychology. They are not mere additive affairs but actually novel syntheses growing out of this act of fusion. These higher units of mind are called "representations."[3]

These representations do not stop with the individual image and concept, however. When the person is gathered with others of his kind into a crowd or aggregation for some purpose a further elaboration of these representations takes place. Thus under the emotional stress, the *schwarmerei* of religious ritual, e. g., the *korroborree* of the Australian natives, the "social" representation is born. Durkheim writes:

> "Collective representations are the result of an immense coöperation; . . . to make them, a multitude of minds have associated, united and combined their ideas and sentiments. . . . A special intellectual activity is . . . concentrated in them which is infinitely richer and complexer than that of the individual." . . .

We are thus able to extend beyond the limits of individual experience into that of the social entity. Moreover, this capacity he implies is cumulative in a group over generations. This notion seems akin to a belief in the inheritance of acquired characteristics. This whole process is not due to any mysterious power, says Durkheim, but to the fact that

> "There are two beings in him [man]: an individual being which has its foundation in the organism and the circle of whose activities is therefore strictly limited, and a social being which represents the highest reality in the intellectual and moral order that we can know by observation—I mean society."[4]

Thus the social representation, the highest reality, is only experienced in collective behavior. Society only makes itself felt in action, and it is only in action when the persons composing it are assembled and "act in common." For this very reason the cult is important in all social life, not only religious but secular. Gehlke, who has given us a good account of Durkheim's thesis, presents a schema which is of great service in understanding the psychology upon which this whole fabric of "socio-psychical" reality rests.

[3] The German word *vorstellungen* carries the meaning of this word better than our own vague word, "idea." I follow the usual practice of retaining the French word.

[4] Cf. *Elementary Forms of Religious Life*, English translation (1915), pp. 16, 418 for extension of these two quotations.

SCHEMA OF DURKHEIM'S PSYCHOLOGY [5]

WITHIN THE INDIVIDUAL MIND

Many brain cells produce (by interaction) a sensation.
Many sensations produce (by their interaction and combination) a concept.
Many concepts produce (by interaction and combination) a representation.

WITHIN THE SOCIAL MIND

Many representations produce (by interaction and combination) a social representation.
Many social representations produce (by interaction and combination) a social representation of a higher, more purely social kind.

These phenomena within the social mind possess the characteristics of "exteriority," that is, they seem outside the individual mind. While modern psychology would interpret this as a projection of a highly charged emotional perception, Durkheim did not so conceive the matter. This very "exteriority" is what gives the experience its sanction. This authority and the force of constraint developed by the group to protect it are considered by him as the chief criteria of social data. Gehlke quotes him as saying:

"The group thinks, acts and feels quite differently than its members would, were they isolated. . . . By aggregating, inter-penetrating, fusing, the individual minds give birth to a being, psychic if you will, but which constitutes a psychic individuality of a new sort."

This is simply an elaboration of the dual consciousness of which we have already taken note.

The principal difficulty with this whole theory arises first from a metaphysical extension of a structural psychology which lacks verification. Its mystical terminology is peculiarly misleading. On the other hand, the whole thesis of Durkheim has done very much to stimulate a study of the action of the group as a whole. And he has given us excellent concrete analyses of the emotional experiences of men and women under the control of religious ideas.

The collective psychology of the continent has been carried over to this country chiefly through the writings of Ross. For him "social psychology . . . studies the psychic planes and currents that come

[5] Modified slightly from C. E. Gehlke, *Emile Durkheim's Contribution to Sociological Theory, Columbia University Studies in History, Economics and Public Law* (1915), pp. 31–32.

into existence among men in consequence of their association."[8] While this idea is more dynamic than Durkheim's and hence more valid, nowhere does Ross go into minute and detailed analysis of the psychological factors. He also draws heavily upon the notions of imitation and suggestion as found in Tarde. In concrete material, Ross makes use of Le Bon's methods and matter. Ross has affected the theory of the social mind only indirectly. His system of sociology, however, comes under the rubric of "psychological sociology."

Of American sociologists, Charles Abram Ellwood has developed the notion of the social mind most consistently and significantly. Cognizant of the faults of the continental school, he attempted to develop a theory of social psychology on a dynamic basis In his *Some Prolegomena to Social Psychology* (1901) he developed the theory that social psychology is concerned primarily with giving an explanation of social phenomena in psychological terms. He thought to apply the concepts instinct, imitation, suggestion, habit, and attention to this problem. He felt sure in 1901 that the phrase "social psychology" could not be used to describe merely the "behavior of an individual in the presence of another of its own species." Such description was merely a branch of individual psychology. For him "social psychology" was concerned with group or collective action, using functional terms so to describe it. It is "the science of the mechanism . . . of socio-psychical processes."

Ellwood is concerned with an organic view of society and for him the social mind is a valuable concept to express just the fact that "society is an organic functional unity." Yet he fully recognized that the individual consciousness "not the social group is . . . the center of experience." The social mind is, however, "immanent in the individual mind, and both are aspects of a single reality." This last statement is clearly related to the dual aspect of mind of Durkheim.

A careful reading of his systematic writings on sociology convinces one that Ellwood's original thesis is another brand of the psychological interpretation of society. In fact, in 1901, he uses the phrases "psychological sociology" as synonymous with "social psychology" although in his *Sociology in its Psychological Aspects* (1914), which is apparently a continuation of his "Prolegomena," he has become convinced that these two phrases are not identical in meaning. He writes (1914):

[8] Cf. *Social Psychology* (1908), p. 1. This book contains much valuable concrete material. Cf. also *Social Control* (1901).

"'Social psychology' . . . is a term which had better be confined to the psychology of the social phases of individual consciousness and of the social tendencies of individual human nature; . . . while what sociologists have called 'social psychology' (a psychological theory of society) had better be styled a 'psychological sociology' or 'psycho-sociology,' and recognize it as including all the psychological aspects of sociology."

Yet in his *An Introduction to Social Psychology* (1917) he writes that social psychology is the "psychology of associational processes," not in the sense of individual psychology but in the sense of the "physical interactions of individuals" which lead to an objective view of social life as a unit. "Social psychology will study the place of psychic factors in these (sociological) problems."

In short, Ellwood has given us in his system what is really a "psychological sociology" to use his 1914 definition rather than a social psychology more strictly speaking. He and Ross typify, perhaps, the most thoroughgoing systematizers of this approach.

Social psychology rather than following the lead of Ellwood and Ross, however, has tended to study individual mental processes and behavior as they are affected by social stimuli. The social mind may be a convenient sociological concept, but for the social psychologist it reduces itself to what Davis calls "a mass of common beliefs, sentiments, and determination, possessed by the individuals of a group with the added consciousness that the other members simultaneously cherish them."[7] That is to say, we have a uniformity of mental content to which is added the important fact that these contents are "realized as common" by the separate members of the group. Looked at otherwise, the concept, social mind, may be considered a "feeling of identity" of the person with other persons. Gault, in a recent criticism of the group mind theory, holds that the individuals upon the basis of habit-complexes possess a "sense of social unity, or of belonging together" which explains for psychology this idea. This sense of unity, however, is not highly rational and fully conscious. It lies in large part in the field of attitude and feeling.[8]

We must conclude, therefore, that while the use of the concept "social mind" may be defensible upon the purely sociological level, it offers little for psychology which deals with interrelations of individuals with each other.

It strikes the present writer that Le Bon, Durkheim, Ellwood and

[7] *Psychological Interpretations of Society, Columbia University Studies in History, Economics, etc.* (1909), p. 219. This monograph is the best single treatment of the whole theory of social mind.

[8] *Social Psychology* (1923), Chap. 2.

Ross are feeling their way methodologically toward a theory of society which employs its own terms for its own mechanisms. Though not obvious at first glance, is not the standpoint of Graebner, Boas, Lowie, Rivers, Goldenweiser, Kroeber, and other anthropologists simply an advance over this thesis of a social mind? These men maintain that sociology should develop its own concepts and its own descriptions of social phenomena in cultural terms and discontinue trying to couch its methods in those of psychology. Durkheim seems to have taken a decided step in this direction. May not the social mind theory and the psychological sociology of Ellwood and Ross also be considered as phases of this same tendency?[9] The anthropologists have simply gone on to use their own terms and concepts, avoiding the concepts, in turn, of psychology, which they maintain do not fit the situation of comparing and studying groups as such.

For our purposes, then, let us turn to trace that line of development of social psychology which revolves around the individual. This important development has taken on three phases: first, that concerned with the doctrine of social instincts; second, that concerned with studying social habits and attitudes; and third, that concerned with the social personality.

2. THE DOCTRINE OF SOCIAL INSTINCTS

The preliminary stages of this approach to our subject are to be found in the writings of Walter Bagehot and Gabriel Tarde. Bagehot's famous essay, *Physics and Politics* (1873), devotes considerable space to a discussion of the rôle of imitation in man's social, especially his political, life. His use of the term was very general and applied quite as much to the broad phases of one custom resembling another as to one individual doing similar acts to another. Independently of Bagehot, the French jurist, Tarde, in the early seventies began a series of brilliant papers in which he explained crime waves, common customs, fashion and other features of social behavior through imitation, counter-imitation (resistance to imitation) and invention. In these terms, in short, he explained the growth of culture. He, like Bagehot, had little precise knowledge of psychology and

[9] Cf. A. L. Krober, "The Possibility of a Social Psychology," *American Journal of Sociology* (1918), Vol. XXXIII, pp. 633–650 for a discussion of the newer standpoint; Cf. also F. H. Allport, "The Group Fallacy in Relation to Social Science," Ibid, (1924), Vol. XXIX, pp. 688–706 for a criticism of the group notion as valid in an interpretative sense. Note also Goldenweiser's discussion of Allport's viewpoint at the close of the article. For a good review of the development of the cultural approach to sociology see the article by Herskovits and Willey in *American Journal of Sociology*, September, 1923.

used the terms in a broad general sense. Tarde is sometimes linked up with the French school of collective psychology, but he seems rather to have opposed the notion of group mind which this other theory implies.[10]

The principal value of this early writing was the insistence that man's instinctive, original nature was important in understanding his social behavior. It remained for others to put the whole matter in objective form, but these writers were significant indicators of the breakdown of the rationalism which still controlled political and sociological thinking in the early nineteenth century.

In tracing the development of the standpoint of social instincts one finds that much of the material overlaps that dealing with the other two phases: habit and personality.

The publication in 1890 of William James's *Principles of Psychology* was the first large step toward functional psychology in this country.[11] For the psychology of function, the instincts, the emotions, habit and will become important concepts. The direct contribution to social psychology by James is just this insistence that the instincts and the temperament furnish the foundations upon which the social habits and the social self grow. He defines an instinct "as a faculty of acting in such a way as to produce certain ends, without foresight of the ends, and without previous education in the performance." For him the instincts run the gamut from definite reflex mechanisms like sucking, biting, clasping up to complicated acts such as vocalization, pugnacious behavior and sociability. The principal instincts which bear upon man's social life are: imitation, rivalry, pugnacity, anger, sympathy, "hunting instinct," fear, acquisitiveness, constructiveness, play, curiosity and love, with its aspects of jealousy and parental affection.

Upon the basis of these instincts and the habits which develop from them the self is constructed. The self, in fact, is the center of all our habits, the unifying feature of our being. James divides the self, however, into the material self, the social self, the spiritual self and the pure ego. It is largely with the second that we are concerned.

The social self is predetermined by our social instincts developing

[10] Cf. Davis, op. cit., p. 86.

[11] Functional psychology is concerned with the actions (behavior) of the individual. Its terms are frankly more biological than structural-psychological. Its approach touches both the genetic and the experimental angles. Structural psychology, on the contrary, was developed in Germany under Wundt and concerned itself with the study of mental processes as static elements. These elements were basically sensations with their attributes: quality, duration, etc. This psychology does not concern itself with human behavior problems and has never been of much assistance to the problems of conduct.

under contact with other persons. As James succinctly remarks: "A man's Social Self is the recognition which he gets from his mates," and further, "a man has as many social selves as there are individuals who recognize him and carry an image of him in their mind." We live, indeed, very largely in the reflection which other people cast back to us about ourselves, hence the tremendous importance of social status in social behavior. Cooley may have caught his notion of the place of face-to-face contacts in social control and in the rise of personality from James's comment that "what may be called 'club opinion' is one of the very strongest forces in life." Again James writes:

"Our *social self-seeking* . . . is carried on directly through our amativeness and friendliness, our desire to please and attract notice and admiration, our emulation and jealousy, our love of glory, influence and power, and indirectly through whichever of the material self-seeking impulses prove serviceable as a means to social ends."

James's service to his fellow psychologists and to sociologists has been very great indeed. Ellwood got the notion of his functional psychology from him, in part. Cooley, Dewey, Mead and others have drawn heavily upon his writings. Thorndike's work, to be discussed shortly, got direct stimulation from him. While James did not write extensively upon purely socio-psychological topics, his paper, "Great Men and Their Environment" (1880) showed remarkable insight into the relations of leaders to masses and thence to social progress. In social theory his views have affected political thinkers greatly. Giddings's "pluralistic behavior" is borrowed from the general thesis of pluralism, while Barnes has well remarked that James's treatment of the social self, especially his insistence that one's attitudes are largely determined by those of one's group, "leads directly to the social-psychological political theories of Léon Duguit, J. N. Figgis, G. D. H. Cole and H. J. Laski."[12]

James's notion of instincts was loose, yet extremely suggestive Significant too, is his giving place to a wide congeries of native trends, rather than pinning his faith to one or two, for example, imitation and suggestion as did Baldwin.

It is to William McDougall, however, that we owe most in giving us a direct approach to social psychology through a schema of instincts. There is no single book in this entire field which has had such widespread influence as his *An Introduction to Social Psychol-*

[12] Loc. cit., p. 160.

ogy (1908). The volume has in sixteen years run to nearly an equal number of editions.

The core of McDougall's system is a logical arrangement of instincts and emotions in definite relations to each other. His definition of instinct reveals this:

"We may, then, define an instinct as an inherited or innate psycho-physical disposition which determines its possessor to perceive, and to pay attention to, objects of a certain class, to experience an emotional excitement of a particular quality upon perceiving such an object, and to act in regard to it in a particular manner, or at least, to experience an impulse to such action."

Thus the instinct-emotion combination has a distinct hereditary background. The structural basis is of long-standing biological history, and, therefore, not greatly affected by chance forces of the environment. The emotion is the core of the instinct and its distinguishing characteristic. The chief instincts with their emotions are as follows:

1. Instinct of flight and emotion of fear.
2. Instinct of repulsion and emotion of disgust.
3. Instinct of curiosity and emotion of wonder.
4. Instinct of pugnacity and emotion of anger.
5. Instinct of self-abasement and emotion of subjection.
6. Instinct of self-assertion and emotion of elation.
7. Parental instinct and "tender emotion."

There are also a number of "less well defined" instincts and emotions which the author includes in an additional list. The instinctive features of these are much more distinct than are the emotional characteristics which accompany them. These are: instinct of reproduction with sexual jealousy and female coyness connected therewith, the gregarious instinct, the instincts of acquisition and construction. There are also a number of "general or nonspecific innate tendencies": sympathy, suggestion, imitation, play and temperament.

Through the process of experience the various emotions combine togther into more complicated forms. It is these "complex emotions" which we meet in our daily lives. When the complex emotions have a relatively stable object about which they are organized, we have the birth of the sentiment. Complex emotions are exampled in admiration, which is a combination of wonder and negative self-feeling, and in scorn, which is a compound of disgust and anger. Hate and love are typical sentiments formed from a number of rudimentary emotions.

On the basis of complex emotions and sentiments the self arises. Here the particular form which it takes is greatly affected by the social background. Character of consistent sort grows up by relating the instincts, and the emotions and habits developed from them, to a goal or ideal. Will plays a part here. Will is decidedly related to the field of social action. Will is largely concerned with keeping the goal which we have mentioned in the focus of attention and thus serving to direct the sentiments and complex emotions toward it. Will is, moreover, not so much a negative factor, an inhibitor of action, as a positive controller of action. This puts the problems of morals upon a definitely social psychological level and points the way to future developments of social conduct. The sentiments and habits, therefore, should be positive and directive rather than negative and prohibitory. The highest form of character is constructed around the self-regarding sentiment which directs conduct into higher channels. Since this sentiment is so dependent upon the stimulation one gets from his fellows, it reflects precisely the social environment. Thus the moral aims of society cannot rise higher than those determined by the education, direct and indirect, of the group elders who control it, whether they be the old men of an Australian Arunta tribe, the theologians of the Middle Ages, the legislative assemblies of modern democracy, or the local school board.

While McDougall's rigid schema of instincts has come in for some criticism, as we shall note subsequently, the contribution which he has made to the mechanical basis of a social psychology is important. His 1908 work he termed "An Introduction." When his next volume appeared, *The Group Mind* (1921), it is found to be given over to a discussion, in large part, of related problems of racial and national psychology. There is in this book little of the consistent elaboration of his theory of instincts and emotions which one might expect.

There began at the opening of the present century a series of experimental studies upon the original nature of man and his closely related species which was to go far in answering many of the important questions of innate nature which enter into social relations, education and group behavior generally. Many of the older concepts —imitation, social instincts, and the related matter of learning— were for the first time objectively studied. The two most important workers in this field were Thorndike and Watson. From their activities and such related work as McDougall's and Hobhouse's in England, Graham Wallas was to make his noteworthy contribution to political science by his books: *Human Nature in Politics* (1908) and *The Great Society* (1914). Following his lead, Carlton Parker,

W. C. Mitchell, W. F. Ogburn and others were to make use of psychology in their treatment of current problems, economic, social and political. To-day we find a use of psychology in the social sciences which had been thought impossible two decades before. Without the brilliant work of experimental psychology of an objective sort, this application of psychology would hardly have been so fruitful.

Although his contribution is by no means final, the work of Edward Lee Thorndike must be given primary consideration in this newer movement. During the first decade of the present century he began a number of significant studies upon animal and human intelligence. Among other matters he attacked the problem of the "instinct of imitation" which had been made so much of in pedagogy and in sociology. He showed rather conclusively by a number of experiments on higher animals, cats, dogs and monkeys, that the "abridgment of the learning process," to use Watson's apt phrase, does not take place by any inborn instinct of imitation. He indicated that neither doing the act in front of the untutored animal yourself nor letting the novitiate see the act performed by a trained animal helped shorten the learning process, except as it might direct attention of the learner toward the stimulus. Furthermore, with infants, he tested certain of the earlier assumptions of Preyer concerning the human tendency to imitation with negative results. The whole process called imitative is highly complex. The term, imitation, is used to describe reactions running all the way from reflex mimicry to any loose similarity in elaborate social behavior of two or more individuals. Thorndike, however, in 1913, was not willing to dispense entirely with the term any more than McDougall was in 1908, when the latter retained it as a "general innate tendency." Writing in his "Original Nature of Man" (*Educational Psychology*, Vol. I) Thorndike holds that there are certain tendencies to action aroused by the action of other persons, such as—

"smiling when smiled at, laughing when others laugh, yelling when others yell, looking at what others observe, listening when others listen, running with or after people who are running in the same direction, running from the focus whence others scatter, jabbering when others jabber and becoming silent as they become silent, crouching when others crouch, chasing, attacking and rending what others hunt, and seizing whatever object another seizes."

On the whole, however, these so-called imitative acts which are made much of in the social sciences are really—

"not original tendencies to respond to behavior seen by duplicating it in the same mechanical way that one responds to light by contracting the pupil,

but must be explained as the results of the arousal, by the behavior of other men, of either special instinctive responses or ideas and impulses which have formed, in the course of experience, connections with that sort of behavior."

Now these factors upon which social intercourse rests are the social instincts. To these Thorndike devotes considerable attention.

Socially one of the most important instincts is the motherly response in the presence of infants and children. The maternal instinct is the basis, according to Thorndike, of much of our sympathetic behavior and from it develop habits of tenderness and protection. The male aspect of this, the paternal instinct, is much weaker, but is a factor in paternal and filial relations.

There is also a distinct tendency to gregariousness, operating to form habits of response to the presence of crowds. People attend football, baseball and other games not alone to witness the prowess and skill of the players and thus to participate vicariously in the actions involved in the games, but also because of the presence of others of one's kind. So too, people congregate on the streets, at resorts, and in audiences, partially because of the instinctive responses here mentioned.

Connected with gregariousness is the tendency to pay attention to the behavior of others, to watch their facial and bodily gestures and to listen to their speech. Especially too, there are innate responses "to the presence, approval and scorn of men." Admiration of others and admiration by others are of vast consequence in group life, from the simple family circle up to more complex conditions. "These forces of approval and disapproval in appropriate form from those above and those below us in mastery-status, are and have been potent social controls." Thus connected with approval and its opposite we have the double-headed tendency to submission and mastery. "Every human being thus tends by original nature," he writes, "to arrive at a status of mastery or submission toward every other human being, and even under the more intelligent customs of civilized life somewhat of the tendency persists in many men." He also believes there is a true sex difference here, for he remarks, "Women in general are thus by original nature submissive to men in general."

This whole gregarious and status-building constellation is of predominant importance in social organization and social control. Connected with it are other features, innate at base, such as display, which is of significance in fashion, fads and prestige-following. Veblen has made much of the economic implications of conspicuous consumption wherein the display element enters.

Other important social instincts are: sex tendencies, rivalry, cooperation, suggestibility, opposition, envy and jealousy, greed, ownership, kindliness, teasing, bullying and tormenting.

Our sex behavior is greatly overlaid with a deep coat of habit and sentiment, built up under social stimulation. Yet, it must be taken into account in considering social interrelations. Certainly it is connected with the family, that matrix of so much that is social in our living Rivalry is peculiarly related both to sheer vigor, prowess and mastery-tendency and to acquisitiveness. Thorndike writes:

"Original emulation or rivalry is, in the first place, a group of tendencies to respond more vigorously in trying to get some one's attention upon perceiving a fellow creature's attempts to get it, in chasing some animal upon perceiving a fellow creature chasing it, in pulling toward one's self a thing when a fellow creature is pulling it toward himself, in running toward an object toward which he runs, and the like."

Failure to succeed in these efforts ends in annoyance and even in anger and pugnacious acts.

Rivalry, mastery and kindred trends fall, in short, into a general hunting type of mind which Dewey earlier had discussed in another connection. This hunting pattern[18] of mind is an extremely useful concept because it goes far in explaining the modifications of pursuit and capture, rivalry and mastery which we find in modern society, which the older "intellectualistic" position of the eighteenth and early nineteenth centuries did not take into account. Even coöperation is related to this general pattern. It comes into prominence in hunting with others, fighting and in mastery on the larger scale of group conflict. Of course, coöperation is also related to more pacific reactions: those connected with family and clan life, agriculture and the practical arts.

It should not be supposed that the hunting type of mind refers to the whole general make-up of mind. This thesis, defended by Carveth Read in his *The Origin of Man and of His Superstitions* (1921), is too one-sided. Certainly, however, Thorndike's analysis has lent support to its place in the totality of mind and action.

[18] Cf. "The Interpretation of the Savage Mind," *Psychological Review* (1902), Vol. IX, pp. 217–30. Dewey used the term "hunting psychosis" in the sense in which we should use the term pattern. "Pattern" is used here as a series of coördinated neuro-muscular-glandular mechanisms organized, at birth and by learning, toward some specific stimuli or situations. Such situations are: chasing game, originally connected with food-getting, pursuing others for sexual purposes, etc. Competition for food and mates is important and there is little doubt that the universality of games involving pursuit of a ball or like object is indicative of this same type of mind in play.

Rivalry and resistance (opposition), coupled with acquisitiveness, are important in understanding innate roots of ownership and property-getting. So, too, closely allied to rivalry and the hunting trends are teasing, tormenting and bullying. Thorndike remarks:

"Teasing, tormenting and bullying are the most notable inborn exceptions to a childish kindliness. They are due, I judge, to the competing tendencies to manipulation and curiosity, hunting, scorn and mastery. Manipulation and curiosity develop into teasing."

As he further remarks, "civilization does not so much create kindness and repress cruelty as merely redirect them."

Many instinctive features in social life are also found in reactions to physical objects and the material world. Skills, habits and attitudes overlap both fields of endeavor. For instance, curiosity and manipulation are definitely related to sexual exploration. Certainly they are related to creative art and to science. So too anger and hunting "are fundamentals of social life as well as of adaptation to the rest of nature." [14]

While Thorndike has been criticized for extending the list of original tendencies too greatly, and while it is true that many of the responses he calls innate are combinations of simpler responses made through the learning process, nevertheless the fact remains that he has made a very pertinent addition to education and the social sciences. He has offered objective data for understanding much of man's social conduct, much of his fundamental motive.

Contemporaneously with Thorndike's work on imitation and other alleged instincts, other researches were being carried on. The most valuable of this work has been summarized by John Broadus Watson in his *Behavior: An Introduction to Comparative Psychology* (1914). His chapter which reviews the current experiments on imitation is particularly worth while for the social sciences. Watson on the basis of a number of studies goes even beyond Thorndike in denying an "instinct of imitation." What are called imitative acts are, by and large, understandable on more objective grounds: attention getting, trial and error learning, conditioned responses.

In spite of the strictures of Thorndike and Watson upon imitation, it continues to be used by some social scientists in the loose and unsatisfactory manner of Tarde and Bagehot. For instance, as late as 1917, Ellwood uses the term to describe a sociological mechanism of the spread of culture and also as a process of conscious attention to the action of an individual by another and the consequent duplica-

[14] Quotations from *Original Nature of Man*, Chap. vii throughout.

tion of the act. He even uses it in the simpler sense of reflex duplication of one person's action by another.

On the whole, however, the gradual infiltration of behaviorism into psychology and thence into the social sciences has gone far to dissipate much of the mystery which surrounded the alleged instincts in social life and especially the place of so-called imitation. Particularly important in this change have been the investigations showing the dominant influence of early learning upon original nature. The most significant single principle in this learning is that of the *conditioned reflex* (response) introduced into this country from the work of Pavlov in Russia by Yerkes and Watson in psychology and by W. H. Burnham in education and mental hygiene.[15] The significance of this principle is just now being realized by social scientists. At last, we have a principle which assists, beyond anything we have had, in explaining social behavior without recourse to mystical terminology.

A good example of the use of this principle in dealing with social behavior is found in Humphrey's papers in which he explains imitation, sympathy and other older concepts largely in terms of conditioned reflex. The random acts of the child get organized by being associated with particular stimuli and particular responses. Often the substitution of a stimulus serves, furthermore, to set off native responses. Thus a child being hungry may cry. This is followed by feeding and rocking. The association of mother and rocking may be formed so that thereafter the presence of the mother sets up the crying, not from hunger, but from learned association of acts which follow, taking up by mother and rocking. So too, on higher levels, with the rise of imagery, one image may become associated with another. The child, for instance, may come to play the rôle of another which becomes important for the rise of his skills and attitudes. So too, running when others run, peering into objects because others do, etc., may be explained by this principle. Thus many of the activities which Thornidke imagined might be classified in a general way as imitative become upon specific examination to be

[15] The conditioned response is one which is acquired by associating a novel (artificial) stimulus with one to which the organism is biologically (structurally) accustomed. For example, dogs seem to respond by fear reactions to loud, sharp sounds like the report of a gun near by. By training, that is, by principle of conditioned response, the dog may become quite insensitive to the explosion of gun shells around him. For literature on this whole matter, cf. R. S. Woodworth, *Psychology, A Study of Mental Life* (1921), Chaps. xiii and xvi especially; also W. H. Burnham, "The Significance of the Conditioned Reflex in Mental Hygiene." *Mental Hygiene* (1921), Vol. V, pp. 673–706; and Burnham, *The Normal Mind* (1924).

really acquired by the method of conditioning. So also, sympathy, suffering with one, is the result of substitute stimuli built up early in infanthood.[18]

In order to study original nature one should have recourse to observation and experiment with infants and small children. The older literature of child study is full of reports on the child based, for the most part, upon questionnaires and crude observation. It remained for Watson to commence the most valuable research upon infants which we possess. Upon the ground of careful experimentation on a number of cases, he reports at least three fundamental and unlearned reaction patterns of emotional nature: those concerned (1) with fear responses, (2) with love and affection, and (3) with anger and rage. Among the reaction tendencies, in addition, there are a host of random and exploratory movements made by the arms, legs, fingers, hands and general body which are directed by the sensory receptors: eyes, ears and tactile senses for the most part. There are, of course, those large reflex patterns which maintain bodily nutrition and metabolism.

For social psychology the most significant thing shown by Watson's investigation is the rapidity with which these native reflexes and random movements are integrated into learned reactions. Thus upon definite innate basis, one set of habits is constructed on another until the personality with its gamut of skills and attitudes is at hand. For example, he has shown how quickly fear is associated (conditioned) to artificial stimuli: darkness, furry objects (dogs, cats, etc.), and by implication to imaginary objects. Fear, we all recognize, has great social control value. It is the basis of taboo and the great inhibitor of action. It is easily associated with the stimuli laid down by those about us. Thus the native is taught by his group elders to fear all sorts of actions and objects, and is kept thereby in the proper frame of behavior. Likewise, anger, while originally connected with restraint of free muscular movement, becomes associated through social experience with ideas (images) of social restraint. There is here furnished a basis for understanding an individual's dislike for authority, his craving for freedom and perhaps his efforts to break down taboos which the group puts upon him. We can, in this manner, understand violence in revolution when people destroy institutional inhibitions. On a higher level there is a good deal of this same tendency witnessed in "righteous indignation" at social injustices.

[18] Cf. "The Conditioned Reflex and the Elementary Social Reaction," *Journal of Abnormal Psychology and Social Psychology* (1922), Vol. XVII, pp. 113–119; and "Imitation and the Conditioned Reflex," *Pedagogical Seminary* (1921), Vol. XXVIII, pp. 1–21.

Love, too, is capable of extended elaborations and attenuations by the same method. It may spread from the wife and family to the neighborhood, to the community and to the state, where it becomes the basis of modern patriotism. It is also capable of mal-development both in the individual relations of more intimate sort and in the secondary social contacts. Thus some men never move out of the stage of love of family; for them the community is fair game for exploitation.

From this principle of conditioning we may pass on to study the rise of social habits and attitudes, but before doing so we must mention certain studies of animal behavior which bear on the instinct hypothesis and mention also the systematic attacks upon the adherents of the doctrine of social instincts in social psychology.

Modern study of animal life has revealed to us the place of trial and error learning and conditioning in building up many of the activities even of the lower animals which earlier writers imagined dominated completely by inborn factors. Whitman and Craig, studying pigeons, indicated the place that environment and learning play in the sex behavior of these birds. Swindle showed that the nesting of birds is not the infallible series of actions so often imagined, but full of errors, mistakes and random, wasteful learning. Even the alleged instinctive perfection of insects is open to question when observers report the enormous inefficiency of their actions under certain circumstances. Certainly for man, it has become increasingly evident, from experimental grounds, that not only was imitation an inadequate principle upon which to interpret his social relations, but also that social psychology cannot rest its case alone upon a congeries of social instincts, but must go on to study habits and their integrations.

The instinct theory developed by McDougall and his followers came in for particular criticism since the schema was a logical rather than an experimental arrangement. One of the first attacks upon the dominance of this plan, which had so impressed many writers on social questions, was from Knight Dunlap whose paper, "Are There Any Instincts?" (1919) raised the whole issue of using such a classification as McDougall's whatsoever. While the list might be useful for certain special purposes, it could hardly be said to have experimental validity. For the science of psychology, he concluded that "there are no instincts." Then followed a paper by Kantor in 1920 in which he criticized the whole McDougall position for its crude metaphysical implications. Moreover, he objected to the logical interrelation of instincts and emotions in view of experimental and obser-

vational facts to the contrary. In this year also, Hunter published an important paper, which still maintained a thesis for original instinctive tendencies, but showed very well the place of early learning in modifying the form and content of instinctive reactions when they did appear. Especially was this noteworthy in the sex and social instincts which come to fruition in adolescence.

In the next year there were a number of papers led off by L. L. Bernard on "The Misuse of Instinct in the Social Sciences" and followed by Kuo's paper, "Giving Up the Instincts in Psychology" and by Faris's succinct discussion, "Are Instincts Data or Hypotheses?" There were other papers some in defense, some in attack upon the doctrine of instincts. The majority of these articles, while not denying the very great place that innate tendencies play in man, held that the whole logical arrangement of instincts as if they were absolutes, given once and for all time, and as if they combined in purely additive fashion into sentiments and complexities, was fallacious and misleading. Careful study was showing that man was made up of extremely complicated trends, attitudes and habits. No simple formula of instincts would unravel his personality. The whole schema was, in short, artificial and unverifiable.[17] A more extended attack upon the whole matter of instincts in social psychology and the social sciences was made by Josey in his *The Social Philosophy of Instinct* (1922). This book is a denial of any importance whatsoever to the concept and is by far the most radical departure from the standpoint of the present psychological attitude, which, however it might criticize the logical listing of instincts *à la* McDougall, would not deny the importance of the inborn equipment.

McDougall has recently made an answer to his critics.[18] The essentials of his early treatment of instinct was the connection of specific motor mechanism with a drive or "hormic" urge behind it. At present he seems to be willing to give up the motor mechanism phase as crucial. The drive may take place through any mechanism, innate or acquired. He does rest his case solidly on the ground of

[17] Cf. the following: Dunlap, *Journal of Abnormal Psychology* (1919) Vol. XIV, pp. 307–311; Kantor, *Psychological Review* (1920), Vol. XXVII, pp. 50–72; and Hunter, Ibid. pp. 247–260; also Bernard, Ibid. (1921), Vol. XXVIII, pp. 96–119. For Kuo, cf. *Journal of Philosophy* (1921), Vol. XVIII, pp. 645–664, and for Faris *American Journal of Sociology*, (1921), Vol. XXVII, pp. 184–196. Cf: also, Bernard, L. L: *Instinct* (1924) which is an extensive review of the entire concept.

[18] Cf. "The Use and Abuse of Instinct in Social Psychology," *Journal of Abnormal Psychology* (1922), Vol. XVI, pp. 285–333, and in his text, *Outline of Psychology* (1923), and more recently his "Can Sociology and Social Psychology Dispense with Instincts?" *American Journal of Sociology* (1924), Vol. XXIX, pp. 667–673.

drives, urges or appetites, which express this deep dynamic phase of all living. In the course of our race history some of these drives have developed tendencies in certain directions: the so-called instincts. To deny this hereditary basis to our living would be to go back to the *tabula rasa* mind of Locke and to deny the forward stride we have made in the comprehension of man's social living since psychology has shown us the place of man's inherited nature.

A phase of this entire problem of inheritance in mental life and behavior has been touched on by Robert Sessions Woodworth in his *Dynamic Psychology* (1918). Here he has tried to keep distinct the problem of the mechanism, which may be both innate and acquired, and the "drive" which is that which "induces us to do" a certain thing. That is to say, the "drive" is concerned with the "why" of human behavior, for as Woodworth remarks, "Certainly the motives and springs of action of human life are of so much importance as to justify special attention to them." The drive for Woodworth, however, is not some vitalistic principle, but is itself a mechanism or set of mechanisms which releases or leads to a mechanism involved in the final action of a particular pattern. Thus the preparatory reactions leading to the final food-taking act are drives; so, too, habitual reactions which are pertinent to some consummatory action serve as drives and predetermine, through the changes wrought in the neuromuscular system, the direction of present stimuli toward the final response. There is no place where these "drives" or motives are more important than in social life. In his chapter, "Drive and Mechanism in Social Behavior" Woodworth has given us an excellent summary of present-day social psychology with especial reference to the theory of imitation and the doctrine of instincts of the McDougall sort. His principal criticism of the latter's works is its general logical arrangement and secondly its lack of completeness. To Woodworth one of the most important social motives is that which makes for congeniality and intimate relations of a face-to-face sort, to apply Cooley's term. This "social motive," in fact, is basic to the higher aspects of social behavior, yet it is not the only foundation of social life. The following paragraph summarizes his standpoint very adequately:

"Many drives combine to produce social activity. The fear motive drives men together in times of insecurity; the pugnacity motive bands them together for group combat; the economic motive brings industrial coöperation and organization; the self-assertive and submissive tendencies bring emulation as well as obedience; the expansion of the self to cover one's family, one's clique, one's class, one's country contributes to loyalty; while the

parental instinct, expanding its scope to cover others besides children who are helpless, leads to self-sacrifice and altruism. But besides all these there is the social motive proper, the tendency toward group activity, which is not only found by experience to be beneficial, but, what is more important psychologically, is interesting in itself to creatures that have a native capacity for that sort of action."

Woodworth's concepts and analysis have recently had a powerful influence on F. H. Giddings, who has in part reconstructed his psychology of society along this line in his concept of pluralistic behavior. See his *Studies in the History and Theory of Human Society* (1923).

This tendency to group activity for its own sake, in other words the gregariousness of mankind, has been again brought to prominence by Wilfred Trotter in his *Instincts of the Herd in Peace and War* (1916, new and expanded edition, 1919). This book, while it adds nothing to the objective understanding of social relations, and while, in reality, it is phrased in loose and outworn terminology, is very valuable in its concrete treatment of this instinctive trend in man. Its appearance during the recent World War was timely, as this period was one of immense coöperation and gregariousness as well as of conflict.

We should not dismiss the field of instinct theorists without mentioning Sigmund Freud. His work touches on that of the drive phase of instincts and also upon the problems in the two following sections. It is sufficient to indicate at this point that although American psychologists and social scientists recognize the narrowness of the original view of Freud which would reduce all motives to one connected with sex, they have, on the other hand, come to take cognizance of his contribution to the understanding of human motives. Thus Parker's crucial paper, "Motives in Economic Life," delivered before the American Economic Association in 1915, based its contention upon the work of behavioristic psychology abetted by Freud's thesis. In this discussion Parker attempted to chart unknown seas of human conduct. The "balked disposition" or instinct became the key for Parker and after him, Tead and others, to the maladjustment of the transient laborer, to the understanding of many of the problems of the I. W. W. and other unadjusted laborers. Certainly this use of modern psychology was epoch-making, for most economists, even those of the so-called psychological school, then as now knew very little of modern psychology and its contribution to the study of man in his economic environment.

The psychiatrist, Southard, has shown the place that repression, fear and inferiority-complexes play in the radical labor movement.

His phrase "psychiatry in industry" caught the notion of many social workers and his influence on psychiatric social work is distinctive [19]

Many American psychiatrists who had come to accept some of the fundamental theories of Freud still felt that his viewpoint was too narrow. This view is evident in a symposium which Glueck, Brown, Campbell, and McCurdy delivered at the "American Psychopathological Association" in 1921.[20] This set of papers points the way to a much broader basis for considering the instinctive drive theories from the psychoanalytic viewpoint. There is here an honest attempt to link up the herd instinct notion of Trotter and the self-assertive (ego) notion of McDougall with the sex instinct of Freud. This general thesis has been expanded by one of the writers, J. T. MacCurdy, in his *Problems in Dynamic Psychology* (1923). This volume, although written for psychopathologists, has much valuable material for the psychologist and social scientist. Conflict between the individual and society (group standards), which is a pertinent problem in social control, is explained by the contrasted trends: those of sex and ego in competition with the herd instinct, that is, with that tendency which makes for conformity to moral standards. So too, other conflicts may be explained, such as in family and sex relationships, in terms of herd, sex and ego trends. While the psychiatrists are open to criticism for the loose use of subjective terms, their general thesis is important for the social psychologist and no system which does not take their work into account can hope to hold its place among the social sciences.

To summarize briefly the whole contribution of instinct theory to our subject, we may say that it marks the first attempt to get away from the vagaries of "group mind" and "collective psychology." Even the loose use of imitation by the earlier writers Tarde, Bagehot, and Baldwin had the virtue of talking in relatively objective concepts. The contributions of McDougall, Thorndike and Watson are of great importance. Their work put the whole matter of the inherited versus the acquired into the field of scientific psychology. Even McDougall's logical arrangement had much in fact to support it. That is to say, concrete analysis of behavior revealed many of these trends at work. Above all else, the theory of instincts offered social

[19] Cf. *Mental Hygiene* (1920), Vol. IV, pp. 43–64; 281–300; 550–563, for his discussions of mental hygiene in industry; also Southard and Jarrett, *The Kingdom of Evils*. (1922.)

[20] "Symposium on the Relative Rôles in Psychopathology of the Ego, Herd and Sex Instincts," *Journal of Abnormal Psychology* (1921), Vol. XVI, pp. 217–268.

psychology and through it the social sciences dynamic principles with which to interpret man's social living. The older rationalistic interpretation of the eighteenth and early nineteenth centuries had broken down. As Wallas remarks in his opening chapter to *Human Nature and Politics* the older standpoint was apt to assume "that every human action is the result of an intellectual process, by which a man first thinks of some end which he desires, and then calculates the means by which that end can be attained." This thesis must be given up in view of the whole dynamic, instinctive basis of human nature. Only by taking into account man's fears, his sociability, his tendency to follow the lead of others, or to take the lead in affairs can we understand his life. So too, his anger, his rivalry, his acquisitiveness must be brought into the picture of his world. Likewise play, manipulation, sexual trends, exploration have a large place in his intimate social life and on up to his creative activities in art and science.

Nevertheless, the extremist in the school of instinct theorists is likely to ignore the very important modifications and combinations of trends which go on in the development of life. Thus the conditioned reflex, the trial and error learning, the play of imagination in man's personality and habits must be considered. Motives are not born with us, out of whole cloth, as it were, but are the resultant of a merging together of the innate and the elaborations of learning. The next step in social psychology developed out of an approach which, not ignoring the place of instinctive trends, was to lay its emphasis upon the modifications and acquirements of the organism as it grew to maturity. We come thus to the second standpoint under the rubric of an approach to social psychology from the angle of the individual.

3. THE DOCTRINE OF SOCIAL ATTITUDES AND SOCIAL HABITS

While James gave important place to the instincts as cores of human behavior, he also found habits scarcely less significant. The latter are outgrowths of the former and represent the second stage in the rise of the self We have already reviewed his general contribution to the whole field of social psychology. It suffices at this point to quote from him one paragraph which stands out as indicating his clear perception of the tremendous part that habit plays in our social life:

"Habit is . . . the enormous fly-wheel of society, its most precious conservative agent. It alone is what keeps us all within the bounds of ordinance. . . . It alone prevents the hardest and most repulsive walks of life from being deserted by those brought up to tread therein. . . . It dooms us

all to fight out the battle of life upon the lines of our nurture or our early choice, and to make the best of a pursuit that disagrees, because there is no other for which we are fitted, and it is too late to begin again. It keeps different social strata from mixing. Already at the age of twenty-five you see the professional mannerism settling down on the young commercial traveler, on the young doctor, on the young minister, on the young counselor-at-law. You see the little lines of cleavage running through the character, the tricks of thought, the prejudices, the ways of the 'shop,' in a word, from which the man can by-and-by no more escape than his coat-sleeve can suddenly fall into a new set of folds. On the whole, it is best that he should not escape. It is well for the world that in most of us, by the age of thirty, the character has set like plaster, and will never soften again." [21]

Dewey's influence upon social psychology in this country has been much more direct than that of James. Following the same functional, pragmatic approach to psychology, Dewey gathered around him during the nineties at the University of Chicago a group of men as instructors and students who were to impress this standpoint upon education, sociology, ethics and the whole gamut of social sciences. Among these men are J. R. Angell, Mead, Thomas, Tufts, and following in Angell's wake, Watson. Angell's viewpoint, expressed in his *Psychology* (1904) was an aggressive functionalism, the key-note of which is found in this sentence from his preface: "It is mental activity, rather than mental structure, which has immediate significance for thought and conduct." This dynamic viewpoint became basic to social psychologists and sociologists of the "Chicago School."

The most direct contribution to the social psychology which bases its approach on attitude and habit was the paper of William Isaac Thomas at the St. Louis Congress of Arts and Sciences in 1904 on "The Province of Social Psychology." [22] Thomas was certain that a social psychology could not be written which ignored the relation of the group and the individual. Both these factors must be taken into account; one cannot be understood apart from the other. For him social psychology was considered to be a study of

"the individual mental processes in so far as they are conditioned by society, and the social processes in so far as they are conditioned by society, and the social processes in so far as they are conditioned by states of consciousness. The province of social psychology is the examination of the interaction of individual consciousness and society, and the effect of the interaction on individual consciousness on the one hand and on society on the other."

[21] *Principles of Psychology*, Vol. I, p. 121.
[22] Reprinted in *American Journal of Sociology* (1904), Vol. X, pp. 445–455.

For Thomas, the most important concepts of functional psychology of use for social psychology are: attention, habit, sympathy, suggestion, attitudes, and emotion. He adds a valuable idea in his word "crisis," which he conceives of as those alterations in the environment and in the individual which demand adjustment. Many of these crises are social, that is, imply the existence of entire groups. Such are pestilence, famine, flood, defeat in battle, or still other crises involving smaller groups, like puberty, marriage, births, etc. So too, any behavior on the part of one's self or others which destroys confidence and property (that is, antisocial acts) calls for attention and consequent rules of action. Therefore out of crises develop methods of handling problems of conduct: habits and modes of attention and attitude (social custom and taboos) often with emotional sets attaching. Further certain vocations are set off through crises; specialization begins, and classes and castes grow up. For social psychology the study of crises in reference to the individual is quite as legitimate as it is for sociology or history.

Thomas touched upon the matter of leadership in social life. The cultural growth of any nation is due, in part, to the rôle played by the outstanding persons of any time or place. Thus social psychology must take into account the entire theory of individual differences in reference to social change and social progression. The problem of race differences is likewise related to our field. Thomas throws out the interesting suggestion that perhaps the most marked differences among races is rather that of temperament than of sheer intellectual capacity. Here too, one raises the issue of the subtle interplay of cultural background and the thinking capacity of any race or class. This problem touches social psychology because this problem *is*, in large measure, the crux of the whole matter of the relation of nurture to nature.

In Thomas's *Source Book of Social Origins* (1909) we have a further contribution to social psychology. Through the medium of discussional summaries and introductions the author put forward his thesis of coupling up the materials of anthropology with the social sciences by means of what is essentially his social psychology. Attention, habit, crises, great leaders, state of culture—these become the important concepts for defining the growth of social control. Thus too, for the matter of racial or group differences, he makes it clear that no comparisons may be made until we take into account (1) the presence of men of exceptional ability in the group; (2) the level of culture of the group; and (3) the character of the ideas, habits and run of attention of the members of the group.

The next step in Thomas's own thinking came when he took a cue from Freud's notion of the wish and expanded it to cover the motives of social behavior as he observed it among immigrant groups, among negroes, and in social life of urban and rural centers where his rich experience had led him. Coupled with this theory of wishes was his doctrine of social attitudes. The wishes form the conscious or habitual (nonconscious) motives to conduct, the attitudes are concrete reaction tendencies, mental sets, sentiments organized around specific situations in the environment. Through the attitudes and behavior, the wishes come to light in concrete manner. The first published note on his scheme of attitudes and wishes was in paper, "The Persistence of Primary-Group Norms in Present-day Society" in 1917.[23] He has subsequently modified his arrangement slightly, but the following four fundamental wishes are conceived as convenient categories of motives: (1) The wish for security and safety, which is basic to property rights, conservatism, stable government and maintenance of the *status quo*. (2) The wish or desire for new experience, for novelty, which is basic to adventure, exploration, scientific and artistic creation. (3) The desire or wish for power or recognition of one's self by others, which is basic in prestige-seeking and in the whole attempt to secure superior status as mentioned by James, Thorndike, McDougall and other writers. (4) The desire for response, that is, the wish for companionship, for intimate face-to-face response from others, which is basic to the love life and to the solidarity of small congenial groups. The classification is purely tentative, but has grown out of an effort to organize a great deal of material bearing on social habits and attitudes.

The attitudes which express these wishes concretely are related to the objects and situations in the environment which possess value for the individual. That is to say, emotional, sentimental imagery and attitude are projected into these situations or persons and the attitude cannot be understood without taking into account the factor of value. Thus Thomas maintains that social psychology must take into consideration both the social attitude and the valuational feature of the situation or object toward which the attitude is directed.[24]

While the work of Freud has gained many adherents in this country

[23] Cf. H. S. Jennings, J. B. Watson, A. Meyer, and W. I. Thomas, *Suggestions of Modern Science Concerning Education*, (1917).

[24] Cf. W. I. Thomas & F. Znaniecki, *The Polish Peasant in Europe and America*, 5 vols. 1918–1920, cf. Vol. I, pp. 1–86, "Methodological Note." This monograph is a mass of material on one cultural group under crisis and is full of rich materials for social psychology. Cf. also, W. I. Thomas, *The Unadjusted Girl* (1923), Chaps. I and II.

and has thereby brought to the social scientists many new concepts, the fact remains that the conventional academic psychologists have very little sympathy for psychoanalysis as a scientific methodology. For them the concepts, unconscious, libido, regression, infantilism, autoeroticism, etc., are too subjective and vague to be of real merit in psychological analysis. Not all psychologists, however, feel this way, and E. B. Holt in his *The Freudian Wish* (1915) has tried to make a nexus between the concepts of psychoanalysis and those of behavioristic psychology. He abandoned the terminology of Freud in large part, but did take hold of the dynamic notion of the wish and attempted to show how it could furnish an interpretative principle for modern psychology. Space prohibits more than passing mention of his work here, but Holt indicated that the wish may be thought of in purely objective terms as "a course of action which some mechanism of the body is set to carry out, whether it actually does so or does not." It is dependent upon "motor attitude." The wish may thus be connected with any specific response system and is not connected with one only, as the *echt* Freudians would have it. While Holt's own interest was in relating the idea to the problem of ethics, the whole theory which he has laid down connects with Thomas's use of the terms wish and attitude. In fact, Park and Burgess in their *Introduction to the Study of Sociology* (1921) have combined the discussion of Thomas with that of Holt very successfully. Holt, in his book, also threw light on the problem of integration of wishes and attitudes, to which we shall refer subsequently.

Dewey's paper "The Need for Social Psychology" before the American Psychological Association in 1916 was a frank effort to indicate to the psychological guild in this country their continued avoidance of one of their most fundamental and most fruitful fields.[25] He shows in his opening paragraphs the failure of the older social psychologists to attain working principles because of the unnatural separation between individual psychology and its social phases. The workers in the experimental and systematic fields of psychology are equally at fault.

He remarks that for social psychology the two most important developments of recent years are the application of statistical method to group phenomena and the rise of behavioristic psychology. The former gives a method of testing social trends and making correlations of data which are not amenable to the experimental methods of

[25] Reprinted in *Psychological Review* (1917), Vol. XXIV, pp. 266–277. Quotations below from this article.

the stricter sciences. The latter, by its emphasis upon objectivity, upon the study of stimulus and response, especially its reference to instincts, emotions, habit-formations and integrations is far more pertinent for social psychology than the older emphasis upon the study of elements of consciousness as such. The learning process, which is conditioned first by the innate structure of the organism and secondly by the environmental stimuli, is the key to the building up of social habits, attitudes and modes of action. This process is basic to our institutional life and to our complex civilization. The newer approach, in short, does away with the concepts, also, of any collective psychology and any super-individual group mind:

"It transfers attention from vague generalities regarding social consciousness and social mind to the specific processes of interaction which take place among human beings, and to the details of group-behaviour. It emphasizes the importance of knowledge of the primary activities of human nature, and of the modifications and reorganizations they undergo in association with the activities of others. It radically simplifies the whole problem by making it clear that social institutions and arrangements, including the whole apparatus of tradition and transmission, represent simply the acquired transformations of original human endowments."

Unfortunately what these original endowments are Dewey does not say. While he rests his schema upon original impulses, his greatest stress is put upon the learning capacity. For social behavior the modifications which go under the mediation of other persons is obviously the most significant. In short, he holds that:

"Anything which may properly be called mind or intelligence is not an original possession, but is a consequence of the manifestation of instincts under the conditions supplied by associated life in the family, the school, the market-place and the forum." . . .

Dewey's whole thesis is that environment is the great conditioner of mind, that this conditioning occurs only under social stimulation, and that the core of social control is the development of methods of investigating human behavior in groups with an eye to control through predetermining the environment. "The kind of mind," he writes, "they (the instincts) become depends upon the kind of objects of attention and affection which the specific social conditions supply." Thus social psychology passes directly over into the heart of every social problem and leads thence directly to a social ethics.

The future of social psychology depends, therefore, upon the estab-

lishment of the experimental method in the social sciences as well as in the study of human behavior. When we learn to observe, correlate and deduce laws of social phenomena, we shall be able to construct a consciously controlled society.

The latter implication of his paper of 1916 was expanded in his West Memorial Lectures, *Human Nature and Conduct*, delivered at Stanford University in 1918 (published 1922). This book is an elaboration of the social psychology of habit and attitude into social ethics. The three aspects of mind which come into social conduct are impulses, habits, and intelligence. The first are original and untamed. For man while the impulse is primary in fact, in conduct it is secondary to habit, which is more stable, since it is organized out of rather chaotic impulses into specific form revolving around specific situations. Now habit is modified under crisis and it is just here that intelligence or deliberation comes into play. Thus, for Dewey, to social habit and social attitude, there must be added man's capacity for remaking his social conduct by intelligence. This seems to come about more by the changes wrought in the environment, thus directing the formation and reformation of habits and attitudes, rather than by suppressing and crushing out by the sheer weight of will the original and habitual impulses. Social psychology must lend itself to the study of how this sort of change has been brought about and how it may in the future be accomplished. The place of the intellect comes quite as much into the field of social psychology as the place of habits and attitudes.

By far the most ambitious attempt of recent years to apply the social psychology of attitudes, habits and dispositions to the concrete matters of the various social sciences is the work of J. M. Williams. Two volumes, *The Foundations of Social Science* (1920) and *The Principles of Social Psychology* (1922), have already been published. Four other volumes are scheduled to appear. This writer purposes to set forth a complete system of social psychology as it touches political science, economics, history, sociology, literature, art and morals.

According to Williams, "Social psychology deals with the motives of the individuals who participate in these institutional (social) relations." Upon inspection these motives are found to be complexes of instincts and habits called dispositions. The most important dispositions for social psychology are the rivalrous, aggressive and dominating; the acquisitive and the egotistic; the sexual, sympathetic, altruistic and intellectual. The last three are particularly important, since a more wholesome social order will arise when these come into

the ascendency. The dispositions, as he well states, are "apt not to be so clearly conscious as the ways of acting that have developed for their satisfaction." The disposition, moreover, at base is determined by hedonistic selection: avoidance of pain and the persistence of satisfying reactions. The fundamentals of social living are found in the terms "conflict" and coöperation," two concepts which remind us much of Patten's thesis.[26]

The motives which form the essentials of Williams's system are either conscious, subconscious, or entirely unconscious. By subconscious he means that one is partially aware of one's motives. By unconscious he means that the roots of the motive are lost to the individual, lying apparently in the field of instinct or very early conditioning. He does not seem to make any extensive use of a theory of the unconscious mind in the Freudian sense.

In the two volumes already at hand, Williams has dealt with social psychological phases of jurisprudence, economic motives, and political systems. He has presented an excellent account of the conflict in the spheres of economic relations, political relations, and in the professional, artistic and educational fields. He has also traced the influence of modern industrialism upon the breakdown of the family and upon the production of conflict in the individual. He has drawn somewhat upon the psychoanalytic school for material on suppressed impulses and his whole thesis of habits and dispositions leads at once to a theory of personality. He has, in fact, promised us a volume which will expand his thesis of dispositions to take into account the problems of social personality.

While this writer has added little perhaps to the systematic, theoretical side of social psychology, he has demonstrated once and for all, on a large scale, the applicability of social psychology to the problems of the special social sciences. Using the work of Thorndike, Watson, McDougall and others he has made an attack upon the concrete social problems. He belongs to the group discussed in this section because of his consistent insistence that a mere schema of instincts will not serve the purposes of social psychology. For him these forces must be understood rather through the medium of habits and dispositions.

Before passing on to the next section we must note that Dunlap has continued his attack upon the futility and incompleteness of basing social psychology upon a classification of instincts by positing a number of desires or wishes which he believes lie at the basis of all

[26] Cf. *The New Basis of Civilization* (1908), and other writings.

behavior. These wishes furnish him a set of dynamic principles. They are:

"The alimentary desire, excretory desire, desire for rest, desire for activity, desire for shelter, amatory desire, parental desire, desire for preeminence, and desire for conformity.[27]

It is an interesting coincidence that Dunlap, approaching social psychology from the angle of the systematist, should have seen the significance of the theory of wishes in much the same light as Thomas, whose angle of approach is so different. "Preëminence" is another way of stating wish for power or prestige; "conformity" is akin to security and safety; desire for love and parental desires are closely related to the desire for intimate response; and certainly Thomas's wish for new adventure has much in common with the desire for activity. For Dunlap too, the affective-emotional processes are closely bound up with the desires. Thomas's notion of hedonistic selection is likewise related to the field of feeling and emotion. This recognition of desire by a systematic psychologist is another evidence of the coming *rapprochement* of modern dynamic psychology with the older experimental and systematic accounts.

While the present writer is sympathetic with the theory of wishes as developed by Thomas, Holt and Dunlap, there is no doubt that the term "wish" or "desire" connotes a too high degree of awareness on the part of the individual in question to cover the meaning implied. The word, as here used, refers to a habitual reaction pattern which is constructed on the basis of innate reflex patterns. Unless carefully understood in the sense in which Holt defines it, the term "wish" may better be avoided and some such phrase as "fundamental trend" or "fundamental action-pattern" be employed.

Recently R. H. Gault has given us a treatise, *Social Psychology* (1922), which denies the efficacy of instincts of the McDougall sort and frankly bases his social psychology upon habit-complexes and social attitudes (that is, attitudes in the individual which have social reference or projection). So too, A. D. Weeks, in his *The Control of the Social Mind* (1923), while resorting to some use of the social mind concept, has really framed his definition of the latter in terms of social habits and attitudes. His book follows the general thesis of Dewey in its concrete treatment of political and social ethics.

More recently still, Bogardus has presented his conception of social psychology in his book *Fundamentals of Social Psychology* (1924).

[27] "Foundations of Social Psychology," *Psychological Review* (1924): Vol. XXIX, pp. 81–102.

His principal emphasis is upon social attitudes and the spread of these through social interstimulation. He writes of the province of the field:

"It (social psychology) treats of the processes of intersocial stimulation and their products in the form of social attitudes and values. It obtains its data by analyzing personal experiences"

Bogardus has drawn heavily upon the standpoint and approach of Thomas. His terminology is at times somewhat loose, as for example, his continued employment of the word "imitation" in a very broad and vague way. The book is principally valuable for the nexus it makes between the sociological data and social psychology, and for its pedagogical utility.

In the present and previous sections we have traced the treatment of social psychology from the angle of the individual. We reviewed the attempt to base the field upon the unfolding of the social instincts: first upon imitation, then, upon the rigid classification of McDougall, and latterly, in more empirical terms by Thorndike and Watson. Thereafter we saw that Dewey, Thomas and others, feeling that the schema of instincts and emotions was not sufficient, went on to indicate the place of learning in building up habits and attitudes. These latter revolve around persons and situations in the environment and any theory of social psychology which ignores the interplay of individual and environment is futile.

Even among these latter writers, however, there has been a growing tendency to expand the theory of social attitudes and habits into the study of the social personality. Already Williams and Thomas have caught the trend and Holt's theory of the wish leads directly into a theory of personality integrated toward the varying phases of the environment. Thus we must turn now to examine the next step in social psychology, that which attacks the problems from the angle of personality.

4. PERSONALITY AND SOCIETY: PARTS OF AN ORGANIC WHOLE

Just as James's classic chapter on the self was the fruitful root of much in the doctrine of instincts and in the doctrine of habit, so too, in the approach to social psychology through the study of the personality, his chapter becomes fundamental even if his treatment is only sketchily put forth. The "Social Self," with which he dealt, leads directly to a study of personality as an outgrowth of the play of instincts and habits against the environment, an environment

largely of other persons. We shall not repeat our review of James. It is only necessary to bear in mind his insistence that the self is the unitary, organized core of all habits and attitudes. Its integration and its interrelation with society is the key to social psychology.

We owe much to the work of James Mark Baldwin during the nineties and during the first decade after 1900 in indicating some of the intimate relations of society to the rise of the self. To him the individual and the group are part and parcel of a greater whole. The alleged dichotomy of the person and society is not found in reality. He writes in his *The Individual and Society* (1911):

"Society and the individual are not two entities, two forces acting separately, two enemies making forced and grudging concessions to each other. On the contrary, they are the two sides of a growing organic whole, in which the welfare and advance of the one minister to the welfare and progress of the other."

Upon a theory of imitation, suggestion and habit (accommodation) Baldwin traces the development of the individual. The matrix of this development is the "give and take between the individual and his fellows," the "dialectic of personal growth" as he called it. Growing out of a preliminary basis which is largely one of reflexes and on a purely pain-pleasure level, there are four stages to this development of the self. (1) The *objective* stage wherein, through the processes of perception, memory, imitation, defensive action and instinct, other persons, as well as material objects, are reacted to as impersonal things. (2) The *projective* stage, wherein the child gradually begins to note relationships between persons, projected out from himself. He comes to distinguish between inanimate objects and persons. The latter are arbitrary, active, capable of giving or denying, which makes for a growing "sense of uncertainty" in dealing with them. In short, their behavior is unpredictable. (3) Under suggestion and the more complicated forms of imitation, circular-response or self-imitation begins. It is based upon imagery of the child's own actions in reference to others, and imagery of their actions in regard to himself. This is called the *subjective* phase. It is here that the child becomes aware of himself, and this awareness is in great measure determined by the images he has caught up from the conduct of others toward himself. In brief, his own personality is a reflection of those about him quite as much as it is any distinctive growth from within. (4) The last development is that in which the individual, through more extensive imagery and thinking, comes to recognize that other persons have experiences similar to his own,

"that is, other people's bodies," says the child to himself, "have experiences *in them* such as mine has."[28] This stage Baldwin called the *ejective*. It is here that the moral, ethical self is born. Through the enlargement of the last stage, human sympathy, coöperation and rational social conduct are made possible.

While Baldwin's whole system implies a too logical and rational unfolding of the self under the social stimulation, and while his use of imitation is far too broad for the facts, his early work was fundamental to the development of social psychology. His influence on Cooley and Mead is particularly to be noted While Baldwin does not devote himself extensively to the sociological implications of his thesis, he does give some attention to the matter in his numerous writings. Barnes has summarized his contribution here as follows:

"The natural and pedagogical institutions of society reduce to a large degree the extreme egoistic and individualistic tendencies, advance socialization and prepare mankind for cooperative endeavor. Yet some form of external constraint is necessary for the most effective group cooperation and to curb the disintegrative tendencies of imperfectly socialized individuals. Government constitutes the only agency adequate to insure the most complete degree of collective activity through coöperative endeavor. Yet political constraint is but the means to an end, and administration of collective interests rather than constraint is the chief function of government. Government is not created by a contract; it is an agreement which implies social self-consciousness and the recognition of the necessity of an adequate institution for furthering and perfecting group coöperation.

"The significance of Baldwin's work for social and political theory is that he severely challenges the conventional doctrine that social and political institutions are erected at the expense of individuality and that the problem in the situation is to discover a compromise between two distinct sets of interests. . . . Further, he offers a mechanism, however imperfect, for explaining the reciprocal development of the individual personality and social and political institutions."[29]

From the sociological side Charles Horton Cooley of Michigan has made the most important addition to the theory of personality in relation to society. His major contributions appear in three books, the titles of which indicate in a manner their content: *Human Nature and the Social Order* (1902); *Social Organization, a Study of the Larger Mind* (1909); and *Social Process* (1918). Cooley owes his

[28] Cf. *Social and Ethical Interpretation*, 4th ed. (1900), p. 4. Baldwin's *Mental Development*, 3d ed. (1906) contains the best single treatment of his position.

[29] Barnes, loc. cit., pp. 209–10, 211. Cf. Book II of Baldwin's *Social and Ethical Interpretations* for a discussion of the sociological angle.

standpoint to several sources. From Baldwin he may have caught the implication of the dialogue between the growing self and other selves, from James, no doubt, he got many clews as to the social determination of attitudes. It must not be imagined, however, that Cooley is lacking in originality. He brought to the subject a wealth of observation, reading and thought which makes his own contribution unsurpassed. His first book, written over twenty years ago, still contains one of the most suggestive analyses of human nature yet available. No one ever so clearly saw or more clearly expressed the subtle interplay between the social environment and the social self.

In truth, the chief thesis of this writer is the inseparable connection between the individual and society. This view, implicit at best in Baldwin's concrete treatment, becomes clearly explicit and fundamental to the whole of Cooley's work. The person and society are parts of a total on-going process. The two are complementary in the most intimate sense. The child's idea of himself is the reflection of others about him. Even intelligence is largely socially conditioned. While not denying the thesis of individual differences in capacity, he remarks, "There is nothing exclusively individual about intelligence. . . . The growth of intelligence and the growth of a differentiated social system are inseparable." The mistake of traditional psychology is to segregate the individual from his social and material environment and to study him as an isolated atom. The mistake of the social sciences, on the contrary, is to give complete attention to institutions and social mechanisms without taking into account the complexities of personalities involved in social life. Cooley's treatment avoids most of this unnatural separation. He begins his presentation with a genetic description of the rise of human nature, which is to him decidedly "social" in aspect. His observation of children, coupled with his penetrating interpretation, makes his picture of the rise of self-consciousness far more valuable than much of the material collected by more formal questionnaire method on the minds of children a generation ago.

The psychological roots of personality are for him, first of all, a sort of instinctive self-feeling or ego-tendency, then the suggestibility and sympathetic trends. Especially important are the tendencies to play, to emulate others and to communicate. While he recognizes original inventiveness, he believes social stimulation of others plays a prominent place in this. Above all else the child in his early learning is under the domination of the family, the playground group and the neighborhood elders. These primary face-to-face groups are the matrix of all of one's attitudes and social habits, the breeding ground

of ideas of honor, honesty, virtue,— in truth, the whole gamut of moral reactions and standpoints. Likewise the primary group forms the background on which one's skills and later vocational or professional choices depend.

The second volume of Cooley's series is largely concerned with tracing the influence of social organizations upon personality. He incisively points out the tremendous changes which impend for human nature, due to the modern industrial age with its specialization of labor, its urbanization of population, its rapid communication and its class conflicts · that is, the great alteration in the lives of peoples due to the breakdown of the primary face-to-face groups, those natural sources of personality.

The third volume is largely a defense of the theory of considering the individual and society as an organic whole.

In brief, Cooley's contribution to social psychology is threefold: First, he well describes the effect of the social group upon the rise of personality, in other words he shows that one lives largely in the frames of behavior laid down by those about him. Second, he explains the interplay of social organization upon the personality and *vice versa*. Third, he makes an eloquent defense of a theory of personality and society as an organic entity which will operate best under the ægis of democracy. Changes in personality take place, *pari passu*, with alterations in the social environment. One cannot advance without the other. Culture and progress thus are dependent upon the neat balance of these two forces operating in harmony.

George H. Mead of Chicago has made a number of important contributions to the theoretical side of social psychology. For our purposes here, we can only mention briefly some concrete ideas of his which throw light on the mechanisms of self-consciousness and of behavior under social stimulation.

From the notion of circular-response developed by Baldwin he has gone on to indicate more objectively just how the whole mechanism of self-stimulation and other-stimulation is really alike. His most important principle may be illustrated thus:

The child or person tends by virtue of complex organization of neuro-muscular arcs to respond to his own response as well as to the response which the other person offers him. This backwash of kinæsthesis is extremely important in the rise of self-awareness. The whole field of gesture illustrates this well, either gesture of face, arm, general torso, or vocal gesture (language). Suppose two boys are boxing. The one (A) leads to the face of the other (B) with a left hook. B responds to this by withdrawing, throwing up his guard or

otherwise. Now not only does B respond outwardly to the oncoming movement of A, but he reacts himself to his own movement of throwing up a guard, etc In fact, it is only by so reacting to his own response that he is able to alter the course of his action in reference to A. On more complicated levels, imagery comes to serve in place of direct motor response. Language is all-important here of course. We talk to ourselves as others would and respond or tend to respond to our own speech. Suppose, in another example, that A sees an acquaintance, B, who is a person of superior social status and whom he knows only slightly He wishes to greet this man with a handshake, but hesitates between the imagery (verbal or other) of being rebuffed, and the imagery of being smiled upon. He determines upon the first reaction and this tendency (really a reaction) brings a suffusion of emotional-affective toning that is pleasant That is, A is responding here to his own imagery even before his complete response of greeting B is in operation. Imagine, further, that B does not take the proffered hand, but turns aside to "snub" A. The other process of avoidance and unpleasant toning comes in to inhibit the incipient response of A (which was pleasant) and A's whole attitude and imagery are changed to the opposite sort. If sensitive, A may now respond to himself as inferior and deficient, or he may develop an intense dislike of B.

By this same mechanism the child comes to have toward himself much the attitude which the superior person, mother, father, or nurse, or later the gang-leader, has toward him. So, too, through the medium of imagery and language the child comes to talk to himself, playing the rôle of others in ever-changing mood.

While language is important in this process of self-stimulation, the meaning is after all dependent upon the original reactions which the words signify. Thus the labor representative and the employer in dispute will understand each other much better if each has had somewhat identical experiences: as laborer and as employer. If they have had no common experience, their words do not bring appropriate images and appropriate common responses to their own words, in themselves, and thus they cannot agree and may fall into conflict wherein employers and laborers both understand the gestures (of fighting) since these are much more primitive patterns.

The determinative thing for social control is that the attitudes toward the self and toward others be largely alike. Then the language or other gesture may set off responses in other persons common to your own. This gives us a clew to the great place that the cult

and the common ritual have in social organization. It gives us literally a universe of discourse in the group. The primary group fulfills this function. To-day when the primary group is disappearing we see why it is essential to give the entire citizenry in a democracy the same type of education in attitudes and conduct, why the laboratory method has become so necessary as a common training ground, since specialization so quickly segregates out our activities and hence enhances the possibilities of our misunderstanding each other.

Mead's analysis is particularly valuable. He has given us a clew to the meaning of the circular-response. He has shown us the play of language and attitude in developing the personality: both in the interaction of person on person and in the dramatic imagery of playing the rôle of others. He has, in fact, given us in objective terms the mechanism by which personality grows up.[30]

Moreover, on theoretical grounds, Mead has insisted that the whole problem of knowledge is not to be divorced from the study of the interstimulation of selves. Thought in its essence is socially determined. Under the stimulus of Professor Dewey, Balz, in his *The Basis of Social Theory* (1924), has treated this whole thesis at length. Balz maintains that the older dichotomy of "individual" and "social" features of psychology must be given up and that "the data of psychology in its basic form (and the basic form of psychology is *social* psychology) are social facts." And a "social fact" he defines, "as any fact that could not come to be at all, save within a group or congregate form of life."[31] That is to say, all those features of mental life, language, thought, etc., which we look upon as essential to human nature are fundamentally part and parcel of social "living-togetherness." Without group life there would be no human nature, no nature which we study under the rubric "psychology." Cooley has long insisted on this same fact, although he has not given the notion the epistemological form as has Balz.

Miss Calkins has recently indicated that a self-psychology may consistently throw much light upon social psychology. For her, psychology is concerned with studying "the totally integrated individual

[30] Mead's papers are scattered in the periodical literature of the last fifteen years. The reader may refer to the following which give the most important materials for social psychology: "Social Psychology as the Counterpart to Physiological Psychology," *Psychological Bulletin* (1909), Vol. VI, pp. 401–408; "The Mechanism of Social Consciousness," *Journal of Philosophy, Psychology and Scientific Methods* (1912), Vol. IX, pp. 401–406; "The Social Self," Ibid. (1913), Vol X, pp. 374–380; "A Behavioristic Account of the Significant Symbol," Ibid. (1922), Vol XIX, pp. 157–163.

[31] *The Basis of Social Theory*, pp. 45, 38.

in the attitudes with which it confronts its environment."[32] While Miss Calkins has affected the main current of social psychology but slightly, we are indebted to her for indicating from the systematic angle the need for studying the integrated personality in terms of its attitudes towards its self and its environment. This view of integrated personality we shall note in the subsequent section more fully.

We cannot leave the present section without pointing out the effect which psychoanalysis has had upon the study of personality and thence upon social psychology. We have already noted the influence of Freud on the work of Holt and Thomas. Here we shall review very sketchily the coming of psychoanalysis into the field of social psychology and the social sciences more directly.

Freud's *Totem and Taboo* (1918) is frankly an effort to account for the origin of society and of religion in terms of his concepts. Otto Rank in his *The Myth of the Birth of the Hero* (1914) and in other writings has examined myth and fable in primitive peoples in the light of Freud's principles. Latterly Freud has traced the basis of authority back to the early relations of child and parent in his *Group Psychology and the Analysis of the Ego* (1922). He has shown how the patterns of authority in social groups have their foundations in infanthood. Flügel has tried to trace the whole history of the family life in psychoanalytic terms in his *Psychoanalytic Study of the Family* (1921). There is a mass of psychoanalytical materials from Freud, Jung and Adler and their followers too extensive to mention here.

This work, in turn, has begun to influence historians and biographers in their treatment of historical persons. Among American writers who have drawn upon Freud and his contemporaries are G. Stanley Hall, H. E. Barnes, L. P. Clark, R. V. Harlow, E. D. Martin, H. O'Higgins, E. R. Groves and W. F. Ogburn. Hall, Barnes, O'Higgins, Clark and Harlow have shown the value of psychoanalytic concepts in understanding the personalities of great men: the play of social milieu, the importance of father or mother, and early associates, the place of regressions, repressions and so on.[33] Martin, in his *Be-*

[32] "The Truly Psychological Behaviorism," *Psychological Review* (1921), Vol. XXVIII, pp. 1–18.

[33] Barnes, "Psychology and History," *American Journal of Psychology* (1919), Vol. XXX, pp. 337–378; and his "Some Reflections on the Possible Service of Analytic Psychology to History," *Psychoanalytical Review* (1921), Vol. VIII, pp. 22–37. Cf. also Clark, "Unconscious Motives Underlying the Personalities of Great Statesmen," Ibid. (1921), pp. 1–21, on Lincoln. Cf. R. V. Harlow, *Samuel Adams* (1924); H. O'Higgins, *The American Mind in Action* (1924).

havior of Crowds (1920), has given us an interpretation of the responses and attitudes of the personality under the stimulus of a crowd. He has shown us the dominant primitivity of the crowd-minded person, his extreme egotism, his sadistic cruelty, his prejudices. The crowd serves to break down the operation of the censor and let loose the impulses, often savage, in the unconscious. He has pictured, moreover, the astounding growth of crowd-minded individuals under the stress of modern industrialism and has indicated the possible dangers for society and for personality of this type of development. In his *Mystery of Religion* (1924) he has applied the same concepts and technique to an explanation of religion

While the psychoanalytic treatment is open to criticism for its vague and subjective terminology, it is the conviction of the writer of this chapter that its contribution, when revamped into more objective terms, will be considered the most important single contribution to social psychology in many decades. Wells's *Mental Adjustments* (1917), and *Pleasure and Behavior* (1924), will furnish the reader with an excellent account of the fundamental mechanisms of personality without recourse to the unfortunate subjectivity of many of the psychoanalysts proper. Robinson's *Mind in the Making* (1921) has drawn upon much of this same material in tracing the rise of modern methods of thinking.

Mention should be made also of the work of Galton, Cattell and E. L. Clarke in investigating the character traits of men of fame. These studies, while primarily statistical, did throw into focus the play of social environment upon some of the traits of great men. More recently Hoch and Amsden, Wells and Allport, have attempted schemas for rating personality. These all try to trace the social background of the person.[84] These studies show a growth in objective study of personality and are certain to bring about a closer coördination of this phase of psychology with social psychology.

Recently E. R. Groves in his *Personality and Social Adjustment* (1923) has set forth the significance of some of the newer aspects of psychoanalysis and behaviorism for the study of the genesis of the

[84] Cf. Wells, "Systematic Observation of the Personality," *Psychological Review* (1914), Vol. XXI, pp. 295–333. F. H. Allport and G. W. Allport, "Personality Traits and Their Classification," *Journal of Abnormal Psychology* (1921), Vol. XVI, pp. 6–40, and Allport, "Personality and Character," *Psychological Bulletin* (1921), Vol. XVIII, pp. 441–455. Cf. also Cady, "Psychology and Pathology of Personality," *Journal of Delinquency* (1922). Vol. VII, pp. 225–248; J. Downey, *The Will-Temperament and Its Testing* (1923), and F. H. Allport, *Social Psychology* (1924), Chapters v–vi. Cf. also, L. M. Terman, *Genetic Studies of Genius* (1925) Vol. I for a most extensive study of the relation of heredity and environment to superior ability and personality.

social personality. And F. H. Allport's *Social Psychology* (1924) is a thoroughgoing effort to dispense with all the older materials of group mind, social instincts, etc., in favor of an objective social psychology. His standpoint is set forth, in part, in the following extracts:

"Social behavior comprises the stimulations and reactions arising between an individual and the *social* portion of his environment; that is, between the individual and his fellows. . . . Collective consciousness and behavior are simply the aggregation of those states and reactions of individuals, which owing to similarities of constitution, training and common stimulations, are possessed of a similar character. . . . The influence of one individual upon another is always a matter of behavior. One person stimulates and the other reacts: in this process we have the essence of social psychology. . . . Both the stimulating and the reacting behavior may be at times *accompanied by* a social type of consciousness in the respective individuals; but there is, so far as we know, no immediate action of the consciousness of one individual upon the consciousness or behavior of another. . . .

"Social psychology is the science which studies the behavior of the individual in so far as his behavior stimulates other individuals, or is itself a reaction to their behavior; and which describes the consciousness of the individual in so far as it is a consciousness of social objects and social reactions."

This book presents the mechanisms of personality, the interplay of social stimulation and the effects upon the individual when he reacts in the presence of a group. It is questionable, however, if social scientists, generally, will feel that such a treatise, although invaluable, has done more than to lay down in objective terms the *modus operandi* of individual reaction in the group. It does not typify the whole field of social psychology. There still remains a belief that books like those of Thomas and Williams, which deal with personalities in concrete social situations, as found in political science, economics, history, etc., are also valid social psychology.

Before turning to the final section in which we shall review the whole scope of social psychology and offer some suggestions for a tenable and synthetic standpoint, let us summarize briefly the present section.

We saw that in Baldwin and Cooley the individual and society are thought of as parts of one organic whole. While most of the workers in this field have shown little inclination to follow Cooley into a theory of organic whole, most of them admit implicitly the intimate

interplay of the individual and the group around him. Mead and Allport, on the other hand, are little concerned with this, but more with the mechanisms by which social personalities interact. The psychiatrists and psychologists who have studied personality and its traits have either given dynamic explanations of their subjects or have offered means of rating the various traits of personality. These schemas often reveal the subtle relation of social environment to personality.

III. SUMMARY AND CONSTRUCTIVE PROPOSALS

Dealing with human beings in concrete situations, as they do, the social sciences have never been able to escape the biological and psychological nature of their materials. Certainly the eighteenth century rationalism was a psychological system, as was the equalitarian, intellectualist doctrine of the Mills. The coming of modern biology threw grave doubts upon theories which maintained man's clear intellectual motives in all things. Under Schaeffle and Spencer we have efforts to frame social philosophies based on biological analogies, on the one hand, or on theories of actual organic growth, on the other.

Social psychology itself had its inception in the work of Tarde and Bagehot. From these beginnings and from current French psychology Sighele, LeBon, and Durkheim constructed a "collective psychology" which tended on the whole to frame its descriptions of groups in terms of individual psychology. The latter went so far as to posit a collective consciousness. From this collective psychology the "social mind" concept was born. The sociologists in an effort to escape the restrictions of the narrow experimental psychology turned to the dynamic, functional psychology of France and of this country. They tried to treat their group phenomena in the terms by which the individual is described. This led to the "psychological sociology" of Ellwood and is also implicit in the theories of Giddings, Small and others.

To-day under the lead of anthropology and cultural history the sociologists are coming to posit their own social mechanisms without recourse to the concepts of individual psychology. Here institutions, classes, cultures, etc., are discussed in relation to each other on their own level. In practice surely social psychology comes in to furnish some explanations, but there is little tendency to couch the whole sociological system in terms of psychology which can only apply to individual consciousness and behavior. Social psychology, in turn, has come to be more and more the study of the individual as he reacts

to and in the presence of the group and as he also affects the behavior of others in the group.

The first full-fledged effort to make this study, systematically, from the individual angle, was in McDougall's *Social Psychology*. McDougall proposed a rigid classification of instincts and emotions, which built themselves into complex emotions and sentiments, and thence into character. The important contribution of this writer, however, was not his theory of character, but the dynamic schema of instincts which the social scientists might make use of in interpreting their data. Graham Wallas, Mitchell, Parker, Ogburn, Edie and others have drawn heavily upon McDougall's principles.

This rigidity of instincts, however, broke down under the functional analysis and another trend of interest growing out of behavioristic psychology, a psychology concerned with conduct and action, has been gaining ground. This viewpoint is represented by Dewey, Thomas, Gault, Bernard, Faris and Williams. For them the dynamic principles of social psychology are habits, attitudes and dispositions. They do not deny the place of innate instinctive trends, but hold that these are so quickly complicated and overlaid by habits that no interpretative system can be built up from them alone. More recently still the work of Freud, Holt, Wells, and others studying personality from various angles has given us a clew to another approach to social psychology. This is through the study of the personality in relation to its social environment particularly. Here the preliminary work of James and Baldwin upon the rise of the self is important. Here too the sociologist, Cooley, has performed a lasting service in defining the interaction of social environment and human nature. In fact, Baldwin and Cooley propose a theory that the person and the society must be conceived together as a total ongoing process.

In the view of the writer of this chapter all these efforts are incomplete. True enough the last-named view is much nearer the heart of the problem than that of any of the other writers. Most of the writers, especially those of psychological bent, with a few exceptions,[35] fail to recognize the essential problem. In order to make clear my thesis it will be necessary to turn to a short account of the dichotomy between traditional social science and traditional psychology.

The older social sciences tended to deal with those phases of their work which ignored human nature. Economics, for instance, possessed a series of concepts: price, value, commodity; land, labor and

[35] Cf. J. R. Kantor, "An Essay Toward and Institutional Conception of Social Psychology," *American Journal of Sociology* (1922), Vol. XXVII, pp. 611–27, 758–79.

capital which ignored the personalities involved. If persons were dealt with at all they were put under the rubric of an "economic man" quite devoid of anything but economic motive derived from an outworn Benthamite psychology. So too, jurisprudence tended to be engrossed in history of cases, procedure, machinery of courts, but the human elements in the problem of law and justice were lost sight of. History gave little place to the analysis of personalities except in a very conventional way. With the exception of sociology, which did take man into account, the older social sciences were so engrossed in organization, institution and form that they ignored the dynamic, human features of their subject matter. On the other side, psychology was handicapped, no less, by being cut off from the institutions and environment (social and material). It dealt with the individual as a psychologic atom, open to self-introspection or to study by brass instruments marking simple reaction times. It was interested in the mechanism of mind, in analogy to the processes of chemistry. It divorced itself from human conduct and from all complications. Its single glory was the investigation of *how* we think, feel and act under the simplest conditions.

Thus social psychology, coming into the field when these two divergent courses were still being pursued, had to choose between dealing with such units as crowds, mobs, assemblies and such matters as public opinion, war, and institutional effects on groups in terms of individual psychology or dealing with biological analogies as had Schaeffle.

Then came a functional-biological psychology which maintained a classification of specific instincts that in combination account for social living. These concepts were eagerly accepted as accounting for social behavior. Yet this approach was still inadequate for social psychology because it continued the same fallacy of explaining only the *how*, the mechanisms, of mind. The more recent approach employing the concept of habit and attitude is one in advance, for it puts considerable emphasis upon those environmental situations around which the habits and attitudes develop. So likewise the study of social personality throws light upon the very significant factor of early social contacts in the total reaction system. As yet, social psychology has not caught the meaning of this environmental angle. Cooley is perhaps the only writer who has completely grasped its importance.

It is the writer's view first, that social psychology must be built, on the individual side, around the concepts of the mechanisms of mind. Secondly, social psychology must take into account not only these mechanisms—the how we think, feel and act—but must deal

with the content of mind and act—with *what* we think, feel and act, as well. To put it differently, we must know not only *how* the processes of perception, imagery, association, attitude operate, we must know also *what* the nature of the concrete image is, what the person thinks *about* as well as the *mode* of his thought. Personality is understandable actually in what the person images and recalls and what his attitudes are. We do not want to know alone about the mechanized forms of rejection, acceptance, belief and disbelief in studying attitudes, but also the concrete thing or image around which the attitude is built up.

Thus the first aspect of social psychology involves the individual. This phase itself includes two features: one dealing with the mechanism of the organism, the second with the concrete nature of the conscious process and the concrete nature of the attitude. Now the alternate factor in social psychology is the institutional and social situation toward which the organism is oriented. The *what* of mind of which we have just spoken, can surely only be understood in terms of the institutional and social stimuli of which it is a reflection. Moreover, the content, the what, is quite as important for the foundation of social psychology systematically as is the mechanism of mind under social stimulation. Before we can control social behavior we must know not only how people think, feel and act, we must know what they think, feel and act. And in order to do this latter we must also know the specific nature of their environment.

Looking more closely at this interplay of organism and social environment, we may say that *social psychology is the study of the personality as affected by social and institutional stimuli and as in turn affecting these.* The personality, as we have noted, includes both mechanism and content. The distinction between social and institutional stimuli is simply one of convenience. For instance, the worshiper responds to the concrete church and its ritual in socially determined ways quite as much as he does to a direct stimulation from the priest or fellow member. So too, the idea of the state or of God may be responded to with distinctly social implications.

The most important mechanisms by which we may study the interaction of person on person and of person on institution are those which have been developed by modern behaviorism and physiology. The work of Pavlov and Watson upon conditioned reflexes has given us objective methods of investigating the relation of stimuli and organism. By this mechanism the child is attached to his mother and to his home. Here reactions and attitudes of love and coöperation

to the in-group are built up. With the human being this process of conditioning extends over into the field of imagination and language and there is almost no end to the process. The whole field of memory and association come under this new concept. It is in the elementary group life, family, play-group and congenial neighborhood, that attitudes toward church, state, religion, morals, toward the foreigner, the Catholic, or Protestant or Jew are developed. The conservatism of habits and attitudes so engendered is the basis for prejudice, for conflict and for many of our present-day social mis-adjustments.

The basic reflexes upon which the conditioning begins are those concerned with survival and have, when combined together, often been called instincts. Thus hunger and feeding mechanisms are present very early; so too, responses to bright lights, to pain, to loud sounds (by fear reactions), to tickling and patting (by sex or love responses) and shortly to novel or striking objects (by reaching for, turning over and moving toward). In addition there are a number of fairly well organized reflex patterns involved in what are often called random movements. These are related *in potentia* and are very quickly associated together in growth and by conditioning. It is, therefore, upon these rudimentary reflexes that the learning process begins. The most important single feature for personality is that the crises around which social life is organized all produce, in the person, emotional responses, and naturally these emotional reactions are the core of what is carried over into the conditioning or learning. Then as these conditionings go on, the emotional core becomes mechanized, attitudes arise (this is the field of meaning) and we have the basis for interpreting the whole gamut, so far, of human behavior.[36]

The principle of conditioned response and its attendant features of inhibition, facilitation, etc., is not sufficient. The epoch-making work of Sherrington must also be taken into account. He has shown the marvelous organizing power of the cortex, the place of various response systems coöperating together to make for integrity of the organism. These principles become valid for the study of personality.

[36] In the view of the writer much of the misunderstanding and mystery about the unconscious may be cleared up under the objective terms of modern physiology and behaviorism: conditioned response, inhibition, integration, dissociation, etc. The true field of the unconscious in his belief lies in the study of the mechanized emotions and attitudes. He hopes to indicate this reinterpretation in a subsequent publication. It is his personal opinion that the value of psychoanalysis is rather in the concrete materials which have been collected than in the elaborate subjective terminology: unconscious, libido, racial unconscious identification, transference, regression, etc., almost *ad infinitum*.

In fact, for human conduct this principle of integration becomes all-important.[37] Since so much of this integration, that is, the particular level upon which it takes place, is dependent upon, first, the nature of the original reflex patterns and secondly, upon the conditioning which takes place there, the nature of the social and institutional stimuli become significant in comprehending the growth of the full-rounded personality. Sherrington's presidential address before the British Association for the Advancement of Science in 1922 on "Some Aspects of Animal Mechanism" is so pertinent here that I quote him at some length:[38]

> "The nervous system is that bodily system the special office of which . . . has been more and more to weld together the body's component parts into one consolidated mechanism reacting as a unity to the changeful world about it. . . . It represents the acme of accomplishment of the integration of the animal organism. . . .
>
> "The normal action of the mind is to make up from its components one unified personality."

Moreover, as he well points out, this integration has gone on till it has touched man in his social living. The community itself may take on a form of integration, a living-togetherness, under the leadership of the human mind. In truth, this is just the "scope and ambit of social psychology." As an illustration of what is meant when it is maintained that the environmental stimuli affect the integration of the personality, Sherrington remarks:

> "Not the least interesting and important form of social psychology is the relatively new one, dealing with the stresses and demands that organized industry makes upon the individual as a unit in the community of our day and with the readjustments it asks from that community."

In fact, the conditioned response and the principle of integration go hand in hand together. Connected with the latter is Peterson's theory of completeness of response in learning. The highest integration of the organism can only take place, in short, when the response systems are harmoniously working together to absorb the total organism. Incomplete response is blocked response and produces emotional stress and disarrangements which are disintegrative.

It should not be imagined that mere conscious seeking for integration and complete response is to be our ideal. After all, as Burnham

[37] Cf. K. Young, "The Integration of Personality," *Pedagogical Seminary*, 1923: Vol. XXX, pp. 264–285, for a very rough attempt to indicate this standpoint.

[38] Reprinted in *Science* (1922), n. s., Vol. LVI, pp. 345–355.

has pointed out, integration and balance come from the general orientation of the person toward some all-absorbing goal or task which is constantly moving ahead of him and which is so located in the world of reality that the person is constantly occupied with useful endeavor in reference to it. Moreover, new crises are constantly arising for the growing personality, hence perfection in the way of mediæval daydreaming is not what is meant here. The organism, therefore, must not be running counter to the demands, either of its own trends or to the real world around it. Conflict between organism and environment, conflict between two powerful trends, like those of sex and those which fit into the herd's wishes, produce inefficient living. Hence the aim or goal is a working hypothesis, never a final absolute sought-for, and once gained dispensed with, in a kind of eternal Nirvana of bliss.[39]

From the second angle of approach social psychology must go into a study of the specific stimuli of persons and objects which affect the personality. The study of crowds, mobs, audiences, crazes, fads, crime, war, propaganda, public opinion is the very center of its problem. These must be phrased and defined in precise situations, and there is little need for appealing to psychological concepts beyond those demanded to explain the interaction of social beings. Likewise, the ideas and sentiments revolving around the great institutions of our society: the family, the church, the city, the state, the nation, the religion, the club, our science, art or special economic activity, business or industry, must be related to the specific nature of the situation in every instance. We lack just this detailed analysis of the stimuli. Beginnings toward this are being made in the work of Thomas, Williams, Park and Faris, and we may expect the social scientists generally to assist in this process once they catch the meaning of social psychology for their own particular fields. The contribution of psychiatry has been just this. It has got at the concrete situation or person that produced the dislike, the phobia, the avoidance or other social attitude and habit. The analysis must be carried into the field of normal relationships. Since the methodology of this whole approach is yet to be devised, literature, both the creative sort and the unintentional, like diaries, letters, communications, etc., are worth much consideration. So too, the suggestion of Dunlap to employ the theater for setting off typical reactions is noteworthy. We need also an expansion of the study of the effect of rivalry, competition, and the pres-

[39] For Peterson, cf. "The Functioning of Ideas in Social Groups," *Psychological Review* (1918), Vol. XXV, pp. 214–226, and references therein. For Burnham, cf., "The Normal Mind," *Pedagogical Seminary* (1922), Vol. XXIX, pp. 383–399.

ence of other persons upon work and play. Allport has given us an extensive review of past experiments in this problem in his *Social Psychology*.

In summary, therefore, it is the view of the present writer that social psychology must take into account the organism first of all, both the mechanism of mind and action and the content of the mind: of the imagery and attitude. Mere mechanism alone can never solve the problem of personality and motive, neither can it solve the problem of social psychology. In the second instance, social psychology must examine the specific nature of the environment to which the organism reacts. This environment is either other persons or institutions with social implications. Thus organism and environment must be considered inseparable. This view may lead to an organic concept such as Cooley holds. The individual and society in which he lives are conceivable in one unity. The community becomes the prototype of this organic whole. Certainly as Sherrington has put it, in the address cited above:

> "Just as the organization of the cell colony into an animal individual receives its highest contribution from the nervous system, so the further combining of animal individuals into a multi-individual organism, a social community, merging the interests of the individual in the interests of the group, is due to the nervous system's crowning attribute, the mental. That this integration is still in process, still developing, is obvious from the whole course of human prehistory and history."

The present writer does not say that this organic view is one which may with scientific impunity be accepted, but certainly there is much to recommend it. It is surely superior to a view which holds for a "social mind" or a theory which sharply segregates the organism from its social environment. Whatever we may think of the individual and society conceived as an integrated whole, the larger concept must be put into terms which will not confuse it with the problem of the individual integration alone. Otherwise, we return again to the fundamental error in the theory of the "social mind." The social anthropologists of this country may indicate the way to this larger concept in what Kroeber has called a "super-organic" unity. The writer would incline rather to call it the cultural world or reality, which includes both the individual and society and the total product of their interaction—culture.

Finally, one may ask, what are the problems of social psychology? Thomas and Dewey have well defined a number of them in their

writings. Immediately pressing questions in the view of the present writer are these:

We need a careful study of the effect of the social frames of behavior, laid down by others, upon the growing personality. There is decided need that the "infant psychology" commenced by Watson be carried farther. We ought to test many of the assertions of the psychoanalysts concerning early conditioning of children. The whole method of Pavlov, Watson and Sherrington should be introduced into the investigations of personality so far as possible. This would allay much of the popular mysticism about Freud and Jung. Then too, observations and descriptions should be made, outside of experimental conditions, of the effects of milieu upon the growing boy or girl. Here too, the social direction of attention, the rise and fall of special talents, could be observed and reported. Some of the current work of Terman upon superior children ought to cast light upon many of these factors. In reality, the whole problem of individual differences touches social psychology here, and there is no more pressing problem than to discover the roots of exceptional ability, since the matter is so fraught with social importance.

Another lead may be followed into the field of the mores and folkways. In view of much prevalent talk about social progress and the possibilities of education, the limits of intelligence and conditioning must be gone into. The persistence of certain general patterns of behavior: fear, rage, sex responses, curiosity, manipulation, rationalization, and the universal tendency to explain the world in subjective terms, seem too deep-seated to be broken up by education. So too, the tendency to follow leaders, to give to words and rituals much more attention and emotional attachment than cold reason seems to warrant, the whole appeal of magic-making, myth-making and religious trends ought to be studied carefully. In other words, the limitations of rational control in reference to social living ought to be investigated. Until we know more than at present it is futile to discourse about social reform of widespread application. The writer takes refuge in the well-put statement of Thomas on the matter of sociological investigations and social reform. Thomas writes:[40]

"The example of physical science and material technique should have shown long ago that only a scientific investigation, which is quite free from any dependence on practice can become practically useful in its applications. Of course, this does not mean that the scientist should not select

[40] Thomas and Znaniecki: op. cit. Vol I, p. 7. Italics are my own.

for investigation problems whose solution has actual practical importance; the sociologists may study crime or war as the chemist studies dyestuffs. *But from the method of the study itself all practical considerations must be excluded* if we want the results to be valid."

Concrete studies in the special social sciences should be undertaken to give us a body of objective data on the interplay of person on person and institution on person. The social sciences may retain their own standpoint and concepts and yet lend assistance to social psychology in its field. In practice the social psychological approach overlaps the methods of any special social science in question. From such dual attacks upon social problems we shall come to grips with the nature of social reality and at the same time, abetted by experimental and analytical psychology, to the understanding of the nature of the individual. From this, then, we will be in a fair way to lay down laws for both individual and social becoming. Thus social science goes down into biology and psychology on the individual side and up into the special fields of its own kind on the other, and out of this interrelation the nature of the social reality can be defined.[41] From this, also, we might come nearer solving the problem of so-called "social progress." Is this fact or fiction? Do we mistake change for progress? And how is progress to be defined? Is not the whole matter a relative one? What relation has the idea of progress to our present ethos? What, in short, will be the increasing effect of the idea of progress upon our future? The whole world seems caught up in this notion. The one disgrace to-day for person or nation is not to be going somewhere. Will this very notion, this mental set for progress, come to be a permanent part of our social personality and reflect itself in our institutions? Or are the fundamentals of human nature and the patterns of human mind too constant to be altered, even in ages, to any great extent? Can we form an environment which will actually shift the basis of personality? We are back to a problem already raised, a moment ago, under another guise. What light can experiment and investigation throw upon the stability of innate, hereditary factors, and upon the stability of institutional forms, and what significance has plasticity and the capacity to make and to break habits upon human life? Social psychology, abetted by biology and general psychology, must assist among other things in solving this problem.

[41] Cf. Znaniecki, F., *The Laws of Social Psychology*, (1925) for a unique effort to state social laws in new terms.

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CHAPTER V

CULTURAL ANTHROPOLOGY [1]

By Alexander Goldenweiser

I. THE ORIGINS: ADOLPH BASTIAN (1826–1905) AND FRIEDRICH RATZEL (1844–1904)

In writing history one cannot begin with the beginning, but every beginning is a beginning. Ours will be the ideological work of the pioneer anthropologists, Adolph Bastian and Friedrich Ratzel.

They built on the loose albeit imposing structure of the geographical, biological and psychological sciences of their day, coupled with the vast but uncouth mass of travelers' tales, missionary accounts and other odds and ends of ethnographic information or misinformation which constituted the anthropological knowledge of the time.

Bastian and Ratzel were scientists and specialists. Having profited by the versatile training of the German universities, they had at their command a variety of methods and with these qualifications they combined an ample first-hand acquaintance with the world and its inhabitants.

In other respects the two pioneers were very different. Bastian was a philosopher, Ratzel a natural scientist; Bastian's mind and temperament inclined towards religion and abstract ideology, those of Ratzel towards material culture and art. But in a wider sense they were both historians and both were concerned with man in his geographic setting.

Of the two, Bastian was the greater traveler. He undertook nine world-wide journeys, some of which kept him away from civilization for many years. He visited America, Africa, India, Eastern Asia and the islands of the South Seas. Then he revisited them, and each one of his colossal journeys resulted in a series of volumes which

[1] A thoroughly oriented history of cultural theories would have to include constant references to other phases of anthropological science, somatology, linguistics, archaeology, and in particular, European prehistory. In the limited scope of this essay such comprehensiveness cannot be aimed at. The discussion, therefore, is restricted almost exclusively to the theories of primitive cultures still available for investigation.

brought facts, ideas and theories about man and his culture.[2]

The more Bastian traveled the deeper became his conviction of the fundamental unity of the human species and, as he pondered over this fact, the thought of the *Elementargedanken*,[3] the elemental ideas of mankind, came to him. But he who would scan Bastian's numerous volumes for a list of these elemental ideas would be disappointed. For this perennial searcher mentioned the elemental ideas often but never defined nor specified them. But withal, he did not perhaps deserve the censures so often passed upon his thought, for what Bastian had in mind when he thought of elemental ideas was nothing more nor less than the original nature of man, that psychic spring which feeds all the creations of human culture. Barring some carelessly radical spirits, we still believe in it but, like Bastian, we are unable either to define it or to accurately specify its content, scope and limits.

In other words, elemental ideas were abstractions which received actual expression only under specific conditions. These conditions Bastian localized in what he called geographical provinces, definitely circumscribed areas, in which the elemental ideas were transformed into folk ideas, *Völkergedanken*,[4] under the influence of geographical factors and the historic contacts with other tribes and geographical provinces.[5]

While Bastian vaguely believed in cultural levels and cultural stages, he never fully endorsed the theory of evolution, particularly in its application to social phenomena. Eminently realistic in

[2] Bastian's Journeys: (1) 1850–1858, Peru, Mexico, China, India, Australia, Africa. Books: *Ein Besuch in San Salvador* and *Der Mensch in der Geschichte* (3 vols.). (2) 1861–1865, India, Philippines, Japan, China, Mongolia, Siberia, Caucasus Books: *Die Volker des Östlichen Asiens* (6 vols.). (3) 1873–1874, Loango Coast (Africa). During the decennium 1865–1875 Bastian developed his folk-psychological ideas. (4) 1875–1876, America. Books: *Die Kulturlander des alten Amerika* (3 vols.). (5) 1878–1880, Persia, India, Polynesia Northwest Coast of America. In 1886 was founded the Ethnological Museum of Berlin, truly a child of Bastian's. (6) 1889–1891, Russia, Turkestan, India, East Africa. (7) 1896–1898, Java. (8) 1901–1903, studied Buddhist philosophy in Ceylon. (9) 1903–1905, Jamaica.

[3] *Cf.* his book *Ethnische Elementargedanken.*

[4] *Cf.* his book *Der Völkergedanke.* Bastian's folk-psychological orientation is apparent in many statements. He writes: "For ethnology man is not the individual *anthropos* but the 'political being' which presupposes the social state." (*Der Völkergedanke*, p. 172). Again: "The idea of an isolated person is sterile; only social ideas are productive . . ." (*Volkerkunde*, p. 6). And once more: "The thought of man, the individual, fulfills the possibilities of its existence only as part of social thought." (*Ibid.*)

[5] Bastian's geographical provinces must thus be regarded as the dim ideological forerunners of what in a more critical and better informed era became the "culture areas" of American ethnology.

his entire mental outlook he shrank from the very simplicity and formalism of this doctrine. The problem of the relation of diffusion to the independent development of cultural traits, which was fated to play so important a part in later anthropological speculation, also did not appear to Bastian's mind as either urgent or clearly defined. He claimed that there was no such problem, that similar ideas and cultural products arose independently in many places and among diverse tribes and also that such ideas and things traveled from tribe to tribe and became incorporated in cultures other than those in which they had originated.[6]

Friedrich Ratzel's[7] early training was that of a geographer. Like his illustrious contemporary, Élisé Réclus, he was inspired by the teaching of Ritter. In his geographical work he early developed a taste for the study of life in its relation to environment. Thus were raid the beginnings for his environmentalism,[8] a theory to which he remained true throughout his life.

But it would be a mistake to consider Ratzel an environmentalist in the sense later acquired by this term. To him life and man and culture were not entities to be juxtaposed to physical environment. Rather were they its culmination. The animal kingdom, including man, was but the last chapter in the development of the earth, and geography and climate culminated in culture. In one point only, namely his theory of the state, did Ratzel come nearer to the modern doctrine of environmentalism.[9]

Having approached living phenomena from the standpoint of their material substratum, Ratzel never lost his bias in favor of the objective and concrete manifestations of culture as against its more illusive and spiritual factors. Thus he was led to carry out a number of extensive researches of the distribution of concrete cultural fea-

[6] For a brief statement of Bastian's position see Richard Schwartz' *Adolph Bastian's Lehre vom Elementar-und Volkergedanken*, Inaugural-Dissertation, Leipsic, 1900.

[7] For a sympathetic study of Ratzel see Karl Lamprecht's *Friedrich Ratzel*.

[8] F. Ratzel, *Anthropogeographie* (2 vols.). The English translation of this work, amplified and supplied with bibliographies, was made by Miss Ellen C. Semple, under the title *The Influence of Geographic Environment: on the Basis of Ratzel's System of Anthropo-geography*.

[9] When Ratzel emphasized environmental factors, in the narrower sense, he usually took them with a grain of salt. He admitted, for example, that the quest of food was an important cause of migrations, but he added other factors, such as enemy invasions, love of conquest and plunder and even "vague longings for more beautiful lands" (*Anthropogeographie*, p. 438), the fear of regular work and the lure of laziness (*Ibid*, pp. 449–51). Nor were socio-psychological factors foreign to Ratzel's thought. Commenting on another occasion upon migrations, he wrote, in substance: when people get agoing, they move for long periods; hence, entire eras of migrations (*Ibid*, p. 444).

tures, such as plate armor or the African bow and arrow. The phenomena of diffusion were to him occasions for extensive exploration. He cared little for the theoretical setting of the problems thus presented and the methodological attitude taken by him was therefore curiously nonchalant. He claimed that in religion and philosophical ideas similar cultural products could appear independently among many tribes. In material culture this was not so, argued Ratzel, for if we assume that every object originated where it is found then investigation comes to a standstill. The search for historical contacts, on the other hand, is a never-ceasing stimulus for tireless exploration. A principle such as this is clearly not the product of theoretical insight but of temperamental disposition.

To the idea of social evolution Ratzel was almost as indifferent as was his contemporary Bastian.[10] His monumental *History of Mankind* is neither a history nor a study of evolution, but a careful descriptive account of many peoples at different stages of cultural development.

II. HERBERT SPENCER (1820–1904), E. B. TYLOR (1832–1917) AND THE CLASSICAL EVOLUTIONISTS

While Bastian and Ratzel were thus engaged in exploring man and his environment, other thinkers in England and America were amassing facts and building theories which soon took the form of a doctrine more comprehensive in its sweep and ambitious in its finality than anything that had gone before. In logical consistency this doctrine was also far in advance of its predecessors and was thus calculated to hold the minds of men enthralled for at least two generations.

The year 1859, in which Bastian published his comprehensive *Der*

[10] The extent to which Ratzel thought in evolutionary terms and how his evolutionism was mellowed by deeper historic insight may be gathered from the following passage: "We must be careful not to discern in all (cultural) differences remnants of greater differences or effects of differences in environmental conditions, for while it is true that environment does in many ways influence the development of man, it must not be forgotten that he (man) is a spirit in nature and that nature is a spirit in him: culture can transform men mightily and in its ever moving world embracing developmental sweep in which it makes one people after another the carrier of a certain phase of its unfolding, it institutes a great selective process. And so it comes that those human groups who today stand highest are not merely the pall-bearers of culture because of their high heredity, but also their heredity is so high because they are the pall-bearers of culture. This is to say that the distinctions between cultured and uncultured peoples rest in the main not on somatological but on historical and ethnographical criteria . . ." (*Anthropogeographie*, I, pp. 470–1).

Mensch in der Geschichte, also saw the birth of Darwin's *Origin of Species.*[11] When Ratzel published his *History of Mankind,* Lewis H. Morgan's *Ancient Society* was already well known. Most of the later work of Bastian and Ratzel, moreover, falls into the period during which Herbert Spencer developed his *Synthetic Philosophy.* Darwin's biological explorations did not stand alone as the scientific precursors of social evolution. While he was conducting his painstaking experiments and before he began them, other men had applied similar ideas to other fields of inquiry. Lyell had already used the concept of development in the interpretation of the earth's strata. Von Baer had laid the foundations of comparative embryology and first suggested the parallelism between ontogenetic and phylogenetic processes; while Malthus had announced his inaccurate but thought-provoking principle of population.

Herbert Spencer, brought up in an atmosphere of theological agnosticism and the vague pre-evolutionary strivings of his father and uncles, was, however, the first to attempt a more ambitious synthesis of evolutionary doctrine. The life work of this thinker was dominated by two over-powering interests—evolution and political society or government. His essay on "The Proper Sphere of Government" antedated the publication of any of his evolutionary papers and the volumes of the *Ethics,* in which his political theory received a definitive formulation, also constituted the final link of his evolutionary philosophy. Spencer's original intention of embracing in his philosophic system all cosmic phenomena, from the origins of the celestial bodies to society and ethics, was never fully carried out. The complete scheme as briefly presented in the *First Principles* was later modified by the elimination of the projected volumes on astronomy and geology. While Spencer was able to carry out his evolutionary conceptions in the domains of biology and psychology with relatively little reading and less experiment, he found himself facing a very different situation when confronted with the task of a similar synthesis in the social domain. It became evident that a vast accumulation of data had to precede any comprehensive summary, and as the carrying out of this task was neither possible nor congenial, Spencer solved the difficulty by delegating the labor of gathering data to a number of assistants who scanned the available literature on human society for illustrations of customs and beliefs which Spencer had al-

[11] It might also be mentioned that in this very year Rudolph Virchow published his epochal work, *Cellular Pathology,* which became the cornerstone of modern medicine.

ready constructed and arranged into stages, following, in the main, a deductive method.

Thus was laid the beginning of what came to be known as the comparative method, which consisted in the accumulation of customs and ideas gathered from many places and periods, to substantiate developmental schemes arrived at through speculation. While in some of the general passages of his work Spencer seems to hold that the evolution of civilization as a whole proceeds uniformly wherever it occurs, the doctrine implied in his *Principles of Sociology* is of a less extreme character, for instead of applying the concept of evolution to social phenomena as a whole, he splits them up into several domains, political institutions, industrial institutions, ceremonial institutions, etc., then traces evolutionary stages in each of these fields. Spencer's chapter on professional institutions will probably always stand as a model of evolutionary stage building, for here Spencer traces each of the separate professions, such as that of the chief, physician, scientist, etc., from their earliest precursors in primitive society through slight gradations to their modern representatives. In the chapters on industrial and military institutions Spencer drew the notable contrast between these two types of socio-political organization, representing industrial society as a gradual growth out of and beyond that of military society and developing a set of social relations and attitudes different from the latter and peculiar to itself.

This juxtaposition characterizes Spencer's attitude toward government and is theoretically allied to his conception of society as both an organism and a super-organism, and to the contrast he draws between the organism of society and a biological organism.[12]

In view of Spencer's reputation as the most comprehensive social evolutionist, it is worth noting that whereas he worked out detailed stages of development for religion, social and political organization and the professions, he touched only indirectly upon material culture and art.

The honor of figuring as the father of evolutionary anthropology Spencer justly shares with E. B. Tylor, a thinker of very different equipment and temperament. Whereas Spencer may be classed as a versatile amateur in all the sciences, Tylor was deeply grounded in anthropological data. Not only did he show a more critical spirit in the selection and presentation of material, but he also had achieved the perspective which accrues from first hand familiarity with a number of different cultures other than our own. While Spencer's mind was

[12] *Cf. Principles of Sociology*, Vol. I, part 2.

essentially deductive and he excelled in argumentative dialectics, Tylor, on the whole, steered clear of abstract argumentation and relied on the mass of evidence to carry his points for him. By way of further contrast with Spencer, Tylor showed a distinct inclination toward balanced and moderate judgment, a trait in which he greatly resembled Charles Darwin, the arch-master of careful and judicious reasoning.

By and large, Tylor had less of an axe to grind and his work was therefore intellectually more honest. When compared with the first volume of Spencer's *Sociology*, Tylor's classical work, *Primitive Culture*, was less a contribution to evolutionary thinking than an attempt to trace the life history of a particular belief, namely, animism. There is practically no stage building in his book; instead, it consists of illustrations of the forms taken by the belief in spirits at different times and in different cultures.

Tylor's most notable contribution to evolutionary methodology consisted in the concept of survival, which was used with even more striking effect by some of his contemporaries and successors than by himself. Survivals in a civilization are left-overs from a preceding cultural stage which often acquire novel psychological connotations or may even appear without any tangible meaning as mere floating fragments in an otherwise coherent and well-knit cultural medium. Tylor taught that the description and analysis of such survivals can be used as a guide in the reconstruction of antecedent cultural stages or even as a proof of their existence

While Tylor in his principal work showed the common evolutionary disinclination to interpret cultural similarities through historic contact rather than independent development, he was fully aware of the difficulties of the problem and in his other two books, *Anthropology* and *Researches into the Early History of Mankind*, he made substantial contributions to the theory and methodology of diffusion.[13]

[13] As an evolutionist, Tylor was of course inclined to stress the basic unity of the human mind, as in the following passage: "For if the similar thing has been produced in two places by independent invention, then, as has just been said, it is direct evidence of similarity of mind. And, on the other hand, if it was carried from the one place to the other or from a third to both, by mere transmission from people to people, then the smallness of the change it has suffered in transplanting is still evidence of the like nature of the soil wherever it is found," (*Researches, etc.*, p. 371.) The sanity of Tylor's theoretical judgment, at least in so far as the formulation of principles is concerned, will be gathered from the following passage· "It is not needful to accumulate great masses of such tales as these, in order to show that the myth-making faculty belongs to mankind in general and manifests itself in the most distant regions, where its unity of principle develops itself in endless variety of form. There may indeed be a remote historical connection at the root of some of the analogies

In his article "On a Method of Investigating the Development of Institutions, applied to Laws of Marriage and Descent"[14] Tylor laid the foundation for the application of statistical procedure to the phenomena of evolution. And while it cannot be said that the conclusions he thus reached were wholly acceptable, this article did much to point the way toward a new orientation in anthropology.

The theory of social evolution ushered in by Spencer and Tylor had all the earmarks of a doctrine fated to become the crystallization point for subsequent thought and research. It was simple, final, and flattering to the vanity of white man and his civilization which, in the evolutionary scheme, appeared as the crowning achievement of man's earthly career. The new ideology, after a brief initial struggle against theological prepossessions, soon came to dominate the field of social thinking. Writers like Frazer,[15] Lang,[16] and Hartland[17] applied it to religion and mythology and, while no one of these writers was responsible for a definite developmental scheme of religious evolution, their works are pervaded by a general sense of the uniformity of religious development among all peoples.[18]

The theorists of social organization went much further. The Swiss classicist, Bachofen,[19] the Scotch jurist, McLennan,[20] and the American anthropologist, Morgan,[21] completely refashioned the then current

in myths from far distant regions, which have just been mentioned, but when resemblances in mythology are brought forward as proofs of such historical connection, they must be closer and deeper than these. Mythological evidence, to be used for such a purpose, require a systematic agreement in a number of events or ideas, which agreement must be so close as to make it in a high degree improbable that two such combinations should have occurred separately, or at least the tales or ideas found alike in distant regions must be of so quaint and fantastic a character as to make it, on the very face of the matter, unlikely that they should have been invented twice. But it is both easier and safer to appeal to the effects of known intercourse between different peoples in spreading beliefs and popular tales, as evidence of the way in which historical connection really does record itself in mythology, than to lay down *a priori* rules as to what the effects of such connection ought to be." (*Ibid.*, p. 336.)

[14] *Journal of the Anthropological Institute of Great Britain and Ireland*, Vol. XVIII, 1889, pp. 245–269.

[15] J. G. Frazer, *The Golden Bough.*

[16] Andrew Lang, *Custom and Myth: a Study in Early Usage and Belief;* and *Myth, Ritual and Religion.*

[17] E. S. Hartland, *Myth and Ritual.*

[18] Other contributions to the theory of religious evolution were: A. Réville, *Histoire des religions;* F. Schultze, *Der Fetischismus,* and *Psychologie der Naturvölker;* A. E. Crawley, *The Mystic Rose;* L. Frobenius, *Die Weltanschauung der Naturvolker,* etc.

[19] J. J. Bachofen, *Das Mutterrecht.*

[20] J. F. McLennan, *Studies of Ancient History* (2 vols.).

[21] L. H. Morgan, *Ancient Society;* and *Systems of Consanguinity and Affinity of the Human Family.*

views of the development of society, which had acquired prestige through the authoritative support of Henry S. Maine [22] These writers taught that social organization began in a chaotic stage of promiscuity in which society was protoplasmic, unorganized, and sexual intercourse unregulated; that this condition was followed by group marriage (according to Morgan, in two successive forms) during which period the clan system took its inception; that clans were later superceded by gentes, in which descent had shifted from the maternal to the paternal line; and that the series culminated at the dawn of the historic period in an organization based on the family and the village community, with a strong emphasis on the authority of the father. Post [23] amassed a vast collection of data on primitive law and began the ordering of it according to evolutionary stages, a task later continued with great perseverance and scholarship by Joseph Kohler, for many years editor of the *Archiv fur Vergleichende Rechtswissenschaft,* which became a treasure trove of materials on primitive social organization, relationship systems and law.[24] The evolution of the idea of property was roughly sketched by Bücher,[25] while Haddon [26] and Balfour [27] were similarly engaged in building up stages in the development of art.

Among writers in Germany, where the theory of social evolution never gained the foothold it had attained in England and America, one deserving particular mention is Wilhelm Wundt, who in his ten volume work, *Völkerpsychologie,* attempted to give an elaborate analysis of the development of language, art, religion, mythology, social organization and law. While Wundt's work is not free from schematism, this writer had advanced in many ways beyond his English contemporaries. In dealing with human motives, he abandoned the rationalism

[22] H. S. Maine, *Lectures on the Early History of Institutions;* and *Ancient Law.*

[23] A Post, *Die Geschlechtsgenossenschaft der Urzeit;* and *Afrikanische Jurisprudenz.*

[24] *Cf.* E. B. Tylor's "The Matriarchal Family System" (*Nineteenth Century,* Vol. XI, pp. 81–96). Other contributions to social evolution were: L. von Dargun's *Mutterrecht und Vaterrecht;* J. Kohler's *Zur Urgeschichte der Ehe;* M. Kovalevsky's *Primitive Law,* as well as his lectures delivered in Stockholm in 1890, *Tableau des origines et de l'évolution de la famille et de la propriété;* and C. Letourneau's *Evolution of Marriage and of the Family,* the latter being particularly notable for its uncritical use of material and sweeping generalizations. *Cf.* also H. Cunow, "Les bases économiques du matriarchat," *Le Devenir Social,* Vol. IV.

[25] C. Bücher, *Industrial Evolution.*

[26] A. C. Haddon, *The Evolution of Art.*

[27] H. Balfour, *The Evolution of Decorative Art;* and *The Natural History of the Musical Bow.*

of these writers in favor of will and the emotions. Instead of emphasizing the individual who in the evolutionary writings seemed planted in a social void, Wundt stressed the importance and omnipresence of social determinants. No longer adhering to the unilinear scheme of development advocated by the evolutionists, Wundt never tired of emphasizing the great complexity of the evolutionary process.[28] He was, moreover, fully aware of the great historic importance of diffusion as a factor in cultural growth. In this respect, in fact, Wundt in his last works advanced beyond the limits prescribed by critical method.[29]

Of the special topics to which the evolutionists turned their attention, totemism deserves a word of mention. Apart from the voluminous but ideologically diffuse contributions of Frazer,[30] four books stand out as notable examples of the evolutiontry approach: G. Laurence Gomme's *Folk-lore as an Historical Science,* and F. B. Jevons' *Introduction to the History of Religions,* in both of which totemism is made the cornerstone of primitive religion and vicariously of most other things; Wundt's *Elements of Folk-Psychology,* one part of which is devoted to an analysis of a totemic era, and Émile Durkheim's *The Elementary Forms of the Religious Life,* in which totemism is identified with primitive religion on the basis of an analysis of the totemic organization of primitive Australia.

The prevailing tendencies in the evolutionary phase of social thinking may be briefly characterized as follows.

Man everywhere and at all times is psychologically the same. This is psychic unity. Under the influence of a physical environment, everywhere similar in its general features, the psyche of man produces similar cultures. These develop under the urge of a quasi-organic law in ways that are essentially uniform. The changes thus undergone by culture are also gradual as well as progressive.

While the extreme evolutionary position represents culture as a whole as evolving in a uniform, gradual and progressive way, the

[28] For a brief sketch of Wundt's life and work see my "Wilhelm Wundt, 1832–1920," *The Freeman,* 1921. Wundt's theoretical position is analyzed and criticised by H. K. Haeberlin in "The Theoretical Foundation of Wundt's Folk Psychology," *Psychological Review,* Vol. XXIII, 1916. Wundt's evolutionism is examined in my *Early Civilization,* pp. 348–359.

[29] In a section of his *Elements of Folk Psychology,* pp. 122–139, entitled "The Stages of Totemic Culture," Wundt introduces what is readily recognized as Graebner's hypothetical cultures without in the least realizing the nature of his commitment. As Graebner's position is diametrically opposed to Wundt's, this *quid pro quo* must be regarded as one of the curiosities of theoretical ethnology.

[30] J. G. Frazer, *Totemism and Exogamy* (4 vols.).

evolutionists usually restrict themselves to particular phases of culture, such as religion, social organization, art, and attempt to trace developmental stages in these domains.

Although the evolutionists as such have not developed a special theory of the relation of the individual to the group or of the emotional and volitional factors to the rational ones, their arguments are usually developed in such a way as to place the individual in the center of the stage, the group being practically overlooked. The individual solves the tasks of mechanical and ideational adjustments to nature by means of a rational process which assumes the character of the solution of a problem.

By and large, the evolutionists assumed that cultural stages corresponded to stages of psychological development, and that at any given time and place the content and scope of culture was what the psychological capacities of its human carriers permitted it to be.

As a believer in fixed historic laws and unilinear development, the evolutionist took each phase of development with great seriousness. To him such a phase was never merely a historic event but a link in a deterministic chain. This applied particularly to the first stage or the first origin. All evolutionists were eager searchers for the first origins of human customs and beliefs. In pursuing their work further beyond the first beginnings, they loved to play with the analogy of phylogenetic and ontogenetic development, a notion which like that of evolution itself was part of their heritage from the science of biology. Particularly in the domain of art attempts were made to draw parallels between the artistic development of the child and the race.

Among the methodological tools employed by the evolutionists the principal ones were the so-called comparative method, which consisted in the accumulation of vast collections of customs and beliefs from different tribes and places and the utilization of these as illustrations (to the evolutionist, proofs) of cultural stages; and the method of survival, in accordance with which beliefs and customs assumed to be characteristic of antecedent cultural stages were discovered in vestigial forms in later cultures, these vestiges then being interpreted as a proof of both the antecedence and the specific character of preexisting cultures.

In his better moments the evolutionist was, of course, aware of the presence of cultural diffusion. But he made but scant use of this knowledge in the elaboration of his theories. When confronted with irrefutable evidence of the intrusion of foreign cultural traits, the evolutionist was wont to lose his temper and to dispose of the diffi-

culty referring to the processes of diffusion as intrusive features or distracting irregularities.

III. THE DOWNFALL OF EVOLUTIONISM

That the early evolutionists turned for their data, to primitive society cannot be regarded as altogether accidental. Following one of the major tenets of their doctrine they assumed that the primitive civilizations still available for study were not unlike the now extinct cultures of our own ancestors, and the gradually accumulating evidence of European prehistory seemed to support this contention. These primitive cultures, moreover, in America, Africa, Australia and the South Seas, were not only highly diversified but seemed also to differ in *degree* of development. It was tempting to assume, therefore, that they actually represented the *stages* through which our own ancestral culture had passed.

The historic period did not invite evolutionary analysis. There was too much complexity, too many facts, the "disturbing" agencies of historic contacts were too busily at work and marred the picture. The primitive cultures were simpler, more isolated; here, if anywhere, evolution could prove its case. The very paucity of data, especially the lack of historic depth in this primitive material, fitted it admirably to serve as grist for the evolutionist's mill. He who would attempt to read evolution into the archives of recorded history was lost. The lateral extension of his data, due to international contacts, as well as its chronological continuity and depth, were so great that the span of a lifetime barely sufficed for a breathless descriptive account. Primitive data, on the other hand, were flat; they seemed isolated chronologically and apparently also geographically. With little effort they could be linked into a chain, and the chain do service as history if only a suitable formula were provided. The theory of evolution was such a formula. The chain of chronological zeros became transformed into a quasi-historic record of events by being placed on end, in time, with the First Origin as the beginning and the Dawn of History as the end.

Primitive Australia had played the part of godmother to evolutionism; primitive America assumed a similar rôle toward anti-evolutionism. One of the first strongholds to be attacked was the comparative method. The facts harnessed by the classical anthropologists were many but their quality was poor. In the lists of their authorities missionaries joined hands with explorers, stray travelers with profes-

sional anthropologists, prejudiced historians with resident government agents. What good was there in such raw material? What was worse, the facts were secured by a sort of literary kidnapping. They were torn forcibly from their historic homes to figure in evolutionary dissertations as cultural waifs, deprived of their local associations and chronological antecedents. When thus severed from the soil of historic reality, facts could be made to speak any tongue, to serve any dogma. What right, then, had the evolutionist to corral facts of such heterogeneous provenience and doubtful pedigree into quasi-chronological series and call them stages? If an Indian stage *2* was made to reach down to an Australian stage *1* and reach up to an African stage *3*, this could obviously be done only if cultural development in the three tribes was posited as uniform. But was not uniformity of cultural change one of the evolutionary tenets, the justice of which was first to be demonstrated by the comparative procedure? Thus, instead of providing proof of evolution the evolutionist was merely chasing his own tail.[31]

Then attacks were levelled against the particular stages constructed by the evolutionist. It was shown that both evidence and probability were against the assumption of a single unilinear development in social organization, religion, art, material culture. In the domain of social organization Westermarck argued for the universality of the family and its priority to the clan,[32] and American anthropologists, on the basis of local evidence and general theory, joined in his stand.[33] The universality of the clan and gens stages was success-

[31] *Cf.* F. Boas, "The Limitation of the Comparative Method in Anthropology," *Science*, N. S., Vol. IV, 1896, pp. 901–908. A fuller statement of the criticism made above will be found in my *Early Civilization*, pp. 20–27.

[32] E. Westermarck, *The History of Human Marriage* (3 vols.). Consult also C. N. Starcke, *The Primitive Family in its Origin and Development*; and E. Grosse, *The Family*.

[33] John R. Swanton, "The Social Organization of American Tribes," *American Anthropologist*, 1905, pp. 663–673; R. H. Lowie, "Social Organization," *American Journal of Sociology*, Vol. XX, 1914, pp. 68–97; and "Family and Sib," *American Anthropologist*, 1919, pp. 28–40; A. A. Goldenweiser, "The Social Organization of the American Indians," *Journal of American Folklore*, Vol. XXVII, 1914, pp. 411–436; and *Early Civilization*, pp. 235–282. *Cf.* also Lowie's "The Matrilineal Complex," *University of California Publications in American Archaeology and Ethnology*, Vol. XVI, pp. 29–45; and W. H. R. Rivers' article "Marriage," in *Hastings' Encyclopedia of Religion and Ethics*, Vol. VIII.

In the light of these critical reconstructions E. S. Hartland's recent contributions seem distinctly anachronistic. *Cf.* his *Primitive Paternity* (see my review in *American Anthropologist*, 1911) and "Matrilineal Kinship and the Question of its Priority," *Memoirs, American Anthropological Association*, Vol. IV, pp. 1–90; *Cf.* Kroeber's review, *American Anthropologist*, Vol. XIX, pp. 578 *sq.*, Hartland's reply and Kroeber's counter-reply, *Ibid.*, Vol. XX, pp. 224–227.

fully disputed. Also, it was shown how slight was the evidence for the clan-gens succession as an universal or even a common occurrence. The hypotheses of promiscuity and group marriage were rejected altogether, the first for lack of evidence and on general psychological grounds, the second as claiming primitiveness and universality for an institution which, in fact, was exceedingly rare and could, moreover, be explained as an extension of individual marriage rather than as an antecedent thereof.[34]

In religion, animism stood its ground, but it was denied that the belief in spirits was either of the essence of religion or co-extensive with it. Magic, for example, is as common as animism, yet magical beliefs and practices often involve no animistic element. The belief in *mana* or impersonal supernatural power is akin to animism but not identical with it; yet it cannot be denied that the cycle of beliefs and rituals clustering about the *mana* concept come near the very essence of religion. Again, evidence was produced to show that the belief in a Superior Being was perhaps older than was once supposed.[35]

The study of totemism which had become a favorite playground of evolutionary thinking underwent a no less profound transformation. The manifold cultural traits which were once believed to constitute inherent and characteristic features of totemism were shown to be complex in their psychological make-up and historical derivation. They were neither at the root of totemism nor born of it but were drawn into it from various sources. The notion of the universality

[34] See W. Wundt, *Elements of Folk Psychology*, pp. 34–53. Trenchant criticisms of the group marriage theory will also be found in the older works of A. Lang, *Social Origins*, and *The Secret of the Totem;* and N. W. Thomas, *Kinship Organization and Group Marriage in Australia.*

The whole problem is discussed from the point of view of relationship systems by Rivers in "The Origin of the Classificatory System of Relationships" (in *Anthropological Essays Presented to E. B. Tylor*) and "Kinship and Social Organization" (*Cf.* also his "Social Organization," pp. 37–103).

[35] See R. H. Codrington, *The Melanesians;* R. R. Marett, *The Threshold of Religion;* A. Fletcher, "The Import of the Totem," *Proceedings of the American Association for the Advancement of Science*, 1897; W. Jones, "The Algonkin Manitou," *Journal of American Folk-Lore*, Vol. XVIII, 1905; J. N. B. Hewitt, "Orenda or a Definition of Religion," *American Anthropologist*, Vol. IV (N. S.), 1892; A Lang, *Magic and Religion*, and *The Making of Religion;* P. Radin, "Religion of the North American Indians," *Journal of American Folk-Lore*, Vol. XXVII, 1914, pp. 335–373; A. A. Goldenweiser, articles "Animism" and "Magic" in *New International Encyclopedia* (2nd Ed.), "Spirit, *Mana* and the Religious Thrill," *Journal of Philosophy*, Vol. XII, 1915, pp. 632–630, and *Early Civilization*, pp. 184–235; and R. H. Lowie, *Primitive Religion*, pp. 99–167.

Of special value is J. H. Leuba's *A Psychological Study of Religion*, as showing the great complexity of the magico-religious situation.

of totemism was exploded and the identification of it with animal and plant worship was shown to be countered by abundant evidence. Totemism emerged from this critical rehauling no longer as a religion but as a peculiar combination of a certain type of religious attitude with a form of social organization. And if this was so, then the imposing totemic theories of Gomme, Jevons, Durkheim and Wundt fell to the ground.[36]

The development of art, on closer scrutiny, also revealed much greater complexity than had been assumed by the evolutionist. Evidence was not lacking to indicate that geometrical forms were historically as old as realistic ones, that each could and did develop from the other, that decorative symbolism was not necessarily a survival of defunct realistic designs, that many elements of plastic art, in fact, could not be accounted for by any factors involved in art as such, but were evidently derivative from the nature of the material or of the technique.[37]

In material culture, again, pottery was dislodged from the place of a symptomatic invention which it had occupied since the days of Morgan, for its very geographic distribution indicated that it could appear in lower as well as in higher stages of culture, that many otherwise high civilizations had no pottery and that in other numerous instances pottery, although apparently indigenous and intimately correlated with a local culture, had been derived from other tribes through historic contact.[38]

[36] An admirable critical study of totemism by L. Marillier, "La place du totémisme dans l'évolution religieuse," *Revue de l'histoire des religions*, Vols. XXXVI and XXXVII, 1897–8, appeared too early and was disregarded and forgotten until its conclusions were vindicated by later research. See my "Totemism, an Analytical Study," *Journal of American Folk-Lore*, Vol. XXIII, 1910, pp.179–293. Also "The Origin of Totemism," *American Anthropologist*, Vol. XIV, 1912, pp. 603 *sq.*; "Form and Content in Totemism," *Ibid.*, Vol. XX, 1918, pp. 280–295; "Andrew Lang on Method in the Study of Totemism," *Ibid.*, Vol. XIV, 1912, pp. 382–391; article "Totemism" in *New International Encyclopedia* (2nd Ed.); "The Method of Investigating Totemism," *Anthropos*, Vols. X–XI, 1915–16, pp. 256–265; and *Early Civilization*, pp. 282–292. A general review of the history of totemic theories will be found in A. van Gennep's *L'État actuel du problème totémique*.

[37] See W. H. Holmes, "Origin and Development of Form and Ornament in Ceramic Art," 4th *Report, Bureau of American Ethnology*, 1886; and "A study of Textile Art in its Relation to the Development of Form and Ornament," 6th *Report, Ibid.*, 1888; F. Boas, "The Decorative designs of Alaskan Needlecases," *Proceedings U. S. National Museum*, Vol. 34, 1908; and "Representative Art of Primitive People," *Holmes Anniversary Volume*, 1916, pp. 18–23; C. Wissler, "Decorative Art of the Sioux Indians," *Bulletin, American Museum of Natural History*, Vol. XVIII, part 3, 1904; and my *Early Civilization*, pp. 165–184.

[38] The historical relation of hand made pottery to the potter's wheel is discussed by B. Laufer in a brilliant essay, "The Potter's Wheel," in "Beginnings

When this critical work was done, little remained of the uniformity of culture development. Stages became so confused as to resemble a network rather than a ladder, and the prehistory of culture once more appeared as a set of problems, many of them barely broached, rather than an orderly series of solutions available for use as a background for historic study.

While cultural change could no longer be assumed to be uniform, the assertion of the frequency of parallel development in cultures still remained, but this also was attacked at the hand of another concept —convergence. It was shown that the tendency towards divergence assumed by the evolutionist as dominating the whole field of cultural change was everywhere accompanied by an opposite tendency towards convergence; that cultural features, spiritual or material, in two or more tribes, features once distinct and dissimilar, often tended to assume more or less striking resemblances. This was particularly common when the cultures in question were themselves comparable, but it also occurred in cultures of markedly different types. Thus, two clan organizations originally dissimilar on account of having different functions, became similar or even identical through the assumption of similar functions. In material culture, tools and weapons originating in different conditions and in different cultures, assumed similar forms owing to the operation of the principle of limited possibilities which checked the appearance of many abstractly possible forms and often led to curious resemblances in the mechanical solutions.[39]

The principle of convergence, when once applied, possessed distinct superiority over the principle of parallelism, in so far as much shorter developmental series were necessary to demonstrate its operation and in so far also as similarities could now be accounted for without as-

of Porcelain in China," *Anthropological Series, Field Museum of Natural History*, Vol. XV, No. 2, pp. 148–177. In his "Material Cultures of the North American Indians" in *Anthropology of North America* by various authors, pp. 76–135, C. Wissler presents a synthetic sketch of material culture in North America, the bearing of which on evolutionary theory is obvious. The primitive ideas of property are analyzed by R. H. Lowie in Chapter ix ("Property") of his *Primitive Society*.

[39] See O. T. Mason, "Similarities in Culture," *American Anthropologist*, Vol. VIII, 1896; W J McGee, "The Trend of Human Progress," *Ibid.*, Vol. I, 1899; P. Ehrenreich, "Zur Frage der Beurtheilung und Bewerthung ethnographischer Analogien," *Correspondenz-Blatt der deutschen Gesellschaft fur Anthropologie, Ethnologie und Urgeschichte*, 1903, pp. 176–180; R. H. Lowie. "On the Principle of Convergence in Ethnology," *Journal of American Folk-lore*, Vol. XXV, 1912, pp. 24–42; F. Boas, reviewer of Graebner's "Methode der Ethnologie," *Science*, Vol. 34, 1911, pp. 804–810; my "The Principle of Limited Possibilities in the Development of Culture," *Journal of American Folk-lore*, Vol. XXVI, 1913, pp. 259–290; and W. D. Wallis, "Similarities in Culture," *American Anthropologist*, Vol. XIX, 1917, pp. 41–54.

suming either identity of origin or a long series of parallel stages or cultural diffusion through contact.

The theory of diffusion itself, when further elaborated, became a powerful foe of the simplicist evolutionary scheme. As noted before, the evolutionist knew of diffusion but generally disregarded it in his theories. This could evidently be done only if the validity of the evolutionary scheme was taken for granted. But as soon as the scheme itself became subject to critical scrutiny, cultural features derived through historic contact at once acquired full right of citizenship in history. It was shown, moreover, that far from being rare and exceptional, cultural diffusion was a constant and omnipresent process characteristic of modern as well as primitive civilizations. Now, when a cultural feature borrowed from a neighboring tribe makes its appearance in a civilization and is accepted and assimilated, it thereby becomes part and parcel of that civilization, and must henceforth be included among the factors responsible for further changes. Each case of diffusion, therefore, complicates the cultural situation and makes it increasingly difficult to interpret its development in terms of inner forces alone. Thus the acceptance of the phenomena of diffusion at their face value is in itself sufficient to negate the evolutionary scheme in its original form.[40]

[40] The evolutionist did not cede his position without a valiant fight. To the criticism outlined above he had a come-back which at first seemed unanswerable. "You are right," claimed the evolutionist, "that cultural features are constantly derived from neighboring tribes and that some of these are assimilated and become part and parcel of a tribal culture But I will not draw from these facts the conclusions which to you seem inevitable. For what is it that determines the rapid acceptance and perfect assimilation of some foreign features, the less rapid acceptance and imperfect assimilation of others and the total rejection of still others? The answer is, psychic or cultural preparedness. If a tribe is prepared to accept and assimilate a feature it will do so, should the feature present itself. If it is unprepared, it will reject it. But what constitutes psychic or cultural preparedness? Is it not the very stage of development of which we have been speaking? If an adequate stage of cultural growth is reached, the ground is prepared for accepting certain foreign features, but also for developing similar or identical features through the inner forces of the culture itself. Hence cultural features, whether of inner growth or of foreign derivation, can become integral parts of a culture only if an appropriate stage in evolution has been reached. Therefore, the acceptance of foreign cultural traits in no way affects our evolutionary scheme and we are fully justified in disregarding the phenomena of diffusion when we speak of evolution. *Q. E. D.*"

Having recovered from the initial shock induced by this retort, the anti-evolutionist then responded somewhat as follows: "Yes, without doubt there is much truth in your contention. There is such a thing as cultural preparedness and it affects the acceptability or non-acceptibility of features derived through diffusion. But you proceed on the assumption that preparedness and unpreparedness are absolute conditions, defining to a nicety the exact range and con-

With "uniformity" disposed of and the "stages" shattered, a different orientation towards origins and particularly towards first origins followed as a matter of course. The evolutionist took origins with tremendous seriousness. To him an origin was a seed which determined the growth of a culture or any part of it, and a first origin was the universal matrix in which the entire cultural process lay predetermined. The believer in historic determinism must needs stand in awe before first origins. To the anti-evolutionist an origin is but an incident, origins are but cross-cuts of developments. His origins, moreover, are unencumbered by the responsibilities of determinism. To the evolutionist particular things could only develop from particular things; to his critic, almost anything could develop from almost anything. Therefore, nothing was of special significance as an origin. Thus the search for first origins became a vain quest.

The evolutionary concept of gradual change received a setback at the hands of another group of evolutionists represented by Karl Marx and his followers. Marx did not deny the actuality of gradual change but he insisted on the presence of another and opposite tendency, the tendency, namely, towards cataclysmic or revolutionary transformation. The frequency, nay, necessity of cataclysmic change in the political, social and economic domains soon became a commonplace of radical ideologies. The temperamental opposition to these ideologies induced many thinkers to develop a general antagonism to the doc-

tent of features that can or cannot be accepted or assimilated. This, I beg you to note, is very far from being the case. Preparedness merely indicates a limit, and so it is with unpreparedness. It is true that a tribe that knows not machines is not prepared to accept or utilize the printing press and will not do so. It is also true that a tribe immersed in idolatry and spirit worship will not be in a position to accept or incorporate in its culture the belief in a supreme, all-powerful, all-knowing and morally perfect deity. Again, the experiences with modern culture show with utmost clearness how the general cultural uniformity of the modern world facilitates and precipitates cultural exchange because it stands for a widespread preparedness for the same sort of things, customs and ideas. So far, then, you seem to be right. But this, my friend, is an illusion. For within the general scope of preparedness and unpreparedness lie infinite possibilities of the acceptance or non-acceptance of *particular* things and ideas. And it is these particular things and ideas that knock at the gate of a culture in inter-tribal contact. When a tribe is prepared for a certain invention it may achieve it, but also may not. Now if this invention happens to come to it from without, it will constitute a definite, perhaps an all-important contribution to its cultural growth; and if it did not thus come from without, it might never have been invented in the tribe or not until much later in its evolution; and on this chronological difference might depend the historic fate of the tribe, its relations to other tribes, its ascendency or submergence. The trouble with you evolutionists is that you are too absolutistic and formal in your reasoning and that you pay so little heed to the flesh and blood reality of historic processes."

trine of cataclysm. Thus it came about that its bearing on the other phases of culture, such as art, religion, philosophy, science, was barely perceived and generally neglected.

As soon as this prejudice is overcome it becomes obvious that relatively sudden change is at least as characteristic of the developmental process as is gradual transformation. Instances are at hand from all domains of culture in modern as well as primitive society. The spectacular cultural effects of the invention of the printing press, the utilization of steam, the incandescent electric bulb, the telephone, wireless, radio, are matters of common knowldge. The revolutionary transformations achieved in thought by the publication of Lobatchevsky's geometry, Mendelcyev's formulation of atomic weights, Darwin's principle of natural selection or Einstein's relativity, are equally well if less widely known. A retrospect of the history of philosophy and art tells the same story. And in primitive society there is the transformation achieved in the life of the Plains Indians by the introduction of the horse or such dramatic episodes as the lightning-like spread of the Ghost Dance religions among the American Indians.[41]

The third tenet of evolutionism, the progressive character of the evolutionary process, also suffered defeat at the hands of numerous critics. It was obvious enough that civilization as a whole had progressed; also, that at different times and places certain phases of it had progressed. But to assert this was one thing, to assume the universality or even necessity of progress, another. In comparing mod-

[41] That such cataclysmic changes in culture are not only common but necessary can be readily perceived. The causal nexus here lies in an important aspect of culture itself. The inertia of the individual psyche is not sufficient to account for the phenomena. But this inertia is ever reinforced by the inertia of institutionalism. Thus a powerful resistance to change is engendered which brings about what Professor Ogburn aptly described as an institutional lag. Now, under such conditions, to whatever domain of culture they may refer, new ideas produce but a slight ripple in the stream of culture, without effecting a definite change or advance. Some time must elapse, therefore, during which new ideas, working presumably in the same general direction, accumulate or gather momentum. Then, when an open fight ensues between innovation and the *status quo*, the latter may be forcibly dislodged. This is cataclysm. The dislodgment of the *status quo* must be forcible because it sticks so tightly.

(I should not want these reflections to be interpreted as meaning that cataclysmic transformations are not only common and necessary but also desirable in all domains of culture. The reverse indeed may prove to be the fact. Thus, in the social, political and economic domains, a wiser era may learn to achieve transformations revolutionary in content by evolutionary means. The economic interpreters of history of the Marxian pattern and communistic anarchists like Élisé Réclus or Kropotkin spoke of "evolution through revolution." The day may come when we shall learn to achieve revolution, that is, revolutionary change, through directed evolution. *A. G.*)

ern civilization with its antecedents, ancient and primitive, the tremendous advance in certain respects cannot be gainsaid. Thus, in accumulation of knowledge our civilization far surpasses all of its predecessors. The same applies to the utilization of knowledge as a guide to thought in theoretical science, mathematics and philosophy, and its utilization in the practical problems of living and the control of environment, as in industry, agriculture, forestry, sanitation, and so on. In all this we stand supreme.

But as soon as the field of comparison is shifted to other levels, difficulties begin to appear. In religion, social organization, art, literature, ethics, our supremacy is not so apparent and can, in fact, easily be disputed. Our religion may be superior to that of the Wood Veddhas of Ceylon, but does it loom above the naturalistic pantheism of Greece or the lofty spirituality of Buddhism? In art we easily outrank the native Australians or the Indian tribes of the Amazon Basin, but would our artistic prowess fare equally well in comparison with that of China or even of Java, in its own field? In ethics we may, with some show of reason, claim superiority over the Ancient Mexicans or the natives of Dahomey, but a comparison with the exalted code of Hinduism may prove less flattering to our vanity.

However this may be, argued the critics of evolutionary progressivism, a comparative estimate of progress implies standards and these are dependent on judgments of value which are of necessity subjective. Therefore, comparative estimates based on such judgments cannot claim objective validity. Apart from this, moreover, many day by day changes of culture can be easily seen to be neither progressive nor otherwise, while many other changes are unmistakably regressive.

Thus progress emerges from the critic's cauldron as neither universal nor characteristic of culture: it is but one of several kinds of cultural change.[42]

The assumption of the psychic unity of man on which the evolutionist had built his theory, was accepted by his critics, but they refused

[42] See C. Wissler, *Man and Culture*, pp. 361–364; A. L. Kroeber, *Anthropology*, pp. 502–506; A. A. Goldenweiser, *Early Civilization*, p. 26; F. H. Giddings, "The Costs of Progress," in his *Studies in the Theory of Human Society*, pp. 224–249; R. H. Lowie, *Primitive Society*, pp. 440–1; R. R. Marett, "Progress in Prehistoric Times," in his *Psychology and Folklore*, pp. 223–246; L. T. Hobhouse, *Development and Purpose*, pp. 284 *sq.*, and *Social Development*, pp. 337 *sq.*; Bertrand Russell, "Economic Organization and Mental Freedom," in his *The Prospects of Industrial Civilization*, pp. 273–287.

How progress and the obstacles to it are envisaged by the modern scientific mind can be gleaned from the two tiny and delightful volumes by B. Russell (*Icarus, or The Future of Science*) and J. B. S. Haldane (*Daedalus, or Science and the Future*).

to follow him in the offhand manner in which he solved the problem of the relation of psychology to culture. As our familiarity with primitive life increased, it became ever more evident that culture could not be explained by psychology, that the only road towards the comprehension of cultural individuality led through patient and intensive exploration of restricted local cultures in their historico-geographical settings. This was the historical as contrasted with the purely psychological approach. In America it was established on a firm theoretical basis by Franz Boas and was further elaborated by Wissler, Kroeber, Lowie, Ogburn and the writer.[43]

For his excessively individualistic approach to cultural problems the evolutionist was taken to task by a number of writers. In Germany, Steinthal and Lazarus, editors of the *Zeitschrift für Volkerpsychologie und Sprachwissenshaft* (started in 1860), had early directed attention to the importance of the social factor in the making of culture. They had gone so far, in fact, as to assume a social psyche or soul, after the analogy of the individual one. For this they were severely attacked by Wundt who purged social theory of all mysticism but insisted on the folk-psychological nature of language, art, mythology, religion.[44] The psychological study of the individual, taught Wundt, can never suffice to interpret these phenomena; social factors must be given due weight if culture is to be understood.[45]

[43] See F. Boas, "Some Traits of Primitive Culture," in his *Mind of Primitive Man*, pp. 197–244; R. H. Lowie, "The Position of Woman," in his *Primitive Society*, pp 186–205, "History and Psychology," in his *Primitive Religion*, pp. 185–205, and "Culture and Psychology," in his *Culture and Ethnology*, pp. 5–26: A. L. Kroeber, "Parallels," in his *Anthropology*, pp. 216–241; C. Wissler, "Psychological and Historical Interpretations for Culture," *Science*, Vol. XLIII, 1916, pp. 193–201, and "Culture as Human Behavior," in his *Man and Culture*, pp. 251–281; R. R. Marett, "The Transvaluation of Culture," in his *Psychology and Folk-Lore*, pp. 99–120; A. M. Hocart, "Ethnology and Psychology," *Folk-Lore*, Vol. LXXV, 1915, pp. 115–138; W. F. Ogburn, *Social Change;* and A. A. Goldenweiser, "History, Psychology and Culture," *Journal of Philosophy*, Vol. XV, 1918, Nos. 21 and 22, "The Nature of Civilization," in *Early Civilization*, pp. 15–20, "Early life and thought," *Ibid.*, pp. 399–416, and "Psychology and Culture," *Proceedings of American Sociological Society*, 1924.

F. C. Bartlett's *Psychology and Primitive Culture*, is notable as the first publication by an English scientist which is definitely committed to the historical standpoint.

[44] Steinthal and Lazarus, *Zeitschrift* etc., Vol. I, 1860, Introduction, also Steinthal, "Begriff der Völkerpsychologie," *Ibid.*, Vol. XVII, p. 333 *sq.;* W. Wundt, *Volkerpsychologie*, Vol. I, Introduction and "Ziele und Wege der Völkerpsychologie," *Philosophische Studien*, Vol. IV, p. 129,

[45] *Cf.*, among many pertinent passages, *Völkerpsychologie*, Vol. 2, *Mythus und Religion*, Part I, pp. 527–531 ("Historischer und psychologischer Standpunkt der Betrachtung"); also, *Ibid.*, Part III, pp. 5–10 ("Individuelle und allgemeine Einflüsse).

Approaching the problem from yet a different angle, Émile Durkheim sided with the social interpreters. He taught that social facts were like "things," that they descended upon the individual like the objective facts of nature and worked through him, unconsciously but irresistibly.[46]

The theoretical position of the Marxians pointed in the same general direction. To them the individual was nothing, society all. The individual may will, aspire, think, but he was but a fragile shell tossed about by the mighty current of social forces. Causally he counted not at all. Individuals pass, culture persists. Individuals dream, while culture, society, does the work of history. In all this there was, of course, much exaggeration, but as an antidote to the confident individualism of the classical anthropologists, Marxian social determinism performed a useful service.

Connected with the individualism of the evolutionists was their rationalism and intellectualism. In the works of Spencer and Tylor the savage often thinks out culture in response to his experiences with nature; Frazer's Australian medicine men conceive and install a system of exogamy intended to prevent the intermarriage of near kin; inventions are made by primitive wise men through a mighty effort of constructive imagination.

One by one these illusions were dissipated. Here, once more, Wundt did much of the pioneering work. He emphasized will and the emotions as the prime movers of cultural life,[47] he applied his con-

I might add to this that Wundt went further than most other folk-psychologists in his emphasis on the importance of social determinants. Not only was culture to be interpreted in folk-psychological terms, but individual psychology itself had often to seek its raw material among the data of folk-psychology. He writes: "Psychology itself is no less in need of the folk-psychological material accumulated by certain social sciences, than these need the psychological foundations. If psychology will study the sources which are presented by the different domains of psychic life (in society), then its contributions to the understanding of the individual derived from the general observations of this psychic life will no longer be neglected", *Völkerpsychologie*, Vol. I, Part I, p. 22. *Cf.* also his "Ziele und Wege der Völkerpsychologie," *Philosophische Studien*, Vol. IV. And again: "Thus folk-psychology is an indispensable companion to individual psychology in the analysis of higher mental functions. . . . In many problems individual psychology must consult folk-psychological motives."

[46] *Cf.* his *La méthode sociologique*, pp. 9, 10, 13; *Le Suicide*, pp. 353–4; and *The Elementary Forms of the Religious Life*, which is throughout based on this assumption.

Durkheim, of course, went too far in the opposite direction, completely disindividualizing the individual. For criticisms of his position see my "Religion and Society: a Critique of Émile Durkheim's theory of the Origin and Nature of Religion," *Journal of Philosophy*, Vol. XIV, 1917, pp. 113–124 and *Early Civilization*, pp. 360–380.

[47] W. Wundt, *Grundzuge der Physiologischen Psychologie*, Vol. III (5th Ed.),

cept of apperception to mythology and showed how mythological apperceptions resulted in the rich phantasmagoria of savage beliefs and stories.[48] With reference to inventions, he pointed out that most inventions were applied discoveries and that the latter were usually accidental.[49] The rôle of conscious and deliberate thought was thus greatly reduced.

Another work, of later date, which exercised considerable influence in a similar direction was Lévy-Bruhl's *Les fonctions mentales dans les sociétés inférieures.* He made much of the pre-logical character of primitive mentality which was dominated by socially induced preconceptions. He advocated the principle of *participation,* in accordance with which the minds of primitive men are so completely dominated by mystic rapports established between things, creatures, actions and persons, as to exclude objective or logical thought.[50]

Boas stressed a similar point of view. He tried to show that the psychic sources of prevailing attitudes and ideas were unconscious or emotional, that this was true, for example, of the grammatical structure of language, of the formal basis of the plastic arts and of music. More than this, he made plain that much that passes for rational thought is but rationalization, an attempt to find "good reasons" for ideas and convictions already established.[51]

IV. DIFFUSIONISM AND ITS CRITICS

Having achieved its first success in the field of evolutionary criticism, the study of diffusion soon gathered momentum, developing in

pp. 206–320 ("Theorie des Willens"), and pp. 744–756 ("Causilität und Teleologie Psychophysischer Lebensvorgänge").

[48] W. Wundt, *Völkerpsychologie,* Vol. 2, Part I, pp. 577–586 ("Allgemeine Psychologie der Mythenbildung").

[49] W. Wundt, *Elements of Folk Psychology,* pp. 27 *sq.* *Cf.* also my *Early Civilization,* pp. 348–360 and pp. 158–161, where an attempt is made to place the concepts "accident," "discovery," invention," in their proper perspective.

[50] L. Lévy-Bruhl's book, referred to above, and its sequel, *La mentalité primitive,* while representing an attitude akin to Durkheim's, are less extreme. Lévy-Bruhl, moreover, is more particularly concerned with the relation of the individual psyche to culture, rather than to Durkheim's "Society." But Lévy-Bruhl certainly errs in making too much of primitive irrationality and modern rationality, too little of primitive rationality and modern irrationality. For a critique of Lévy-Bruhl's first work see my review in *American Anthropologist,* 1911, and *Early Civilization,* pp. 380–389.

[51] F. Boas, *Mind of Primitive Man,* pp. 214 *sq.* and elsewhere. Similar ideas are expressed in J. H. Robinson's *Mind in the Making.*

range as well as depth. Following in the footsteps of Ratzel, students of culture history set themselves the task of tracing the geographical distribution of various cultural features, such as pottery, agriculture, clans, the mother-in-law taboo, the couvade, maize, secret societies. And in all such instances the reality and significance of the diffusion of culture stood out as one conspicuous fact. Quite apart from the historical evidence of the borrowing of culture traits, the geographical distribution itself often gave less explicit but no less convincing proof of the same phenomenon. Take, for example, the instance of agriculture in America. Its distribution proceeds from Peru northward along the west coast of South America, then through Central America and Mexico to the Southwest, Southeast and Northeast of North America. This distribution is continuous. South and east of it in South America there is no agriculture, nor is there any north and west of it in North America. A distribution such as this can only be explained by diffusion; by diffusion, moreover, from a small number of centers, or perhaps, from one; for it would seem improbable in the highest degree that agriculture should have originated independently many times in the area of its American distribution and yet that the peoples in the areas from which it is absent should never have developed it.

There are numerous other instances in which conclusions cannot be reached so readily. The story of the Magic Flight is an example at hand.[52] While not universal, the story has a distribution that can be described as world-wide. Yet the content of the story is fairly complex. Now, can it be assumed that it developed independently a number of times or should one be tempted, in view of the complexity of the story, to ascribe its wide distribution to diffusion alone, consequent upon invention once, at some one place? The solution of such a problem is not simple and this particular one has remained unsolved to this day.[53]

The sort of difficulties one encounters in this subject can be further

[52] *Cf.* F. Boas, "Mythology and Folk-tales of North American Indians," in *Anthropology in North America* by various authors, p. 315, where Boas writes: "An example of such a tale is the Magic Flight, in which we find a combination of the following elements: flight from an ogre; objects thrown over the shoulder forming obtsacles—first a stone, which becomes a mountain; then a comb, which becomes a thicket; lastly a bottle of oil, which becomes a body of water. It is hardly conceivable that such a group of unrelated incidents should arise independently in regions far apart."

[53] The problem of diffusion *vs.* independent development, in relation to mythology, became the subject of numerous scientific controversies. *Cf.*, for example, the case Grimm *vs.* Benfey or the case Andrew Lang *vs.* Joseph Jacobs.

illustrated by the case of Heinrich Schurtz, who, after studying the decorative art of Melanesia and of the Northwest Coast of America, became convinced that historic contact must have taken place between the two regions. He was struck with the great resemblance of the totemic columns of New Ireland with the totem poles of the Northwest and was thus led to emphasize the prevalence in both districts of what he called the eye motif. Subsequent studies of the American material revealed aspects of Northwest art which made Schurtz's position if not untenable at least highly improbable. It was admitted that vertical columns were constructed in both districts; that these were ornamentally transformed by super-imposed carvings of birds and animals; that in both places, moreover, the functions of these objects were religious or totemic. But the contrasts were as great as the similarities. The totem poles of the Northwest are huge structures, often looming high above the houses, while their Melanesian counterparts are relatively slight columns, barely reaching the height of a person and used on ceremonial occasions inside the club houses. The nature of the carving is, moreover, quite different. Whereas that of America is done in high or low relief and scarcely ever shows any open work, the Melanesian carvings are throughout of the latter variety. They are made in filigree, giving the effect of lace work. The peculiar method of dissection and arrangement of designs characteristic of the Northwest Coast is never encountered in New Ireland or, for that matter, anywhere else. The American counterpart of the eye ornament, moreover, was shown to be not an eye ornament at all but a conventionalized representation of a cross-cut joint. When this much is said one is no longer inclined to glibly ascribe the arts of the two areas to historic diffusion.[54]

The study of diffusion, especially with reference to material culture, had features which made it attractive to many investigators. It was concrete, proof of the borrowing of a trait could often be furnished and, as Ratzel had long ago pointed out, a continuous impetus was given to further investigation. Independent development, on the other hand, was a process that had to be assumed on general psychological grounds, for in most cases it was hard or impossible to prove.

Thus it came about that some students began to think of the study of cultural diffusion as the main preoccupation of ethnology, and some

[54] *Cf.* H. Schurtz, *Das Augenornament;* and F. Boas, "The Decorative Art of the Indians of the North Pacific Coast," *Bulletin XI, American Museum of Natural History*, 1897, pp. 123–176.

of these began to support the view that most, if indeed not all, instances of cultural similarities should be explained by diffusion through historic contact. Perhaps the outstanding thinker of this group is F. Graebner, a German anthropologist associated with the ethnological museum in Cologne. In collaboration with W. Foy he formulated a theory of cultural interpretation which deserves the name of "diffusionism."

Graebner[55] not only rejects the theory of evolution *in toto*, but holds the creativeness of man in slight respect. Inventions, using this term in the wide sense of original ideas, are rare; similar inventions in different places even rarer. Therefore, the independent origin of cultural similarities can only be assumed after all attempts at reducing them to historic contact or common historic origin have failed.[56] The task of ethnology thus becomes the reconstruction of the historic contacts of peoples and of the wanderings of cultural features from tribe to tribe.

In view of the deficient chronology in the study of primitive records and the paucity and unreliability of historic data, the wanderings of cultures or cultural features must be inferred from the similarities observed in different areas. For this reason the problem of discovering and evaluating similarities becomes to Graebner of prime importance. He distinguishes two criteria of similarity, one qualitative, the other quantitative. The qualitative criterion refers to similarities in form, such as the shapes of pots or other material objects, the elements of design in art or the descriptive contents of religious beliefs and rituals. The quantitative criterion refers to the number

[55] The views of Graebner and of the other writers of the "Culture-Historical School" can be gleaned from the following works: F. Graebner, "Kulturkreise und Kulturschichten in Ozeanien," *Zeitschrift für Ethnologie*, Vol. XXXVII, 1905, pp. 28–54; "Die Melanische Bogenkultur und ihre Verwandten," *Anthropos*, Vol. IV, 1909, pp. 726–780, 998–1032; *Die Methode der Ethnologie;* and various articles in *Ethnologica* and the *Baessler Archiv;* F. Graebner and W. Foy, "Begriff, Aufgaben und Geschichte der Völkerkunde," *Führer durch das Rautenstrauch-Joest-Museum der Stadt Cöln*, 1908; B. Ankermann, "Kulturkreise und Kulturschichten in Afrika," *Zeitschrift für Ethnologie*, Vol. XXXVII, 1905, pp. 54–91; various authors in *Korrespondenzblatt der Deutschen Gesellschaft für Anthropolgie, Ethnologie und Urgeschichte*, Vol. 42, 1911; and W. Schmidt, "Kulturkreise und Kulturschichten in Südamerika," *Zeitschrift für Ethnologie*, Vol. XLV, 1913, pp. 1014–1124.

[56] Apart from the error in ethnological perspective implied in this formulation, it also errs in its logic. This was noted by more than one critic. Haberlandt, for example, writes: "This involves a shifting in the burden of proof; in every science the *onus probandi* falls on the one who finds connections or relationships, not the one who abstains from such inferences." ("Zur Kritik der Kulturkreislehre," *Korrespondenzblatt*, etc., p. 162).

of qualitative points of similarity. This may apply to an object or a set of culturally related objects or an entire phase of culture, such as religion or mythology or art, or to the culture as a whole, in comparison with corresponding items in another district. The more striking the qualitative resemblances and the larger their number, the less probable becomes independent origin and the more certain common origin or diffusion through historic contact.

These criteria, claims Graebner, have absolute logical validity and if, in their light, the verdict is diffusion, then it will stand, whatever the geographical distance betwen the two districts in question. Distance, to Graebner, is a relative matter. If diffusion can occur between two neighboring tribes, it can also occur between *any two* tribes on the surface of the globe. The hesitancy, therefore, to accept diffusion when the distance is great, merely reveals an irrational "fear of space and time" on the part of timid ethnologists.

Graebner, moreover, holds that cultural features like company in their travels. When historic contact is established between two tribes, some features open the procession, others follow. They do so inevitably. The assumption that some features might frame their own itinerary and travel in isolation is rejected by Graebner as a "culture-historical absurdity." [57]

Leaning upon these postulates Graebner searches for evidence of diffusion everywhere, and finding it—always finding it—builds up hypothetical culture waves, culture strata and culture districts on an enormous scale. Starting with Melanesia and Polynesia, he follows his "cultures" to Australia, Africa, as well as to South [58] and North America.

On this side of the Atlantic Graebner's position was attacked by

[57] B. Ankermann takes the same attitude: "One must always remember," he writes, "that the elements which comprise a culture do not possess an independent life, but become animated only as organically interrelated parts of a whole. It is, of course, feasible to trace an isolated culture element in its distribution over the globe, but, in using these findings for any kind of conclusions, one must not neglect to observe in association with what other culture elements this one element usually occurs." (In "Die Lehre von den Kulturkreisen," *Korrespondenzblatt*, etc. p. 136).

It is strange that Graebner and Ankermann should so thoroughly misunderstand the actual situation. It is true that cultural features often travel together, sometimes for no apparent reason, as for example, pottery and agriculture in America. But isolated elements also travel. Graebner and Ankermann are blind to the tendency of cultural elements to shake the dust of former cultural associations off their feet and travel in isolation.

[58] The South American evidence has been prepared by Father W. Schmidt, *late* editor of the *Anthropos*, who was once an opponent of Graebner's but since his conversion, after the common fashion of hard-won disciples, out-Graebners Graebner himself in his diffusionistic zeal.

Boas,[59] Lowie [60] and the writer.[61] It was pointed out that his faith in our ability to evaluate cultural similarities was unjustified. In material culture objectively valid comparisons can be made, but even here the personal equation is ever in evidence, as attested by numerous controversies among experts over just such points of similarity between objects of material culture. As to art, religion, social organization, who is there confident enough to assert that his judgment of "impressive" similarity is likely to be supported by more than a few of his anthropological colleagues? Suppose, however, that the similarity in question is incontestable and even that it is deemed impressive, does this settle the question in favor of historic contact and against independent invention? By no means.

Graebner greatly underestimates man's capacity to originate new things or ideas. Does not evidence abound on all sides that in every local area new inventions are constantly made, new adjustments to environment come about, new forms of religion or social structure arise? This is indeed so apparent that no one is inclined to dispute it as long as the new cultural features do not reveal similarities with others belonging to some other tribe or area. *The independent origination of dissimilarities is not disputed.* If, therefore, it can be shown that factors are at work which are likely to result in less dissimilar or even in strikingly similar features in different cultural districts, the case is won for the independent occurrence of similarities. One such factor lies in the limitation of possibilities of development. There are, for example, mechanical limitations. Many different kinds of pots are known, but a pot is a pot, that is, a vessel or container. This function sets a limit to its formal variations. To a degree, one pot is and must be like another. Or, take social organization. The different kinds of social units current in primitive society arise on the basis of man's relations to other men, to culture or to environment. The number of such relations, in their most general form, is limited: they comprise blood, locality, sex, age, generation, rank and common cultural functions. This is about all. The number of basic forms of social organization will, therefore, also be limited and similar forms are bound to arise in different places.[62]

[59] F. Boas, review of Graebner's "Methode der Ethnologie," *Science*, Vol. XXXIV, 1911, pp. 804–810.

[60] R. H. Lowie, "On the Principle of Convergence in Ethnology," *Journal of American Folk-Lore*, Vol. XXIV, 1912, pp. 24–42.

[61] A. A. Goldenweiser, "The Principle of Limited Possibilities in the Development of Culture," *Journal of American Folk-Lore*, Vol. XXV, 1913, pp. 259–290.

[62] *Cf.* My *Early Civilization*, pp. 235–292, and "Anthropological Theories of Political Origins," in *Recent Political Theories*, edited by C. E. Merriman and H. E. Barnes, pp. 430–456.

It appears, therefore, that our capacity to evaluate similarities is limited and that even undisputed similarities do not necessarily prejudge the case in favor of diffusion. This being so, geographical factors at once rise into prominence. All else being equal, the probability of diffusion decreases as distance increases. Unless, indeed, there is historic evidence of diffusion—but then there is no problem.[63]

Graebner's assertion that cultural features tend to form a unit, not only in locally stabilized cultures, but also in diffusion, is palpably opposed to all evidence. Nothing, in fact, is more conspicuous than the tendency of single cultural features or of small clusters of such features to become isolated from their local associations as soon as their tribal wanderings begin.

Graebner's hypothetical culture waves and districts were thus shown to be phantastic constructions. The pseudo-historical edifice of the "culture-historical school" is built on thin air.

The second prominent diffusionist was the late W. H. R. Rivers.[64] A moderate evolutionist at first, Rivers directed his energies toward the elaboration of a more objective and exact method of ethnological inquiry. This he achieved with signal success when he used the so-called genealogical method in the study of kinship systems, social organization and ceremonialism. The shift in his theoretical position came during his studies of terms of relationship and social systems in the Melanesian Archipelago. Impressed by the obviously complex

[63] Graebner's insensitiveness to the geographical factor reveals an absence of that "ethnological tact" he himself is so fond of advocating. For distance is time, geography is history, and the disregard of these factors stamps the "culture-historical school" as theoretically unhistorical.

Ratzel, from whom Graebner had learned so much, had a wholesome respect for distance as a factor in history. He wrote: "In connection with the distribution of types of forms (*Formgedanken*) Space and Time are convertible terms." *Anthropogeographie*, Vol. I, p. 608.

[64] W. H. R. Rivers' contributions to ethnology fall into two periods: the first embraces his methodological and descriptive studies, the second his contributions to kinship systems and terminologies and the theory of diffusion. First period: articles on social organization and kinship in *Cambridge Anthropological Expedition to Torres Straits*, Vols. V and VI; *The Todas;* and "The Geneological Method of Ethnological Enquiry," *Sociological Review*, Vol. III, 1910. Second period: Presidential address before the Anthropological Section of the British Association for the Advancement of Science, *Proceedings*, 1911; also in *Science*, N. S., Vol. XXXIV, 1911; "The Loss of Useful Arts," *Westermarck Anniversary Volume*, 1912; "The Sociological Significance of Myths," *Folk-Lore*, Vol. XXIII, 1912, pp. 307–332; "Survivals in Sociology," *Sociological Review*, Vol. VI, 1913, pp. 293–305; "The Contact of Peoples," *Essays and Studies presented to William Ridgeway*, 1913, pp. 474–493; *Kinship and Social Organization; The History of Melanesian Society* (2 vols.); *Medicine, Magic and Religion;* "The Aims of Ethnology," in his *Psychology and Politics*, 1923; and *Social Organization*.

and composite character of these island cultures,[65] Rivers reflected upon the rôle of culture contact and mixture in social evolution. He still believed in evolution, but in a highly expurgated and revised version; also, he came to think of the historic process as much more complex than he had formerly conceived it to be; and, finally, he began to look upon the phenomena of inter-tribal contact as the dynamic element in culture which supplies the initial momentum for evolutionary change.[66]

Rivers' view of culture never descended to the mechanical level of Graebner. On the contrary, he was ever alert in observing the significance of the psychological interplay of cultural features, he studied the effect of routes of travel upon wandering culture traits, insisted on the complexity and variety of situations which arise when culture meets culture. In particular, he pointed out that in the course of historic contact of two or more cultures, *new* features will make their appearance which were not formerly represented in any of the mingling cultures.[67]

[65] By "complexity" Rivers means the mixture of heterogeneous cultures or cultural elements. He writes: "From this point it became my task to endeavor to analyze the complexity presented by Melanesian society into its component elements. As the argument proceeded I was forced into the conviction that Melanesian culture is even more complex than had at first appeared, it became evident that an understanding of its complexity must be a necessary preliminary to any complete knowledge of the development, not only of Melanesian culture as a whole, but of each of the individual customs and institutions which make it up." *History of Melanesian Society*, Vol. II, Introduction, p. 2.

[66] "The general mode of treatment of this book," writes Rivers in his *History*, "holds a middle course between those of the evolutionary and historical schools because the principle underlying it is that the contact of peoples and the blending of their cultures act as the chief stimuli setting in action the forces which lead to human progress." (Vol. II, pp. 5–6.) Compare with this the following: "But withal there is no denying the overwhelming weight of accidental factors. Of these, those belonging to the 'foreign contact' group are of special importance. Not only do they constitute the 'yeast' of the historic process, but they bring content; they stimulate through 'the shock of novelty'; they shine by the 'prestige of things foreign'; they raise cultural contents into consciousness through contrast, and thus invite comparison, provoke ratiocination, engender wideawakeness. The new content, moreover, increases the variety, complexity, richness of a culture." (From my "History, Psychology and Culture," *Journal of Philosophy*, Vol. XV, 1918.)

[67] In contrasting his position with Graebner's, Rivers writes: "To him, the introduction of the dual organization of society or of an Austronesian tongue seems to present no greater difficulty than the introduction of a new weapon or implement. To me, on the other hand, social organization, language and religion seem to be bound up with the life of a people so far more intimately than material objects that it is not enough to say they have been introduced. It is the duty of one who attempts to analyze a culture to formulate a mechanism whereby an introduced element of culture has become part of the complex in which it is now found." *History*, etc., Vol. II. p. 4. *Of.* also Rivers'

His Melanesian experiences led Rivers to formulate two additional principles which were to prove of great significance in his later work: (1) cultural features, even highly useful ones, may be forgotten—"the disappearance of useful arts"; (2) even a small number of immigrants may usher in important changes, provided their culture impresses the native population as sufficiently "great and wonderful." In illustration, just one example. Rivers was struck by the multiplicity of forms of burial in Australia: inhumation in the extended and contracted positions, preservation on platforms, trees and in caverns, a simple kind of embalming and cremation. He argued that in a cultural district otherwise so homogeneous such variety in one feature could not be explained except by the intrusion of foreign elements. Thus he came to believe that Australia had been subjected to periodic invasions by peoples with higher cultures. After each migration there followed a deep cultural transformation, including the introduction of a new method of burial. In the course of time, the other features were forgotten but the new type of burial remained. In this way, after several migrations, the present condition came about. Incidentally, owing to the small number of immigrants involved in each migration, no perceptible trace of these happenings was left in the physical type of Australians.

Operating with these principles, Rivers then tackled the formidable task of reconstructing the history of Melanesian society. The second volume of his work has no equal in the entire domain of theoretical ethnology in boldness, ingenuity and the dialectic rigor of its speculations.

But the weakness of Rivers' method also stands glaringly revealed.[88] It is one thing to note the possibility of the loss of useful arts and the profound effects achieved by a few immigrant individuals, another, to make use of these theses as principles of interpretation in the absence of local and historic evidence. Especially does this apply to

general discussion of the conditions of migration in Melanesia ("Migrations," *Ibid.*, pp. 292–309).

Rivers is certainly right in holding that Graebner's position reflects the psychology of a specialist in material culture. Graebner's unimaginative mind never transcended the limitations imposed by his experience with the mechanical details of an ethnographic museum. It will also be noted that several of Graebner's "principles" apply more readily to material than to spiritual culture. Similarities in objects are more readily discerned and described, they are also more permanent; the diffusion of things can be followed and proved more easily than that of attitudes and ideas. A mechanical view of culture, while never justifiable, is less artificial when applied to its material rather than its spiritual elements.

[88] See the writer's review in *Science*, Vol. XLIV, 1916, pp. 824–828; *Cf.* also *Early Civilization*, pp. 313–316.

the principle of loss of culture or degeneration, for if the absence of a trait makes as good a case as its presence, then obviously anything can be proved. In this instance the difference between theoretical possibility and methodological procedure appears in bold relief.

Another weakness lies in the disregard of comparative material as a check on the interpretation of local features. Thus Rivers explains the secrecy, multiplicity and graded character of the religious societies of Mota Island as the result of culture mixture. But a glance at the religious associations of other areas, those of West Africa, for example, or of North America, will show that here also secrecy, gradation and multiplicity are present, while conditions preclude the possibility of interpretation through culture mixture. Now, if these things can happen here without the stimulation of culture contact, then in Melanesia also Rivers' interpretation is hazardous, notwithstanding its theoretical plausibility and its historical possibility in this region, unless indeed specific proof can be adduced.

Another and final criticism of Rivers' procedure refers to the multiplication of hypotheses. Here the theory of probability sounds a warning. The probability that a hypothetical structure will tally with historic reality decreases at a tremendous rate with the complexity of the structure. On this score Rivers' brilliant attempt at historic reconstruction must be classed as so improbable as to be impossible.[69]

[69] This sketch of Rivers' contribution to the theory of diffusion is reproduced with minor changes and additions from my essay entitled "Diffusionism and the American School of Historical Ethnology" to be published in the *American Journal of Sociology*, 1925.

It will be seen from this analysis that the contrast between his own position and that of Graebner, on which Rivers insists (this insistence, by the way, being shared by Graebner), is not as thoroughgoing as Rivers believes it to be. "This (Graebner's) attempt," writes Rivers, "differs in its line of approach, in its general method and in its main assumptions and principles so deeply from those of my own work, that it is difficult to say that there is any element common to us except our belief in the great complexity of Melanesian culture and the need for its analysis." (*History, etc.*, p. 3.) But there is also this common trait: both writers use the theory of diffusion not as a tool of inquiry but as a speculative principle of interpretation.

This weakness in Rivers' methodological procedure accounts for his strange even though delayed receptiveness to the teachings of G. Elliot Smith and W. J. Perry. The theories of these authors, as falling outside the scope of ethnological science, will not be analyzed in these pages, but they may be found in the following books and articles: G. Elliot Smith, *The Migrations of Early Culture* (*Manchester University Press*, 1915); "On the Significance of the Geographical Distribution of the Practice of Mummification," *Manchester Literary and Philosophical Society*, February, 1915; "The Influence of Ancient Civilization in the East and in America," *Bulletin John Ryland's Library*, Jan.-March, 1916; *The Evolution of the Dragon;* and *Elephants and Ethnologists;* W. J. Perry, *The Megalithic Culture of Indonesia; The Children of the Sun; The Origin of Magic and Religion;*

V. FRANZ BOAS AND THE AMERICAN SCHOOL OF HISTORICAL ETHNOLOGY

The earlier contributions of American anthropologists have been so completely overlaid by recent works that one does not usually think of evolution in connection with America. This is both erroneous and unfair, for evolution had its day on this side of the Atlantic and among its representatives may be found some of the towering figures of early American anthropology. In addition to Lewis H. Morgan's epochal contributions, the works of Major Powell in social organization, Cushing's in mythology and material culture, Mason's in industry, McGee's in primitive knowledge, Brinton's in religion and mythology, are one and all oriented by the stars of the evolutionary heaven.[70]

But what may be called the historical trend in American ethnology must be identified with the life work of one man—Franz Boas. By his early studies in the physical sciences and mathematics, his talent for concrete research and his critical ability, this scientist was eminently fitted for the revolutionary rôle he was to play in the history of anthropology. When he appeared upon the scene the foundations

and *The Growth of Civilization*. *Cf.* my "Diffusion *vs.* Independent Origin: a Rejoinder to Professor G. Elliot Smith," *Science*, N. S., Vol. XLIV, 1916, pp. 531–533; review of Rivers' *Social Organization* which contains a section by W. J. Perry on "The Dual Organization," *The Nation*, Dec. 1924, pp. 644–5; and joint review of Rivers' *Medicine, Magic and Religion* and W. J. Perry's *The Origin of Magic and Religion*, *The Nation*, 1925.

[70] *Cf.* J. W. Powell, Introduction to 16th *Report, Bureau of American Ethnology*, 1894–5; articles in *American Anthropologist*, N. S., Vols. I, II and III, "On Activital Similarities," 3rd *Report, Bureau of American Ethnology*, Introduction, pp 65–74; and "The Interpretation of Folk-lore," *Journal of American Folk-lore*, Vol. VIII, pp. 97–105; F. H. Cushing, "Manual Concepts: A Study of the Influences of Hand-Usage on Culture Growth," *American Anthropologist*, Vol. V, pp. 289–318; "The Arrow," *Ibid.*, Vol. VIII, pp. 307–49; O. T. Mason, "Influence of Environment upon Human Industries or Arts," *Annual Report, Smithsonian Institution*, 1896, pp. 639–665; *Origins of Invention;* "Resemblances in Arts Widely Separated," *American Naturalist*, Vol. XX, pp. 246–251; "The Birth of Invention," *Annual Report, Smithsonian Institution*, 1892, pp. 603–11; "Primitive Travel and Transportation," *Annual Report, U. S. National Museum*, 1894, pp. 237–593; and "Beginnings of the Carving Industry," *American Anthropologist*, Vol. II, pp. 21–46; W J McGee, "The Science of Humanity," *Proceedings, American Association for the Advancement of Science*, 1897; "The Relation of Institutions to Environment," *Annual Report, Smithsonian Institution*, 1895, pp. 701–11; "The Beginnings of Mathematics," *American Anthropologist*, N. S., Vol. I, pp. 646–74; "Primitive Numbers," 19th *Report, Bureau of American Ethnology*, pp. 821–51; D. G. Brinton, "The Aims of Anthropology," *Proceedings, American Association for the Advancement of Science*, 1895; *The Myths of the New World; Religions of Primitive Peoples;* "The Origin of Sacred Numbers," *American Anthropologist*, Vol. VII, pp. 168–173.

of the new science had already been laid. A great deal of primitive material had been accumulated, museums had been founded offering opportunities for research, young anthropologists trained in scientific method were ready to go forth into regions where primitive men were still available for study. They were prepared to bring back results that would withstand critical scrutiny. But withal, there was no order or system in the camp of anthropologists. Exact methods and subjective phantasy were applied almost at random. The temptation toward sweeping generalizations was seldom resisted. And the demands made on anthropology to furnish data as a background for the social sciences, worked steadily in the direction of premature conclusions and hasty finality.

Anthropology was young and it was still possible for one man to encompass the wide range of its constituent disciplines. Boas became this man. With him he brought method and a critical approach. The statistical procedure first applied to problems of genetics was introduced by Boas into the study of myth, where it proved possible, by using incidents and personages as the units of veriability, to determine the spread and direction of diffusion of myth complexes. Building upon the classificatory foundations laid by Powell, Boas established the science of American Indian linguistics which brought fruit in two directions. With native texts phonetically recorded as a basis of their analyses, anthropologists trained by Boas succeeded in building up grammars of numerous Indian tongues, thus making a signal contribution to the science of comparative philology, the importance of which has as yet been scarcely recognized. At the same time, this linguistic study became an indispensable tool as a method of ethnological investigation. Some problems of diffusion could not be solved without linguistic analysis, nor could the more esoteric aspects of ceremonialism and the delicate subjective shadings of religious belief be fully understood without this approach.

But over and above all this, Boas' one outstanding contribution was the historical point of view in accordance with which native cultures were to be investigated in their restricted historico-geographical homes and in the perspective of their relations to physical environment, the surrounding cultures and to the many and often intricate psychological associations formed between the different aspects of culture.[71]

[71] Owing to Professor Boas' predilection for concrete monographic investigations, it is not easy to acquire a comprehensive knowledge of his theoretical and methodological principles by a perusal of his works. With a little care, however, all the basic points can be gleaned from the following selection: "Dissemination of Tales among the Natives of North America," *Journal of American Folk-*

These principles when applied to concrete investigations in the field and superadded upon the extensive if less craftsmanlike researches of earlier studies, soon brought fruit in the form of an imposing array of well authenticated and partly co-ordinated data on Indian cultures.

The historical standpoint received concrete expression in the concept of the culture area.[72] This concept is both objective and psychological, objective in so far as the composite picture of the different cultural phases of each area is distinct, psychological in so far as the inter-relations between the different cultural phases are also charac-

lore, Vol. IV, 1891, pp. 13–20; *Indianishe Sagen von der Nord Pazifischen Kuste Amerikas*, 1895; "The Growth of Indian Mythologies," *Journal of American Folk-lore*, Vol. IX, 1896, pp. 1–11; "The Mythologies of the Indians," *International Quarterly*, Vol. XI, pp. 327–342, Vol. XII, pp. 157–173; "The Mythology of the Bella Coola Indians," *Publications, Jesup North Pacific Expedition*, Vol. I, pp. 25–127; "The Folk-lore of the Esquimo," *Journal of American Folk-lore*, Vol. XVII, 1904, pp. 1–13; "Comparative Study of Tsimshian Mythology," 31st *Report, Bureau of American Ethnology*, 1909–10; "Decorative Art of the Indians of the North Pacific Coast," *Bulletin IX, American Museum of Natural History*, pp. 123–176; chapter on "Art" and "Conclusion," in Teit's "The Thompson Indians of British Columbia," *Publications, Jesup North Pacific Expedition*, Vol. I, pp. 376–390; "The Decorative Art of the North American Indians," *Popular Science Monthly*, Vol. LXIII, 1903, pp. 481–496; "Decorative Designs of Alaskan Needlecases," *Proceedings, U. S. National Museum*, Vol. XXXIV, 1908, pp. 321–344; "Representative Art of Primitive People," *Holmes Anniversary Volume*, 1916, pp. 18–23; "The Social Organization and Secret Societies of the Kwakiutl Indians," *Report, U. S. National Museum*, 1895; "Der Einfluss der Sozialen Gliederung der Kwakiutl auf deren Kultur," *Internationaler Amerikanisten Kongress*, 1904, pp. 141–148; "The Kwakiutl of Vancouver Island," *Publications, Jesup North Pacific Expedition*, Vol. V, Part I; "Ethnology of the Kwakiutl," 35th *Report, Bureau of American Ethnology*, 1913–14; "The Limitation of the Comparative Method of Anthropology," *Science*, N. S., Vol. IV, 1896, pp. 901–908; "The History of Anthropology," *St. Louis Congress of Arts and Sciences*, Vol. V, pp. 468–482; "Anthropology," *Columbia University Press*, 1907; and *The Mind of Primitive Man*.

[72] The history of this concept is of interest. While working over the ethnographic collections of the American Museum of Natural History, Professor Boas observed that the specimens ranged themselves into groups corresponding to geographical areas. He followed up this suggestion of the concrete material and found that the continent of North America could be divided into a number of geographical districts which where characterized by their material culture. The culture area concept was born. In a sense it was a rebirth of Bastian's "geographical provinces," but whereas the latter were reached intuitively and, like other of Bastian's ideas, remained vague and almost mystical, the concept of culture area was dictated by the natural disposition of the data; it was concrete, realistic, and became one of the working tools of American ethnology.

It must not be thought, however, that the culture area concept itself is definitively objective. No concept of such generality based on a complex material can compare in objectivity with a descriptive account of the data. Certain elements of selection, emphasis and valuation, necessarily subjective to a degree, must enter here. But this need not interfere with the usefulness of the concept, as long as the presence of the subjective component is clearly recognized.

teristic for each area. Thus, the relation of decorative art to social organization takes one form among the peoples of the Northwest, another among those of the Eastern Plains; the relation of religion to material culture is oriented differently in the Eastern Woodlands and in the Southwest, and so on.[73]

The cultural similarities and differences of the tribes in each culture area became the subject of minute investigations which resulted in much new insight into the processes of cultural diffusion and assimilation.[74]

Correlated with the concept of culture areas is that of *marginal areas*. It was observed that the tribes lying near the boundary of two areas tended to combine traits of both: the Ute, for example, being intermediate between the Southwest and the Plains, the Winnebago between the Eastern Plains and the Woodlands, the Lillooet and Shuswap between the Plateau and the Northwest.

The concept of marginal areas served to give precision to the distinction between the objective and the psychological points of view. The culture area was an objective and psychological concept, the marginal area a purely objective one. It was marginal with reference to the concrete cultural contents of two areas, which in the intermediate region, the marginal area, were intermingled. Psychologically, the marginal area is but a type of culture area, for its cultural content is as much of a unit and has the same value to its human carriers as the content of a full-fledged culture area.[75]

[73] *Cf.* C. Wissler, "The Influence of the Horse on the Development of Plains Culture," *American Anthropologist*, Vol. XVI, 1914, pp. 1–25; and "The North American Indians of the Plains," *Popular Science Monthly*, Vol. LXXXIII, 1913, pp. 436–444.

[74] Among many illuminating studies of diffusion, the following may be mentioned: C. Wissler, "Material Culture of the Blackfoot Indians," *Anthropological Papers, American Museum of Natural History*, Vol. V, 1910. pp. 1–177, in which he shows, after an exhaustive comparative analysis, that the Blackfoot have originated nothing in the material culture which now is theirs, but must be regarded as carriers and propagators of cultural features originated by others; "Riding Gear of the North American Indians" *Ibid.*, Vol. XVII, 1905, pp. 1–38; "Costumes of the Plains Indians," *Ibid.*, pp. 39–91; "Structural Basis of the Decoration of Costumes among the Plains Indians," *Ibid.*, pp. 93–114; R. H. Lowie, "Plains Indian Age Society," *Ibid.*, Vol. XI, 1916, pp. 877–1031.

Two excellent studies of cultural assimilation are P. Radin's "A Sketch of the Peyote Cult of the Winnebago: A Study in Borrowing," *Journal of Religious Psychology*, Vol. VII, 1914, pp. 1–22; and "The Influence of the Whites on Winnebago Culture," *Proceedings, State Historical Society of Wisconsin for* 1913, pp. 137–145.

[75] To cite a modern example: no one would presumably regard the inhabitants of Alsace-Lorraine as less genuinely cultured because their *mores* partake both of German and French traits. Nationalistic ideology, of course, takes a different view of the matter, designating the representatives of marginal areas (whether geographical or psychological ones) as hyphenates.

The studies of inter-tribal diffusion gave occasion to elaborate the concept of tribal patterns. The pattern might also be described as the cast or spirit of a tribal culture or of a phase of it, into which new features arising in the tribe or coming from elsewhere are moulded. In the Plains such studies were carried out by Lowie for the age societies, by Spier for the Sun Dance and by Mrs. Benedict for the spirit vision.[76]

Pushing further beyond the tribal pattern, family and individual differences were worked out by Boas, for example, for myths (among the Tsimshian), by Lowie for religion (among the Crow[77]) and by Sapir for ceremonial and other peculiarities, the so-called *topati* (among the Nootka).[78]

Other explorations into cultural depths were made possible by the application of the linguistic method. Thus, Paul Radin in his *Autobiography of a Winnebago Indian*[79] succeeded in presenting the unadulterated religious experience of a semi-renegade Indian; Theresa Mayer described the actual functioning of relationship systems in the Northwest,[80] while Boas compiled from text material a most instructive account of the social system, at rest and at work, of the Tsimshian, a comparison of which with the systematized accounts of informants, throws new light on the problem of a native social code, as it is taught and as it is lived.

Still other studies wrestled with the difficulties of disentangling the historical and psychological ingredients of cultural complexes.

[76] L. Spier, "The Sun Dance of the Plains Indians: Its Development and Diffusion," *Anthropological Papers, American Museum of Natural History*, Vol. XIV, 1921, pp. 451–527; Mrs. R. F. Benedict, "The Concept of the Guardian Spirit in North America," *Memoir* 29, *American Anthropological Association*. *Of.* also A. A. Goldenweiser, "The Origin of Totemism," *American Anthropologist*, N. S., Vol. XIV, 1912, pp. 600–607; R. H. Lowie, "Some Problems in the Ethnology of the Crow and Village Indians," *Ibid.*, Vol. XIII, 1912, pp. 60–71; C. Wissler, "The Ceremonial Bundles of the Blackfoot Indians," *Anthropological Papers, American Museum of Natural History*, Vol. VII, 1911, pp. 65–289, particularly "Origins of Rituals," pp. 100–106.

In its more general aspects the application of the pattern concept is discussed by Lowie in "Ceremonialism in North America," *American Anthropologist*, Vol. XVI, 1914 ("Diffusion of Ceremonials" and "Ceremonial Patterns"); by Goldenweiser in "The Social Organization of the Indians of North America," *Journal of American Folk-lore*, Vol. XXVII, 1914, pp. 411–436, particularly "IV. Diffusion and Pattern," pp. 418–422; and by Wissler, "Material Culture of the North American Indians," *American Anthropologist*, Vol. XVI, 1914, pp. 447–505, particularly "Trait Association," and "Diffusion of Material Traits."

[77] "The Religion of the Crow Indians," *Anthropological Papers, American Museum of Natural History*, Vol. XXV, pp. 309–444.

[78] As yet unpublished.

[79] University of California Publications in American Archæology and Ethnology, Vol. XVI, pp. 381–473.

[80] As yet unpublished.

This was done by the writer for totemism,[81] a socio-religious complex; by Radin for the Midewiwin,[82] a socio-ceremonial complex; and by Mrs. Benedict for the spirit vision, a religio-mythological complex.

If the guiding principles of the historical school were to be condensed into a brief catechism, it would read somewhat as follows: the concentration of research upon restricted geographico-historical districts, which are to be studied in their chronological depth and in their lateral geographical extension in inter-tribal contact; the application of the objective and statistical methods in the tracing of distributions of features or feature complexes, and of the psychological method in the study of the association, interpenetration and assimilation of features; the use of the concepts "style" and "pattern" in the description of tribal or area cultures, especially in their relation to the absorption of new traits of local or foreign origin; the extension of the differential method inside of tribal boundaries to sub-tribal and individual differences; the adoption of the linguistic method wherever authenticity or delicate shades of meaning or evaluation are involved; the disentangling of the historical and psychological ingredients of cultural complexes; the rejection of evolution and environmentalism in their crude classical forms; and the application of the concepts "diffusion," "independent development," "parallelism," "convergence," not as dogmatic postulates but as heuristic tools.[83]

VI. RECENT TENDENCIES AND FUTURE VISTAS

Methodological care seldom goes hand in hand with intuitive grasp of hidden truths, the critical habit tends to discourage creative constructiveness. It was therefore inevitable that the methodological and critical safeguards used by American students should have resulted, at least temporarily, in a certain timidity in the face of broader and more speculative problems and in a reluctance to indulge in spontaneous creativeness and synthesis. The more daring spirits in continental Europe and in England began to complain of the sterility of American ethnology.[84]

[81] "Totemism, an Analytical Study," *Journal of American Folk-lore*, Vol. XXIII, 1910, pp. 179–293.

[82] "The Ritual and Significance of the Winnebago Medicine Dance," *Journal of American Folk-lore*, Vol. XXIV, 1911, pp. 149–209.

[83] Additional data on the work of Boas and his disciples will be found in my "Diffusionism and the American School of Historical Ethnology," to be published in the *American Journal of Sociology*, 1925.

[84] Professor Boas once voiced a similar sentiment with reference to American archæology. A man who finds one potsherd, he declared, passes with us as an

Signs are not lacking, however, of the recrudescence of spontaneity, theoretical creativeness and speculative daring in America.

The various forms taken by these newer tendencies will be briefly indicated here.

Kroeber in his much discussed essay on "The Superorganic" [85] inaugurated a trend toward cultural objectivism. He emphasized the superorganic, super-individual, super-psychological nature of cultural phenomena, stressed the theoretical autonomy of culture, the determinism and inevitability of historic events, and minimized—in fact, almost negated,—the rôle of the individual in history. In a somewhat earlier essay [86] he had expressed his position in a series of partly cryptic but nonetheless thought-provoking propositions.[87]

Kroeber's theoretical broadside was met by Sapir, Haeberlin and the writer [88] who, while endorsing Kroeber's main contention as to

archæologist, one who finds two potsherds, as a good archæologist, one who finds three, as a great archæologist.

[85] A. L. Kroeber, "The Superorganic," *American Anthropologist*, Vol. XIX, 1917, pp. 163–213.

[86] "Eighteen Professions," *American Anthropologist*, N. S., Vol. XVII, 1915, pp. 283–288.

[87] The eighteen professions are: 1. The aim of history is to know the relations of social facts to the whole of civilization; 2. the material studied by history is not man, but his works; 3. civilization, though carried by men and existing through them, is an entity in itself, and of another order from life; 4. a certain mental constitution of man must be assumed by the historian, but may not be used by him as a resolution of social phenomena; 5. true instincts lie at the bottom and origin of social phenomena, but cannot be considered or dealt with by history; 6. the personal or individual has no historical value save as illustration; 7. geography, or physical environment, is material made use of by civilization, not a factor shaping or explaining civilization; 8. the absolute equality and indentity of all human races and strains as carriers of civilization must be assumed by the historian; 9. heredity cannot be allowed to have acted any part in history; 10. heredity by acquirement is equally a biological and historical monstrosity; 11. selection and other factors of organic evolution cannot be admitted as affecting civilization; 12. the so-called savage is no transition between the animal and the scientifically educated man; 13. there are no social species or standard cultural types or stages; 14. there is no ethnic mind, but only civilization; 15. there are no laws in history similar to the laws of physico-chemical science; 16. history deals with conditions *sine qua non*, not with causes; 17. the causality of history is teleological; 18. in fine, the determinations and methods of biological, psychological, or natural science do not exist for history, just as the results and the manner of operation of history are disregarded by consistent biological practice.

This theoretical catechism cannot be analyzed here, but a mere enumeration of the points suffices to indicate the orientation of Kroeber's thought: from evolution through criticism to objectivity and constructiveness.

[88] E. Sapir, "Do We Need A 'Superorganic'?" *American Anthropologist*, Vol. XIX, 1917, pp. 441–447; A. A. Goldenweiser, "The Autonomy of the Social," *Ibid.*, pp. 447–449; H. K. Haeberlin, "Anti-Professions," *Ibid.*, Vol. XVII, 1915, pp. 756–759.

cultural autonomy, took exception to his inadequate appreciation of the rôle of the individual in history, his over-confident assumption of historic determinism, as well as his theoretically inadmissible identification of psychology with biology.[89]

In reviewing the work of Rivers and that of the American anthropologists, I took occasion to note a revival of interest in psychological problems which arose in the course of cultural studies. The American students, in particular, were keenly conscious of the necessity of a psychological technique to supplement the objective studies of the historian of culture. But to recognize this necessity was one thing, to supply the technique, another. The attempts in this direction first of all produced a crop of theoretical discussions dealing with the general relations of psychology and sociology,[90] discussions which bring

[89] Sapir writes: ". . . It is always the individual that really thinks and acts and dreams and revolts." And he adds: "Shrewdly enough, Dr. Kroeber chooses his examples from the realm of inventions and scientific theories. Here it is relatively easy to justify a sweeping social determinism in view of a certain general inevitability in the course of the acquirement of knowledge. This inevitability, however, does not altogether reside, as Dr. Kroeber seems to imply, in a social 'force' but, to a very large extent, in the fixity, conceptually speaking, of the objective world. This fixity forms the sharpest of predetermined grooves for the unfolding of man's knowledge. Had he occupied himself more with the religious, philosophic, æsthetic, and crudely volitional activities and tendencies of man, I believe that Dr. Kroeber's case for the non-cultural significance of the individual would have been a far more difficult one to make." (*Loc. cit.*, pp. 442–3)

And in his admirable "Anti-Professions," Haeberlin writes: "As soon as Dr. Kroeber will have become conscious of the dogmatism of his biological psychology, all other obstacles towards an understanding must fall like a house of cards. He will recognize the impossibility of building a cloister-wall about history, he will no longer look askance on the psychologically inclined anthropologist as a hybrid form of two distinct crafts, psychology will no longer be a bugaboo—in short there will be complete unison of the 'professions' and the 'anti-professions.'" (*Loc. cit.*, p. 759.)

I can only note here that this tendency towards an exaggerated cultural objectivism is by no means restricted to certain modern anthropologists. The movement, in fact, is more pronounced among sociologists. Its sources may be traced to Durkheim with his social facts conceived as "things" and his well known insistence on the externality and objectivity of social and cultural determinants. Among some of the younger professional sociologists this ideological tendency has taken the form of "institutionalism." *Cf.*, for example, J. R. Kantor's "An Essay Toward an Institutional Conception of Social Psychology," *American Journal of Sociology*, Vol. XXVII, 1922. L. K. Frank has carried this approach over into other fields; see his "The Emancipation of Economics," *Political Science Quarterly*, March, 1924; "An Institutional Analysis of the Law," *Columbia Law Review*, Vol. XXIV, May, (1924) and "Social Problems," *American Journal of Sociology*, Vol. XXX, 1925, pp. 462–474.

In a still wider perspective, "institutionalism" in social science will be found to be allied to behaviorism in psychology and certain aspects of pragmatism in philosophy.

[90] See R. H. Lowie, "Psychology and Sociology," *American Journal of Sociology*, Vol. XXI, 1915, pp. 217–229; W. H. R. Rivers, "Sociology and Psychology," *The*

to mind the old controversy over the folk soul between Wundt and Steinthal-Lazarus, as well as the prolonged disquisitions among sociologists over the content and nature of sociology.

To achieve results it was necessary to go further, and first steps in this direction can now be recorded. Lowie approached the problem from the standpoint of the contribution which psychology as a special discipline can make to ethnology.[91] He notes such cultural features as mystic numbers, local preférences for particular geometrical shapes in art, and the fits of performing Turkish shamans, during which phenomena of anaesthesia occur. These features and many others of like kind, are illuminated in the light of the psychologist's experience, who can show that the association of personal characteristics with numbers is a phenomenon not infrequently observed among Europeans, that geometrical figures may be seen different from what they are on account of certain common visual illusions, that periods of partial or complete anaesthesia do actually occur in association with abnormal psychological states. So much, then, for the enlightenment which the science of individual psychology can bring to ethnology.[92] Further, however, psychology cannot go: "When abnormal psychology has so far enlightened us, it has by no means exhausted even the purely subjective aspects of the case. . . . The cultural phenomenon, then, even on its psychological side, comprises a very appreciable *plus* over and above the facts that psychology can explain, and these additional data require treatment by another science."[93]

Sociological Review, Vol. IX, 1916, pp. 1–13; A. L. Kroeber, "The Possibility of a Social Psychology," *American Journal of Sociology*, Vol. XXIII, 1918, pp. 633–651; A. C. Hocart, "Ethnology and Psychology," *Folk-lore*, Vol. LXXV, 1915, pp. 115–138; R. R. Marett, "Psychology and Folk-Lore," in his book of that name, pp. 1–27; and my "Psychology and Culture," to appear in the *Publications of the American Sociological Society* for 1924.

[91] "It is a very important cultural problem," writes Lowie, "whether the natives of South America knew the bronze technique, *i. e.*, whether they consciously produced the observed alloy of copper and tin. But how can the ethnologist solve this problem? Only by requisitioning the services of the chemist.

"Now very few would deny that services of the kind rendered by chemistry can also be rendered to the study of culture by psychology. Indeed, most people would at once admit that the relationship with psychology is *a priori* likely to be far more extensive and thoroughgoing." (*Culture and Ethnology*, p. 18.)

[92] *Loc. cit.*, p. 24. For numerous illustrations of a similar nature see Lowie, *Primitive Religion*, pp. 185–205, 221–321.

[93] *Loc. cit.*, pp. 24–25. Lowie also says: "We cannot reduce cultural to psychological phenomena any more than we can reduce biology to mechanics or chemistry, because in either case the very facts we desire to have explained are ignored in the more generalized formulation." (*Loc. cit.* pp. 17–18.) This brings up the theoretically more basic question of conceptual levels with which the various sciences can be identified. (*Cf.* my "Discussion of Professor Allport's Paper," *Journal of Abnormal and Social Psychology*, Vol. XIX, 1924, pp. 74–6.)

Wissler approaches the psychological problem from an entirely different angle. He attempts to establish a relation between the basic cultural content (*the culture pattern*) and the original nature of man. His argument is in brief as follows: all cultures however different in detail have elements in common; everywhere there are speech, material traits, art, mythology, knowledge, religion, family and social systems, property, government and war.[94] As these aspects of culture are universal, they evidently cannot be explained by the incidents of environment or history, but must in some way be related to the very nature of man as a culture making animal. Particular types of material culture, of social systems, of art, are determined by history, but the capacity to make tools, to organize socially, to produce art, is imbedded in man's psychology and ultimately therefore in the germ plasm.

"So whatever may be the real nature of the pattern for culture as a whole," writes Wissler, "it is to be considered nothing less than a set of human germ plasm, and both the mechanisms and the drives that underlie the objective phenomena of culture, in their totality, constitute the native equipment of man."[95]

Still another aspect of the psychological approach was repeatedly broached in my *Early Civilization*. The question here was not in the application of the data of scientific psychology to cultural interpretation nor in a psychological evaluation of certain cultural ultimates, but in an analysis in psychological terms of certain general and characteristic but not universal cultural phenomena. By way of illustration one such situation may be mentioned here.

The contrast between the technical rationality and the philosophical irrationality of primitive man has long been a stumbling block to the anthropologist bent upon interpretation. So much common sense and cold reasoning here, so much phantasy and logical irresponsibility there. Why? "He sees straight and hears straight," runs one passage. "With a sure hand he fashions his tools and applies them to the manufacture of articles of use and adornment, with much common sense and shrewdness and great physical adeptness he handles the plants, animals and humans of his environment. But *he does not think straight;* at least not when it comes to explanations and hypotheses. And what is a world-view but a set of explanations and hypotheses? The world-view of early man is supernaturalism. How

[94] For a fuller statement of the *universal pattern* or *culture scheme* see his *Man and Culture*, p. 74.

[95] *Loc. cit.*, p. 272. To fully grasp Wissler's meaning it is necessary to read the sections: "The Universal Pattern" (pp. 73–98), and "Culture as Human Behavior" (pp. 251–280), in his *Man and Culture*.

did it come, then, that such vast stores of cold fact, that so much common sense and perspicacity and shrewdness should have left practically untouched that all-important aspect of primitive thought which refers to the interpretation of phenomena?" [96]

A partial resolution of this paradox will be found in the following passage: "The psycho-physical processes involved (in these technical pursuits) are direct, pragmatic, teleological. There is in this domain some of the implied reason that is characteristic of animal adjustments, which also bear apparent evidence of intellectual acumen, the sort of adjustments so often noted in the industrial life of the bee, the ant, the spider and the beaver. The logic observed in early tools and weapons, traps and snares, pots, houses and boats, is the logic of nature itself, the logic of the objective relations of things, which through the medium of action moulds the mind so inevitably and smoothly as to be almost wholly unconscious. And if consciousness and ratiocination arise in the course of the industrial activity, they are presently submerged, the objective results alone being passed on to the following generation. As the aim in all of these pursuits is not to know but to do, not to understand but to achieve, the realm of the matter-of-fact becomes a happy hunting ground for the pragmatist, not an abode for the pursuer of the 'idle curiosity,' there is satisfaction when the thing works and, barring accidents, no further changes are made. Henceforth, the mind accepts these condensed depositories of reason traditionally. They become part of the technical equipment of behavior, not of thought and understanding." [97]

But nowhere is the impending deepening of the psychological approach foreshadowed more significantly than in some recent contributions by Edward Sapir.

This author distinguishes three meanings of the term "culture." Culture, in the first place, is the traditional baggage, material and spiritual, of a group. In this sense every tribe or nation has culture in so far as it represents what we have referred to as historic cumulation. Secondly, culture is a valuational concept, representing a def-

[96] *Early Civilization*, p. 150.

[97] *Loc. cit.* pp. 406–7. That the situation referred to in the text is indeed psychological and by no means univocal, thus allowing of multiple interpretations, can be gathered from a perusal of Professor John Dewey's chapter on "Changing Conceptions of Philosophy" in his *Reconstruction in Philosophy*, (pp. 1–27) in which similar data are presented but the interpretation is different (*cf.*, however, Dewey's *Experience and Nature*, pp. 210–215).

The entire problem of the relation of technique to thought is of the greatest theoretical interest and in view of present pragmatic and behavioristic tendencies, of equal timeliness. An attempt to throw further light on this relationship will soon be made in an essay on "Craft and Mind."

inite level in a scale of evaluated cultures. What we know as cultural snobbery belongs to this category, for every culture conceives of itself as *the* culture and estimates other cultures accordingly. But the connotation of culture which Sapir takes as the thesis of his essay differs from both these meanings. Culture, in this third and last sense, "aims to embrace in a single term those general attitudes, views of life, and specific manifestations of civilization that give a particular people its distinctive place in the world"; and again: "culture is civilization in so far as it embodies the national genius."[98] This is "genuine culture" which is "inherently harmonious, balanced, self-satisfactory," as contrasted with "spurious culture" in which the individual is so often afflicted with a "sense of spiritual frustration."[99] Mere sophistication, usually referred to as progress, is not identical with a high civilization.

In this direction, continues Sapir, the sophisticated but shallow American of today compares unfavorably with the crude but genuinely cultured Indian. "He (the ethnologist) cannot but admire the well-rounded life of the average participant in the civilization of a typical American Indian tribe; the firmness with which every part of that life—economic, social, religious and aesthetic—is bound together into a significant whole in respect to which he is far from a passive pawn; above all, the molding rôle, often-times definitely creative, that he plays in the mechanism of culture."[100] When aboriginal cultures come in contact with our civilization there is a "fading away of genuine cultures," the native having "slipped out of the warm embrace of a culture into the cold air of a fragmentary existence."[101]

These ideas of Sapir's which cannot here be pursued any further, open up vistas of psychological analysis on a much higher level of insight and refinement than has hitherto been customary in anthropological literature.

Other tendencies, as yet too tentative for lengthy analysis, will only be noted here. One is a revival of bolder and more speculative attempts in historic reconstruction,[102] another—a return to environ-

[98] E. Sapir, "Culture, Genuine and Spurious," *American Journal of Sociology*, Vol. XXIX, 1925, pp. 401–430. The above citations will be found on p. 405.

[99] *Loc. cit.*, pp. 409–412.

[100] *Loc. cit.*, p. 414. *Cf.* also Sapir's "Culture in New Countries," *The Dalhousie Review*, 1923, pp. 358–68.

[101] This is what Rivers had in mind when he wrote about the Melanesians that they were "dying from lack of interest." The rich content of their culture having been torn into bits, there is nothing to take its place. What we in our silly conceit thought of as first steps in civilization, proves to the native but cultural starvation.

[102] *Cf.* N. C. Nelson, "Human Culture," *Natural History*, Vol. XIX, 1919,

mentalism, albeit in a greatly modified form,[103] a third—a more constructive analysis of developmental trends in history which may prove the beginning of a new evolutionism.[104]

The recent tendencies here enumerated mark an incipient liberation of American ethnology from its methodological bondage. Critical checks are useful in proportion to the richness of creative thought that needs to be checked. When criticism and method cease to be heuristic tools and become ends in themselves, creativeness withers

The seeker of truths is like the builder of roads: both must combine imagination with method, vision with technique. The road when built and made safe is never quite like the vision, seldom at all like it. But unless there is a vision first, there will be no road at all.

For some time to come American contributions to ethnology may fall below their accustomed standards of meticulous care and logical finality. But the loss will be a gain if they reveal a proportionate rise in creative ideas and illuminating syntheses.

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pp. 131–140; C. Wissler, "New World Origins," in his *The American Indian*, pp. 355–367; and A. L. Kroeber, *Anthropology*, pp. 326, *sq.*

[103] See C. Wissler, "The Genesis of Culture," in his *Man and Culture*, pp. 212–250.

[104] A. A. Goldenweiser, "History, Psychology and Culture," *Journal of Philosophy*, Vol. XV, 1918, Nos. 21 and 22.

CHAPTER VI

SOCIOLOGY

By Frank Hamilton Hankins

I. SOCIOLOGY STILL IN FORMATIVE STAGE

Sociology is at once the oldest and the youngest of the social sciences. There probably was never a time during the past hundred thousand years when some men somewhere were not speculating on the origin of man and the meaning of human destiny. It cannot be said that all such speculations are truly sociological in nature; but it may be claimed that the desire to know his origin, the course and causes of his social evolution and the goals, if any, of all the travail of human history, constitute the driving force behind man's eager search for evidences of his past and his even more eager speculations as to his future. From this broad point of view it may be said that sociology began when philosophy and religion began, that is, with the origin of man himself. One must come down almost interminable ages, however, before one discovers extant records of systematic discussions of social life. Of the contributions to social philosophy preceding the culmination of ancient cultures in the Periclean Age in Greece we know too little to estimate their value in the light of modern learning. But it is not probable that any of them achieved either the philosophical insight of Plato's *Republic* or the scientific realism of Aristotle's *Politics*.

In any case, these two works represent the highest achievements of the human mind in its efforts to answer the primary questions which have given rise to sociological inquiry until well on into modern times. As individual works they have never been surpassed and still repay careful study, in spite of the nearly complete reorientation of thought and speculation by the development of modern science. One reason for this is that these writers represent the culmination of a long and brilliant cultural evolution during which human experience with political and social forms and institutions was extremely varied.

Another and more significant reason is that sociology has not yet

succeeded in advancing far in those directions which distinguish science from philosophy. This is all the more striking in view of the fact that the problems of sociology are of primary human interest and have attracted the attention to a greater or less extent of all the ablest thinkers of all times. This situation is to be explained by the fact that the problems of social life are extremely intricate and complicated, though they are conceived by all untutored minds and even by some of the most erudite to be so simple that the man on the street is warranted in loudly proclaiming his solution of them. In consequence, sociology has remained very largely a field for the exploitation of mere opinion.

Of equal importance and closely connected therewith is the fact that social phenomena are so highly charged with human interest and emotion that they can seldom be observed in a wholly unbiased frame of mind. Man is an evaluating animal with a powerful tendency to observe all social facts in terms of those values which his social group has taught him are precious and definitive. Even the greatest of social philosophers have not escaped entirely the tendency to observe social phenomena for the purpose of either condemning or approving them. The desire to draw a lesson for his fellow men or to substantiate one of his prejudices for or against a given type of conduct or a given form of social organization has been the primary driving force in the study of social facts by the vast majority of those who may more or less accurately be classed as sociologists.

Sociology has thus rather remained in the stage of social philosophy than arrived at the stage of social science. It is still to a very large extent "the substance of things hoped for, the essence of things not seen." As illustrated in such outstanding modern works as the *Pure Sociology* and the *Applied Sociology* of Lester F. Ward it is at once a philosophy and a faith,—a cosmogony, a theology and a religion. In the terms of the well-known Pearsonian classification of the stages of the advancement of a science, sociology is still considerably vitiated by the impress of the first or ideological stage, though it may be said to have fully arrived in the minds of all its leading devotees at the second or observational stage. Indeed, there are some who have made notable contributions to the metrical stage, but these are yet very fragmentary. It is for this reason that there has not been until recently any considerable body of sociological doctrine upon which most of the professional sociologists would agree. The era of system building by men of outstanding pre-eminence now seems, however, to be passing and the era of more patient and less spectacular research appears to be arriving. It may be expected,

however, that, on account of the closeness with which all sociological observation touches deeply implanted prejudices, the sociologists will not be numerous who will succeed in describing and discussing social facts with the same emotional indifference as to their true nature and import as the astronomer observes and describes the movements of the heavenly bodies. Observation will be sadly mixed with ideological, especially ethical, preconceptions, while the development of exact descriptions of a metrical sort will only very slowly replace the easy generalizations from a few facts which harmonize with wishes, conscious or unconscious.

Sociology then has barely passed its formative stage. There have been and still are many systems but little synthesis. This is the indication of the ideological stage. As a science progresses it loses the impress of the individual mind and becomes impersonal. It achieves a body of tested knowledge which is accepted with greater or less finality by workers in the subject in all countries. We no longer speak of any man's system of biology or chemistry, much less of any man's system of astronomy, except in historical review. Even such revolutionary discoveries or theories as those of Mendel in genetics, Wilson in cytology or Einstein in mathematical physics are absorbed into or added to a large body of accepted principles which remain relatively undisturbed thereby. Even medicine has recently tended in a large way to lose much of that magical and ideological character which made it the happy hunting ground of the charlatan and humbug and which divided its practitioners into rival schools. As it has become experimental and quantitative in method it has developed a great body of accepted facts and principles. This has, of course, not prevented the perpetuation of such ancient divisions as Allopath versus Homeopath, nor the development of new fads and fancies such as Chiropractic, Mental Healing, or the Abrams system of electrical analysis. Nor can one deny that there is still a large luck element left in medical practice, a fact recognized in the popular jokes about Dr. Killum and Dr. Sawbones. There is still much that is obscure and mysterious, so that modern medicine is only partially differentiated from the primitive diabolism of the age-old medicine man, sorcerer and sooth-sayer. The achievement of a generally accepted body of truly scientific knowledge tested over and over again by experience and applicable with almost mechanical certainty in both curing and preventing disease has not precluded resort to the manners and methods of the pre-scientific age in respect to matters still more or less obscure either in the minds of the public or of the experts themselves.

The analogy between medicine and sociology is of wider interest than the mere fact that both tend to move from the era of ideological systems to that of scientific description. Both fields have a therapeutic or normative aim and motivation. Logically this aim must rest for its fulfilment on a body of exact knowledge arrived at by the most rigorous methods of science. Practically and historically, as Spencer long ago stressed in many places, the desire to remedy one or more of the numerous ills which afflict mankind has made the social philosopher impatient of slow research and still slower verification and general acceptance; he has felt so keenly these ills that he has believed it necessary to propose that this or that be done, even though little more than divided opinion constituted the warrant. This has been most unfortunate for the development of sociology itself, for it has, at least in America, put the emphasis in sociological study on the aim of social improvement and assimilated the sociologist to the sooth-sayer and medicine man of an earlier age.[1] Sociology tended to become in the minds of both its students and the public an effort to discover ways of eliminating or reducing crime, poverty, prostitution, divorce or lynching. Obviously such curative prescriptions must rest on an exact knowledge of the manner in which such phenomena occur, that is, the conditions from which they arise, for it is only in the control of causes that prevention is possible. But as a rule the physician has in such matters been the unwitting victim of his own pious rationalizations. Just as in the writings of Hegel and all his kind one sees the diversion of intellectual energy into that fascinating pipe-dreaming which gives one of various sorts of teleological interpretations to the whole sweep of human history, so in the less grand but equally prayerful effusions of numerous sociologists of a later day favorite prescriptions for the cure of one or more of the major ills of man have been the chief stock in trade.

Sociology is thus only emerging from its formative period. It has much of the naïveté of medicine in the days of grandmother's household remedies, and much of the semi-religious piety of the original medicine man. It is still broken into schools, some with a strong idealistic bent and others with a crude materialistic penchant. But progress is being made. The facts of biology, psychology, anthropology and ethnology are being more minutely mastered and theories of social life brought into harmony with them. Above all, the reali-

[1] As this is being written the daily paper, July 10, reports that the Laura Spellman Rockefeller Memorial has granted $150,000 to Chicago University to inquire into and answer six "sociological" questions, such as, Why families are wrecked? How slums grow? Why voters shun the polls? Etc.

zation of the necessity of patient investigation tends to replace the desire to point the way to an immediate millennium. As a new sociological realism replaces the older idealizations it is evident not only that old solutions were largely pietistic rationalizations of subjective attitudes, but that they were hopelessly simple-minded. The more we come to know about fundamental social problems the more we realize how little we really know about them; and thus dawns the realization that it is more important at present to know the causes of social phenomena in both their immediate and in their remote relations than it is to attempt to apply one's favorite remedy to obvious ills.

II. EFFORTS AT CLASSIFICATION OF SOCIOLOGISTS

So diverse and ill-defined is the field of sociological inquiry that every effort to write the history of sociological theories has found it necessary to do so under a variety of broad headings which reveal its nondescript character. Thus Professor Paul Barth in his *Philosophie der Geschichte als Sociologie* used the following headings: The Individualistic View of History (The Great Man Theory): The Anthropo-Geographic View; The Ethnological View; The Culture-History View; The Political View; The Ideological View; The Economic View. A quite different set of rubrics was used by Professor Lester F. Ward [2] two decades ago in describing the existing schools or systems of sociology. He found that sociology was viewed as: Philanthropy; Anthropology; Biology (The Organic Theory); Political Economy; Philosophy of History; The Special Social Sciences; The Description of Social Facts; Association; The Division of Labor; Imitation; Unconscious Social Constraint; The Struggle of Races. Few would regard this as a satisfactory classification even in that day, for it is a bare enumeration of all the viewpoints of writers who had expressed opinions of interest to the sociologist and might well have been extended to include the poets and preachers on the one hand and the psychologists and statisticians on the other.

Moreover, such a classification is altogether too particularistic. Whatever else sociology may be said to seek it certainly seeks a synthetic view of man as an associating animal. In consequence the outstanding figures in the history of sociological thought have treated man from several angles rather than from one alone. They cannot readily be classified wholly under any of the above headings. A

[2] "Contemporary Sociology," in *American Journal of Sociology*, Vol. VII (1902), pp. 475–500, 629–658, 749–762; and *Pure Sociology*, p. 14.

greatly improved line of approach is found in Todd's *Theories of Social Progress*.[8] Though written from the viewpoint of a rather special inquiry, this author has found it possible to treat numerous sociological theorizings under the four headings: (a) Materialistic, (b) Biological, (c) Institutional, and (d) Ideological. Such a classification has the advantage of permitting one to treat a single author under a variety of headings, if his utterances make this desirable. In order to carry out his plan, however, Professor Todd has found it necessary so to subdivide each of his main headings as to make the treatment piece-meal and even artificial and superficial rather than integral, genuine and penetrating. Thus his first class, the Materialistic, includes as the sub-headings of special chapters: Geographic Determinists, The Technicians or Inventionists, Money, Capital, Division of Labor, and The Economic Interpretation of History. It is obvious that this grouping is not an analytical one; the items are far from homogeneous. Aside from the questionable propriety of classing Invention, or the Division of Labor, or even the Economic Interpretation of History under the general rubric, Materialistic, they seem badly associated when grouped with geographic factors and money or the medium of exchange.

Still another ambitious attempt at classifying the materials of sociology for treatment has been made by Professor L. M. Bristol in his *Social Adaptation*. This work also is written from a rather special viewpoint, being "A Study in the Development of the Doctrine of Adaptation as a Theory of Social Progress." But the author brings within his view the entire scope of sociological literature. His classification must be viewed as the best yet used by any one who has attempted a systematic treatment of this literature. After special chapters on August Comte and Herbert Spencer he studies all other writers under the following headings: Sociological Methodology; Biological Evolution; Neo-Darwinian Sociologists; The Environmental School; Development of the Concept of Society as an Organism; The Anthropological Sociologists; The Historical Sociologists; Sociologists Emphasizing one All-Important Principle (as Tarde and Giddings); Invention and Production; Active Social Adaptation; Idealization and Religion. Made for a special purpose which it suited well enough, this classification is unwieldy for a brief survey of a few thousand words. Moreover, it tries the almost impossible task of combining a treatment of men along with the treatment of general ideas or principles of interpretation. This results in a partiality of emphasis which is ill-proportioned. Thus under "The Sta-

[8] N. Y., 1918.

tistical Method" is treated the work of Quetelet. But Galton and Pearson who contributed as much or more to present statistical methods are classed under Neo-Darwinian Sociologists, sub-heading, "National Eugenics." There are numerous cases of such incongruities resulting from the method of classification.

There are only two ways for the historian of ideas to avoid such partiality of emphasis with the resulting tendency to caricature rather than present a rounded view either of men or of principles. One is to treat authors individually as units in a more or less strict chronological order. The other is to present the views of various authors, again more or less chronologically, on each of the headings in some scheme of classification which is believed to embrace the whole field of theoretical sociology. The plan adopted in the following paragraphs is a combination of these two methods. The period preceding Comte is treated briefly as pre-sociological. Comte, Spencer and Ward are each given more or less individual treatment as the founders whose systems are of greatest interest to English students. The remaining contributors are classified according as their emphasis has been upon physiographic, biological, psychological or institutional aspects of social life and evolution. A more or less complete classification appears in later pages.

III. SOCIOLOGY BEFORE COMTE

1. THE GREEKS

If systematic sociology may be said to have begun with Auguste Comte, it is equally true that every phase of sociological inquiry had been treated by numerous writers from the early Greeks on down to Condorcet and other precursors of Comte. In the same manner it may be noted that Greek studies of man and society culminated in the works of Plato and Aristotle; but their finished character is evidence that questions of social policy and organization had long been discussed by their predecessors and precursors. For the most part the earliest works dealing with human origins and destiny were the sacred books of various civilizations. These are illustrated by the records of the Egyptian scribes, the Code of Hammurabi, the Old Testament record of the Hebrews. Most of them are found in the famous series of fifty-one volumes edited by Professor Friedrich Max-Müller under the title, *The Sacred Books of the East.* Among early Greek documents of significance should be mentioned the writings of Homer (cir. 1000 B. C.) and Hesiod (cir. 850 B. C.) with

their descriptions of social manners and customs, myth, theology and epigrammatic wisdom; Anaximander's (610-546 B. C.) emphasis on the social significance of prolonged infant helplessness; Theognis's (cir. 550 B. C.) elucidation of the importance of heredity and eugenic reproduction; Aeschylus's (425–456 B. C.) studies in social evolution; Herodotus's (484–425 B. C.) ethnological and anthropological descriptions; and Hippocrates's (cir. 460–370 B C.) remarkably realistic discussions of the influence of physiographic factors on social institutions and physical traits.[4]

The immediate precursors of Plato were the Sophists, who from the middle of the fifth century B. C. taught a rationalistic and skeptical view of life and developed the art of disputation in the form of eristic, or discussion for the sake of victory, out of the older dialectic, or discussion for the sake of discovering the truth. It has been the custom since the days of Plato to revile the Sophists as horrible examples of intellectual unsoundness and dishonesty. The judgment of Professor Gilbert Murray is doubtless sounder and juster. He says of them: "Their main mission was to teach, to clear up the mind of Greece, to put an end to bad myths and unproven cosmogonies, to turn thought into fruitful paths. Many of them were eminent as original thinkers," as Gorgias, the destroyer of Eleaticism, and Protagoras, democratic philosopher and founder of the doctrine of the relativity of knowledge, Antiphon and Alkidamas. . . . The whole movement was moral as well as intellectual, and was singularly free from the lawlessness and corruption which accompanied, for example, the Italian Renaissance. The main fact about the Sophists is that they were set to educate the nation, and they did it. The character of the ordinary fourth century Greek, his humanity, sense of justice, courage and ethical imagination, were raised to something like the level of the leading minds of the fifth century, and far above that of any population within a thousand years of him. After all, the Sophists are the spiritual and intellectual representatives of the age of Pericles; let those who revile them create such an age again.[5]

Socrates was, like the Sophists, a teacher and an opponent of philosophy, but believing himself possessed of a mission and deeply pious he relied on dialectic rather than eristic, and sought to overthrow the Sophistical doctrine of the relativity of morals and justice by the establishment of a superior moral law, a sort of natural law, which

[4] E. Zeller, *Greek Philosophy to the Time of Socrates;* E. Barker, *Greek Political Thought: Plato and His Predecessors.* For the monographic literature on the history of sociology see H. E. Barnes, "Sociology Before Comte," in the *American Journal of Sociology*, September, 1917.

[5] *Ancient Greek Literature*, pp. 163–164.

would be basic, permanent and binding on all. Here he seems, from one point of view, to be foreshadowing the natural law, or law of nature, concept of the Stoics. But this would be a misinterpretation of his celebrated doctrine that knowledge is virtue, that is, that knowledge is the sole condition of virtuous action. It might be assumed that were man thoroughly rational and at the same time equipped with complete knowledge his actions would be fully in harmony with the highest and final ethical principles. But Socrates denied the possibility of acquiring knowledge in any final or absolute sense; he was the first great pragmatist, for he held that knowledge is practical wisdom and has for its aim the Good which in turn is synonymous with the useful, the advantageous Such concepts obviously avoid the more difficult problems of both practical and theoretical ethics in a world containing such diversity of customs and so many unintelligent and mischievous men, however workable by a mind so gifted as that of Socrates. His really great contribution was, therefore, not in the realm of theory, but in the assertion of the claims of the individual intellect. It is his imperishable merit to have shown at once the inestimable value of critical and honest search for knowledge and the necessity of skepticism regarding currently accepted doctrines.

Plato owed much to Socrates. He found in the latter's doctrine that there is an enduring essence of morality and justice binding at all times and places the suggestion of his doctrine that the idea is the true reality. *The Republic* seems to have been an outgrowth of distinctly Socratic discussions. Its fundamental questions are: "Who is the good man?" and "How is the good man produced?" Such a man must, in the eyes of the philosopher of the Greek city state, be a citizen; hence his question becomes, "What is the good state?" This in turn involved questions as to the nature of justice and the means of its establishment. Moreover, a man cannot be good without knowledge, and therefore it is necessary to inquire what is the good and by what educational processes it may be implanted in the minds of future citizens. *The Republic* was written as a protest against the Sophists and for the high and noble purpose of making men free,—on the theory that in the truth alone can true freedom be found.

The Sophist Thrasymachus had argued that since every man seeks his own interest and only the strongest can get what he wants, justice must be defined as the interest of the strongest. The government is the strongest, otherwise it would not be the government; therefore, justice must be what pleases the government. Furthermore, since the just man is one who works for another's interest and the unjust

one who works for his own, the wise man is just when he must be and unjust if he can be.[6] Glaucon also had argued that justice is an artificial thing established by law and social convention and enforced by some governmental or other authority. Anticipating Hobbes by many centuries he argued that in a state of nature injustice is done by everyone and hence all suffer injustice. There results a movement by the weak to enter into a contract whereby all agree to certain restraints and rules laid down in a code. Man is thus a self-seeking creature and can only be turned aside from a ruthless exploitation of his opportunities in his own interest by the establishment of some superior external force.

As over against these views Plato advances a social theory which centers around the concept of the organic unity of the state and the harmony of interests of state and citizen. No one until recent times has developed so completely the concept of the state as an organic whole carrying on its activities through a division of labor inherent in the natures of men. His conception was more than that of the economic division of labor. It rested on a realization of the diversity of men and the necessity of mutual aid for the achievement of the highest welfare of each. He set up an ideal which has retained an enduring fascination for all ethical philosophers since, namely, the achievement at once of justice for the individual and peace and prosperity for the state through the location of every individual in that special niche in a co-operative commonwealth for which his talents best suit him. This would give to each citizen the largest opportunity for self-expression and self-realization and hence promote the greatest happiness and the living of the good life. It would achieve at once the highest welfare for the individual citizen and that ultimate goal of all human effort, the ideal community.

This is an ideal now more active than at any time since Plato expressed it and, perhaps, more nearly capable of realization than ever before through the development of psychology and vocational guidance. But Plato's division of labor was over simple; based on a somewhat fanciful analysis of human nature as composed of appetitive, spirited and rational elements, it provided for three classes, the producers of sustenance, the warriors, and the counsellors or magistrates. This stilted and artificial analysis of mind represents a type

[6] See Ernest Barker, *The Political Thought of Plato and Aristotle*, London (1906), p. 96; also *Greek Political Thought: Plato and His Predecessors*, London (1917). These are both books of the highest value not only for their exposition of the political theory of the Greeks, but also for the critical discussion of fundamental questions raised thereby.

of psychological theorizing much in vogue almost up to our own day. It not only denies the unity of the mental life, but is altogether naïve as regards the analysis of individual motivation in conduct. Plato's was in fact an ethical idealization based on a noble and philosophical conception of the rational way of living as the final achievement of human perfection. This obviously is metaphysical ethics rather than psychology. And it led, in application to social life, to a similar idealization rather than to political realism, when it produced the conception of the benevolent absolutism of the all-wise philosophers into whose charge the guidance of the state was to be placed. Amidst the loves and hates, the rivalries and factional strifes of the many centuries since Plato, utopian dreamers of every type have been searching for these infallible and incorruptible rulers. In practice every aristocracy fails to be consistently wise and just, and indeed every democracy as well. In this respect, as in so many others, *The Republic* is an effort to solve by simplification and idealization permanently insoluble problems of social life and organization growing out of the imperfections of human nature. There may be few men in every society who are fit only for manual pursuits and a few others who are good only for soldiers; there may be a few in fact who would approach the ideal of the philosopher-magistrates of Plato's imagination; but in reality the vast majority of men are neither wholly one thing nor another. In all of us some of the time and in some of us all the time the emotions, prejudices, and pre-valuations confuse themselves with the reasoning processes, or substitute themselves for reasoning, so that the ideal of a state governed by an impartial and contemplative rationality is a utopian escape from reality.

Plato's ideal of organic unity in the state required the obliteration of the causes of rivalry and strife, and hence he provided for communism of property and women. The communism of property was to insure that the government would act unselfishly and in the interest of all. No one could secure material gain through governmental action. The magistrates were to be specially trained and highly selected and would be controlled by a deeply ingrained sense of the rightful limitations of their sphere of action, for injustice, he held, consists primarily in going outside one's own sphere of right and duty. The state would have as one of its primary functions the education of the citizens and would take every opportunity to inculcate ideals of good citizenship. His ideal community would not rely on force as a general principle; nor would it hope to produce good citizens by legislation, for this is futile. He held that, if the character of the

citizen is sound, laws are unnecessary; if unsound, useless. In this he anticipated the idealizations of the philosophical anarchists and utopian individualists of every time and clime.

Plato's communism was, however, somewhat alloyed on its material side in that he provided for proportional rather than absolute equality. Having dispensed with private property as the reward, and competition as the method of determining merit, Plato was compelled to find the method of distributing rewards in proportion to merit in the votes of the citizens. This is substantially the chief point of contention between present-day individualism and socialism. It has always seemed to some social philosophers and to a large part of the unsuccessful elements in a population that the political method was a more effective and just method of determining who were worthy of high rewards than the admittedly haphazard methods of economic struggle. But the fact has always remained that this is a world of scarcity and hence the vast majority of men have preferred the substantial advantages of accumulated personal material resources to the notoriously fickle loyalty of public opinion. It must be recognized, however, that Plato's principle of reward in proportion to merit, rather than on the basis of an absolute equality, commends itself to the discriminating modern democratic philosopher. He did not make the mistake of assuming that all men are inherently equal and saw that reward in proportion to merit implied some sort of objective inequality.

In *The Republic* questions of governmental forms are analyzed and the rightfulness of the rule of an intellectual aristocracy substantiated. In a state ruled by justice, political power and broad intellectual culture must be united. In practice such a state degenerates into a timocracy, or one ruled by love of honor or glory, as Sparta. A still more degenerate form is the oligarchy, or the rule of the rich, a form based on an excessive emphasis on private property. Such rule over the poor, however, is likely to give way to democracy or the rule of the mob excited by an undue love of liberty. This leads to dissension and strife which prepare the way for the tyrant; and this is the lowest of all forms of government. This series is somewhat modified in *The Statesman*. Here Plato admits that the all-wise philosophers are not to be found. The most important question in that case is whether the government is to be subject to law or not. If so, then royalty or the rule of one under law is best; if not, then tyranny, or the rule of one not subject to law is the worst of all possible forms of government. Aristocracy is the second best of those forms of government subject to law, while its corrupt form,

oligarchy, is less bad than tyranny. Thus democracy becomes the worst form of government under law and the best form unrestrained by law. Democracy is, at best, a weak and inefficient form of government; it can do neither much good nor great harm.

In *The Laws* Plato becomes the practical legislator rather than the contemplative philosopher. He abandons his communism of property, and yet would in the interest of harmony preserve as great an equality of distribution as possible. Moreover, he outlines a community ruled by an aristocracy based not on intellect but on property as an index of worth. The communism of the family also disappears, but not the eugenic ideal which Plato had coupled with it. He would have the government not only supervise marriages with a view to securing well-rounded offspring, but scrutinize the first ten years of married life through the agency of ward committees of women. This would be paradise for the ward committees but hell for the young married couples!

In summation, therefore, Plato must be viewed as throughout an ethical philosopher rather than a social scientist. He sought both in theory and in practical rules the realization of certain ethical concepts. But in his emphasis on the organic nature of the community, the division of labor according to natural capacity, the rôle of education, the types of government, the rational basis of aristocracy, the sources of strife within the community and the possibility of communism, the principle of proportional equality, and the ideal of selective mating and eugenic reproduction, he outlined a panorama of constructive social thinking which has never been surpassed.

Aristotle's *Politics*, however, must be placed alongside the writings of Plato. While he criticised Plato's conception of the "oneness" or organic unity of the state and inclined to view society as an association or co-operation of dissimilar units rather than a union of similars, he, like Plato in *The Laws*, took an historical view. While more realistic and inductive than Plato's, Aristotle's discussion is throughout deeply tinged with ethical considerations. He rejected the doctrine of the Sophists that the state and other institutions are artificial creations for the doctrine of evolutionary development as means of satisfying human needs. The household, as the elemental form of association, provides not only for the propagation of the species and for man's physical needs, but is essential also for his moral development. It cannot, therefore, as in the fancies of Plato, be done away with. Households expand into villages, which increase the physical satisfactions of life and serve the moral and ideal purposes of expanding the human personality. Villages unite and create the state.

This still further increases the scope and effectiveness of economic activities, makes for greater security of person and property, and above all provides the medium *par excellence* in which man's moral nature finds its highest development. On the principle that the true nature of anything must be judged from its highest development, Aristotle held that man is a political animal because through the expansion of his personality in the life of the state, the identification of himself and his interests therewith, man reaches the highest level of human possibilities, the *summum bonum* of human aspirations.

Aristotle found society essential to human existence, much more so for human development. For he "who has no need for society because he is sufficient for himself, must be either a god or a beast; he is no part of a state."[7] Thus all talk of a state of nature becomes nonsense. The state is prior to the individual and the latter can be intelligently viewed only as a citizen. But Aristotle was careful not to carry the organic conception to the extent of snuffing out the individuality of the citizen. The state is conceived as a co-operating unity, a compound, in which there is a considerable place for self-love, in which persons, families and institutions retain their own interests and individuality. Yet no other form of association is equal to the state; all others aim at some partial good, the state "aims at the whole good of man for the whole of his life."[8] It is obvious that Aristotle did not, any more than Plato, divorce politics from ethics.[9] The state is subordinated to a moral purpose, the "good life" of its citizens, while the individual as a citizen in turn finds the guiding principles of life in the aims of the state, the promotion of those conditions in which the good life is possible for all.

Aristotle finds the basis of unity in the state not in any gross material interests, but in justice and friendship. By justice he means the rendering to each of a fair reward, safe-guarding of rights, and the enforcing of duties. But back of justice is friendship which expresses itself in social intercourse, in generosity, in the conception that another's good is also one's own, and in the happiness of the generous-minded citizen. This is clearly an idealistic and ethical treatment of political unity rather than a realistic one. But it harmonizes with his treatment of liberty. For liberty was not conceived as self-government, or obedience to an authority set up by one's self; nor as freedom from state regulation and interference.

[7] F. W. Coker, *Readings in Political Philosophy*, N. Y. (1914), p. 27.
[8] Barker, *Political Thought*, p. 233.
[9] For a contrary view see Wm. A. Dunning, *Political Theories, Ancient and Mediæval*, N. Y. (1902), pp. 51–53.

Liberty is reconciled with obedience to constituted authorities, for it is conceived as the fulfillment of that ideal justice which is the aim of the laws and the constitution. Here Aristotle falls into a bit of utopianism; for such a concept of liberty would be sensible only in an ideal commonwealth.

Likewise his conception of equality was not that of radical democratic theory, but the proportional equality of Plato,—to each according to his merit. Men differ in birth, in wealth, in virtue, and a proper sense of equality recognizes the higher as higher, the worse as worse.[10] This made possible Aristotle's famous justification of slavery on the ground that some men are born to rule and others to be ruled. "He who is by nature not his own but another's and yet a man, is by nature a slave. . . . For that some should rule, and others be ruled is a thing, not only necessary, but expedient; from the hour of their birth, some are marked out for subjection, others for rule." That Aristotle did not intend this as a justification for the existing division between the bond and the free is shown by that passage in which he points out that "some slaves have the souls and others the bodies of freemen." Modern studies of individual differences and historical fact would seem to justify Aristotle's distinction. For in every society there are those who find themselves in positions of personal or social dependency; while there are others whom no form of social organization can prevent from acquiring power over their fellows.

As to the institution of private property, Aristotle combated the communism of Plato as provocative of indifference and disharmony. This is all the more astonishing as Plato had wished to do away with private property as one of the main sources of discord, but Aristotle's reasoning is an induction from observation. He held that experience proves that there is greater discord among those holding property in common than among those with private property. Moreover, the sense of possession gives a sense of worth and dignity. For this reason Aristotle also objected to the communism of wives and children; especially, he held, the possession of children is the basis of affection for them. But while private property is valid and even necessary, Aristotle did not make its acquisition an important concern of the citizen, for the latter should be able both to command and to obey. Therefore, the citizen should not be required to labor in order to live. Economic activities for the most part should be left to those, farmers and artisans, accustomed to

[10] Cf. Barker, *op. cit.*, p. 356; also Paul Elmer More, *Aristocracy and Justice*, Shelburne Essays, Ninth Series (1915).

obey. Aristotle's view here, as in the justification of slavery, found echo in the brilliant *Disquisition on Government* by John C. Calhoun over two thousand years later.

And it may be noted in passing that the ideal of citizenship reflected here is that expressed by Pericles in his famous oration in commemoration of those who fell in the Pelopenessian War. "We aim at a life beautiful without extravagance, and contemplative without unmanliness; wealth is in our eyes not a thing for ostentation but for reasonable use; and it is not the acknowledgement of poverty we think disgraceful but the want of effort to avoid it."

Aristotle was the first to make sovereignty a central problem of political science, and his discussion of it is a curious mixture of modernity and Greek idealism. In answer to the question as to whether the basis of ultimate power in the state should be numbers, wealth, or intelligence, whether the few or the many should rule, he arrives, by a Socratic style of argument, at the conclusion that the mass should hold the supreme power. The aim of the state being not wealth but the promotion of happy and noble living, political power should be held by those who contribute most toward the perfection of life, and these are the virtuous or rather the just. In practice this means the mass, for their total virtue exceeds that of the few. But Aristotle makes the exception that if there be one who is superlatively preeminent in virtue, or if a few be so, then these should be sovereign.

But above the rule of the one, the few, or the many is the law. Even though this work injustice at times, in the long run it will prove less unjust than the wisest man. And yet Aristotle realized that in practice even an approximation to perfect justice is impossible. "The goodness or badness, justice or injustice, of laws is of necessity relative to the constitutions of states. But if so, true forms of government will of necessity have just laws, and perverted forms of government will have unjust laws."[11] While, therefore, Aristotle preferred a government of laws to that of men, he recognized that in the last analysis the character of the people and social tradition are decisive. He pointed out that where the people cherish equality and even-handed justice democracy is natural and inevitable, but, if they reverence authority and show a deep-seated loyalty to an upper class, monarchy (or tyranny) or aristocracy (or oligarchy) is equally natural and inevitable.

Equally illuminating and permanently valuable is Aristotle's analysis of the various forms of government and the varied combinations of elements back of them. Here his realism, his universality,

[11] Coker, op. cit., p. 68.

his modernity, reach their apex. He is credited with having made a study of one hundred and fifty-eight constitutions, and was intimately familiar with the anarchy, revolutions, and tyranny of the Greek city states under all possible forms of political organization. He discussed with remarkable acumen the various conditions under which the pure forms of government, royalty, aristocracy and polity and their respective corruptions, tyranny, oligarchy, and democracy are likely to thrive; also the numerous personal and social, especially economic, causes of those numerous revolutions whereby one form is transmuted into another. These sections alone would make of *The Politics* one of the world's greatest books.

Aristotle thus appears less idealistic, more realistic and hence more universal than his master and earlier contemporary Plato. While he derived his immediate inspiration from that Athens, which as Professor Dunning says, "sounded the depths and crowned the heights of human nature" in both material and spiritual matters and thus drew upon a vast range of historical information, he had himself an unusually intimate view of great affairs from the vantage point of King Phillip's court and the position of advisor to Alexander, was gifted with remarkable powers of observation and had a penchant for writing systematic treatises, which, on account of the great breadth of his learning, dealt with nearly every subject of speculation or observation. It was thus that his writings became the fountain of learning and wisdom for a later age. In him culminated an age of scepticism and freedom of critical thought which was unrivaled until our own day.

The Stoics and Epicureans represent the leading currents of Greek thought after the period of Plato and Aristotle. The former looked upon man and nature as a product of divine creation and guidance. God was in the world and all its manifestations. His emanation—the *Logos*—was the source of all wisdom. Man could appropriate this through his possession of rational powers. Human institutions were perfect according to the degree to which statesmen had been successful in absorbing this divine wisdom and translating it into human action. Society was a natural product, due to man's innate sociability. The intellectual communion of the wise was the most vital of all human relationships, transcending national boundaries. There thus appeared a sort of internationalism, based upon the conception of the brotherhood of the intellectually *élite*. The Epicureans took the opposite position on nearly every crucial point. The Gods had nothing to do with the creation of the world and man, which were purely natural and evolutionary products. Human wisdom was the

result of a vast period of evolution and the accumulated experiences of the race during this time. Society was a purely utilitarian device to give the advantages of co-operative effort and division of labor. The state was the product of a political contract, drawn up to avoid the ravages of anarchy. Whereas, the Stoics had held that the noblest of human acts was the praising of God and his works, the Epicureans held *religiō* to be the greatest curse of the race, and endeavored to promote serenity and self-confidence by teaching that the gods were utterly unconscious of the existence of the human race, and that man had nothing whatever to fear or gain from the supernatural world.[12]

Roman political theory was chiefly an adaptation of the earlier Greek thought, with the greatest popularity on the side of Stoicism. The Roman lawyers made important contributions with respect to the recognition of the individual and corporate personality, and the elucidation of the concept of popular sovereignty and the supremacy of the secular state.[13]

2. THE CHRISTIAN EPIC

Another source of social and political theorizing was the teachings of Jesus, the Apostles, especially Paul, and the Church Fathers. The doctrine of passive obedience counselled submission "to every ordinance of man," enjoined the rendering to Cæsar of the things that are Cæsar's, and proclaimed that "the powers that be are ordained of God." This at once aided the spread of Christianity, but deprived it of much of its potential revolutionary power. On the other hand, the associated doctrine that one ought to obey God rather than men became the basis of the belief in a moral order and authority superior to the temporal, has encouraged martyrdom in both good and bad causes, and when combined with the Stoic doctrine of natural law as the expression of an Eternal Wisdom, and the derivative theory of natural rights, has played a great rôle in the thought of the Western World. Closely associated with Stoicism also is the doctrine of the brotherhood of man. This, like the doctrine of passive obedience, has played little effective part directly in human affairs because in application it has never been able to overcome practical economic and political considerations about which have cen-

[12] E. Barker, *Greek Political Thought; Aristotle and His Successors;* and E. Zeller, *Stoics, Epicureans and Sceptics.*

[13] The best work on this subject is A. J. Carlyle, *A History of Medieval Political Theory in the West,* Vol. I.

tered fundamental sentiments of group loyalty and group rivalry.

Of all features of Christian thought, however, which have formed considerable parts of the theorizing about man and society, by all odds the most important has been what Santayana has beautifully and accurately designated as "The Christian Epic." This is the story of the creation of earth and man, of the latter's fall through sin and his banishment from the Garden of Eden, of his subsequent redemption through the death of the Son of God, a coming Final Judgment in which saints and sinners shall be separated, the former for everlasting bliss in heaven and the latter for everlasting torment in hell. Taking it all in all, it is undoubtedly one of the most complete and one of the most beautiful myths that human imagination has anywhere created. But unfortunately it was accepted by Christian thought as a "Revelation." This gave it an unquestioned and, what is much worse, an unquestionable, authenticity which not only precluded intellectual inquiry but made doubt the gravest sin. When one adds that it made the preservation of one's immortal soul the primary object of truly Christian hope and effort, one hardly need say that it became a great hindrance to that free and untrammelled search for truth such as the Greeks had exercised. The first notable effort at a relative free and bold exercise of thought was made by Erigena (cir. 800–877) who made the intellect man's highest attribute and placed reason above revelation and authority. But he was denounced by the Pope and three hundred years later, when Scholasticism had reached its full perfection, his scholarly work was condemned by church authorities as "swarming with worms of heretical perversity."

The most important social theories of the Christians were the agreement with Aristotle and the Stoics as to the natural sociability of man; the assumption of an original golden age, namely, the state of man before the "fall"; the contention that civil government was rendered necessary by the degraded nature of man produced by his "fall"; the agreement, nevertheless, that government was a divinely established institution, and passive obedience to civil authorities a part of the *ethik* of a good Christian; and the strong conviction that it was not a fruitful occupation to consider ways and means of improving human social and political institutions, because the chief concern of the Christian should be the salvation of his immortal soul, from which he might be fatally distracted by Utopia building.[14]

[14] An excellent work on Christian origins is F. C. Conybeare, *Myth, Magic and Morals*. Carlyle, op. cit., Vols. I–II, is the most satisfactory analysis of the early Christian political and social theories.

3. SCHOLASTICS AND THE HERALDS OF MODERNISM

The chief function of Scholasticism was to reconcile the teachings of Aristotle, "The Philosopher," with those of Christianity, especially as represented in the writings of Augustine and the Church Fathers. The culmination is seen in St. Thomas Aquinas. Aristotle's view was rational and scientific in the best sense, and the great problems of thought and speculation with the Schoolmen were to reconcile a rational view of life with what life presumably must or ought to be in the light of an assumed revelation. Extraordinary acumen was thus shown in reconciling the irreconcilable, but the stilted formalism of scholastic writings made no contribution to a realistic comprehension of human nature or social processes. The authority of revelation was supreme and credulity the mark of the learned mind. The Schoolmen did, however, make a sort of amalgam of Aristotelianism, Stoicism and Patristic Christianism which supplied the basis for the more highly diversified political and social theorizing of the subsequent centuries. They developed the art of disputation to its highest perfection; they kept alive the spirit of learning and even of inquiry according to their light, and practised with real skill the art of teaching great numbers of enthusiastic students.[15]

Space permits little more than the mention of a few outstanding names and compels omission of any effort to delineate the nature of social and political thought centering around the rise of the Papacy and the subsequent conflict between the supporters of Pope and Emperor. A touch of modernism is found in the *De Monarchia* (about 1310) of Dante (1265–1321). This was a masterly plea for temporal authority. On the ground that peace is essential for social welfare he would establish a universal empire on the model of Rome. In the best manner of the day his arguments were supported by the authority of Aristotle, the precedents of Old Testament and Roman history, the precepts of canon and civil law, citations of appropriate scriptural texts, and appeals to popular myths, traditions, and superstitions. Pierre DuBois (1255–1321), Marsiglio of Padua (1270–1342) and William of Ockam (died cir. 1349) vigorously attacked the assumptions of papal prerogative and, especially the former, in his

[15] See James J. Walsh, *The Thirteenth The Greatest of Centuries.* On mediæval social theory the best works in English are Carlyle, op. cit., Vols. II–IV; F. J. C. Hearnshaw (ed.) *The Social and Political Ideas of Some Great Mediæval Thinkers;* and J. M. Littlejohn, *The Political Theory of the Schoolmen and Grotius.*

Defensor Pacis, advanced doctrines such as popular sovereignty which figured largely in the coming revolt. These two along with Wycliffe, Huss, Gerson and Cusanus are the outstanding figures in the controversies which preceded the Councils of Constance (1414–1418) and of Basel (1431–1449) or arose out of the Great Schism and the Conciliar Movement. While adding little to social theory in its special sense these writers clearly establish the basis for the doctrine that the ultimate authority in the Church was the body of members or their duly accredited representatives in council assembled. They not only undermined the theory of temporal authority of the Pope, and laid the basis for the Reformation, but they were the pioneers in the expression of the democratic principles of popular sovereignty and representative government which have dominated modern thought in the political sphere.[16]

Meanwhile the light of true learning was kept burning dimly amidst the prevailing gloom of religiosity and mysticism by scholars here and there who were unconscious heralds of a new age. If Roger Bacon (cir. 1214–1294) now appears to be the greatest of these, one may be certain that he had able predecessors as well as successors in the long centuries preceding the beginnings of modernism in the sixteenth. But they were few and their minds seldom were free from what appears to the positivist of today as a strange mixture of the logic of magic and the logic of science. The revival of Aristotelianism in the thirteenth and of Platonism or Humanism in the fifteenth century caused little more than a flicker of critical intelligence or scientific curiosity.[17]

A note of distinct realism was struck by Niccolo Machiavelli (1469–1527) in his immortal treatise on the art of maintaining political power, entitled *The Prince.* Its modernity derives from its universality, its objectivity, and its freedom from cant and mysticism. *The Prince* was undoubtedly influenced greatly by Machiavelli's own experiences as a practical politician and diplomatist in Florence during a period notorious for governmental instability and unscrupulous political methods. And yet it is not a book of an epoch, but for all times and places. The validity of its instructions and mandates can be tested by historical record or current events. Unlike Plato or Aristotle, Machiavelli accomplishes a complete divorce of ethics and politics. He frees his mind from the metaphysical and religious prepossessions of the mediæval mind; he even separates his discus-

[16] On these developments see J. N. Figgis, *From Gerson to Grotius.*

[17] See Harry E. Barnes, "The Philosophy of Francis Bacon," *The Scientific Monthly,* vol. XVIII, May, 1924, pp. 475–495; J. H. Robinson, *Mind in the Making;* H. O. Taylor, *The Mediæval Mind.*

sion from considerations of public and popular welfare and moral principles. He was probably little, if any, more sophisticated, and, indeed, even less interesting as a person than his worldly-wise literary and philosophical contemporary, Erasmus, (1466–1537) but his contribution to social philosophy was vastly more important. He devotes himself to a consideration of how government, especially that of an autocratic prince, may acquire and maintain power and even increase its dominion. *The Prince* at once aroused vehement controversy and this debate over its merits still continues. Its influence has been, and still is, enormous. Some one has said that "no other man has walked down the aisle of fame with so small a book under his arm."[18]

Machiavelli postulates that human nature is always and everywhere the same and confronted with similar problems. Consequently, an enlightened study of history ought to reveal precedents for the solution of present difficulties and prophecy for the future.[19] Interested not in general social theory but in the practical art of political success he further postulated that the principality that was not growing and expanding was decaying. His fundamental principle, therefore, is that the Prince or sovereign government must be guided by no other consideration than the maintenance and increase of power.[20]

In all the vast literature which Machiavelli has stimulated there appears little that arrives at the essence of his doctrine. It has for four centuries been the popular attitude to decry him as a moral pervert, as the mentor of the cunning, crafty conspirator. It does not seem at all true to view *The Prince,* as does Macaulay in his essay "Machiavelli," as an ironical effort on the part of its knowing and sophisticated author to inform the general public of the machinations and artful deceits of their politicians and statesmen. It seems inadequate to regard Machiavelli as setting forth the art of politics as practised in the conspirital society of his day. Nor is it sufficient to brand him as unmoral or as immoral, or as indifferent to the claims of religion and humanity. Dogmatic moralists and childish idealists have sought to make his name a synonym for all that the

[18] Quoted by J. P. Lichtenberger, *Development of Social Theory,* p. 131.

[19] This theme has been recently discussed by W. E. Heitland, *Behind and Before,* Cambridge, 1924.

[20] For a very excellent and readily accessible summary see the chapter in Lichtenberger, op. cit.; extended excerpts are reproduced by F. W. Coker, *Readings in Political Philosophy;* best translations are those by C. E. Detmold (1882) and Henry Morley (1883); excellent discussions will be found in Dunning, *Political Theories, Ancient and Mediæval,* Chap. xi; Lord Morley, *Machiavelli,* Romanes Lectures (1897); and Figgis, *Studies of Political Thought, from Gerson to Grotius,* Lecture III; for an interesting modern version of Machiavellian doctrine see Henry Champernowne, *The Boss* (1899).

mores condemn. But there is in him something permanent and contemporary. When recently presented by the Fascisti with a sword bearing the quotation from Machiavelli: "You cannot maintain a state by words," Premier Mussolini is reported to have remarked: "Machiavelli's doctrines are alive to-day even more than four centuries ago, because, though the outer aspect of life has greatly changed, no deep changes have occurred in the minds of men or in the actions of nations." "Machiavelli's survey of mankind is not limited by nationality or time."[21] He must, therefore, be read and his precepts pondered by politicians, statesmen and diplomats in every clime; but none dare approve him openly. The preachers of an unreal and cant-encumbered morality have brought it about that Machiavellianism requires that Machiavelli be openly condemned but secretly imitated.

And what then is the essence of this Machiavellianism? It is nothing other than that high form of expediency which represents the completest operation of human intelligence. Given separate states and principalities each endowed with the qualities of sovereignty; given that all are engaged in that eternal struggle which is an inevitable accompaniment of life; given that, therefore, "the supreme duty of the state, whether principality or republic, is to maintain its dominion and its vital quality of growth"[22] there is a supreme expediency, which, ascertained and followed, will preserve, as far as human intelligence and power can preserve, political integrity and prestige. An intelligence crystal clear and equipped with adequate knowledge of individual and social psychology could confidently rely on shrewd cunning to maintain not only power and prestige but also a certain splendour and mysticism of personality which make the great of earth feared and revered. Such an intelligence, as the Prince, could commit most of the crimes in the calendar, but he would do so only under those circumstances which, either through popular deception or through the conjuncture of circumstance, enveloped his acts with a quality of public benefit. Nor could it be argued, on the premises laid down, that there was here something immoral or that the Prince was disregardful of religion. Machiavelli repeatedly emphasizes the necessity of adapting action not only to the manner in which the power of executing it has been acquired but to all the other circumstances attending it. This involves the necessity of giving heed to the prevailing state of public opinion, the popular standards of morality and the means for pop-

[21] *The Springfield Republican*, June 17, 1924.
[22] F. H. Giddings, *Studies in the Theory of Human Society*, p. 105.

ular action. The Machiavellian, therefore, would conduct himself one way in the conspirital society of fifteenth century Florence, the French Revolution or Bolshevist Russia and in quite different ways in the New England town of 1725, the New England mill town or the great metropolis of today. And most people would.

This is of course to lift the theory of Machiavelli into an idealized plane of super-intelligence rather above the level of mortal man. For in practice even a Bismarck cannot always calculate all the elements in the situation with unerring accuracy. Machiavelli's own rules and precepts do not seem always to harmonize with this super-intellectualism but such failure only evidences the difficulties of practice, not the invalidity of theory. He dealt with actuality in a sternly realistic manner. "Many have imagined republics and principalities such as have never been known to exist in reality. For the manner in which men live is so different from the way in which they ought to live that he who leaves the common course for that which he ought to follow will find that it leads him to ruin rather than to safety. For a man who, in all respects, will carry out only his professions of good, will be apt to be ruined among so many who are evil. A prince therefore who desires to maintain himself must learn to be not always good, but to be so or not as necessity may require."[28] In a world in which men are not what they ought or seem to be it behooves one to watch his step. All of which when put with other postulates comes to this: if men in general were gifted with intelligence so clear that none could deceive another, then all would of necessity be honest and virtuous and honesty and virtuousness in all things would be at once the most intelligent, the most moral and the most expedient policies. But taking the world as it is, with its wickedness and stupidity, Machiavelli urges that, while salvation is extremely difficult to attain, the best means thereto is the use of all the intelligence one can command.

4. THE REFORMATION AND THE JESUITS

Like other great agitations the Reformation produced many diverse effects on the development of thought. In establishing for the Protestant world the right of private judgment in the interpretation of Scriptures the Reformation successfully broke the spell of Papal and Scholastic authoritarianism. With the establishment of private conscience and Holy Writ as the supreme guides to Christian conduct a reunion was established between ethics and religion, emphasis

[28] *The Prince*, Chap. xv.

on ritual and formalism tended to be replaced by emphasis on the intent and essence of conduct. Once the Papal monopoly of religious authority was effectively broken a riot of religious individualism was let loose which has filled the modern world with innumerable sects. Moreover, the enormous amount of discussion attending theological controversy was responsible for an extension of the critical attitude to questions of social and political organization. A notable example is Luther's discussion of the family, his denunciation of celibacy and the establishment of marriage as the normal state for the Protestant clergy of whatever denomination. It should not be overlooked that the Reformation itself was not an isolated movement but taken in its full extent throughout the sixteenth century was closely related to, sustained and made effective by the contemporary Commercial Revolution, the growing influence of the *bourgeoisie*, and the rising spirit of political nationalism.[24]

On the other hand, the immediate and direct influence of the Reformation on the development of the modern critical spirit has been greatly exaggerated in all Protestant circles. It effected no clean-cut emphasis on the value of reason and science. Quite the opposite, it replaced the Pope by the Scriptures as an inspired and infallible guide and mentor. While decrying the ceremonialism and ritualism of Catholic tradition it seems actually to have revived primitive diabolism and witchcraft. Far from favoring the progress of science "Luther and Melanchthon denounced Copernicus in the name of the Bible. Melanchthon re-edited, with enthusiastic approval, Ptolemy's astrology. Luther made repeated and bitter attacks upon reason, in whose eyes he freely confessed the presuppositions of Christianity to be absurd. Calvin gloried in man's initial and inherent moral impotency; and the doctrine of predestination seemed calculated to paralyze all human effort. . . . As Gibbon pointed out, the loss of one conspicuous mystery, that of transubstantiation, was amply compensated by the stupendous doctrines of original sin, redemption, faith, grace and predestination which the Protestants strained from the epistles of St. Paul." [25]

But to leave the matter there would be to exaggerate. The Reformation cannot effectively be separated from other movements of the time or allowed no place in the account of the evolution of modernism. Once the shell of Scholasticism and Papal authoritarianism was effectively broken it became impossible to restore so complete a

[24] The best guide to this period in English is Preserved Smith, *The Age of the Reformation*. Dunning's *Political Theories from Luther to Montesquieu* enumerates the chief developments in political and social theory.

[25] J. H. Robinson, *The New History*, pp. 117–118.

suppression of freedom of thinking as had previously existed. Official churchly Protestantism can claim little, if any, credit for the advancement of knowledge and true learning. Even its educational institutions have been established for the training of ministers and the perpetuation of the faith and have become centers of scientific thought only as they have freed themselves from denominational control. But the spirit of Protestantism cannot be divorced from the spirit of revolt, of individualism, of free criticism. And in this way it prepared the way not only for the multiplication of sects but even for that scientific and rationalistic advance which has already "secularized" [26] the state, education and marriage, and bids fair to secularize the church itself. "Early Protestantism is, from an intellectual viewpoint," as Robinson says, "essentially a phase of mediæval religious history"; [27] but there was implicit in its assumptions an era of scientific criticism. It was as intolerant and as superstitious as Catholicism, but that was less its *genre* than the age. Toleration is a product of criticism and knowledge; we are tolerant on matters concerning which scientific truth has been acquired; we are intolerant on matters that are still in the realm of age-old superstition and belief. It is of the essence of Protestantism that its adherents have emerged from primitive intolerance more rapidly and completely, have become more fully secularized, and have aided more widely the advance of scientific enlightenment than the adherents of Rome. This is without doubt due to the fact that the Reformation was a factor in introducing what Bagehot called "The Age of Discussion." [28]

It cannot be said that the leaders of the Reformation, Luther, Melanchthon, Calvin, Knox, contributed anything to the advancement of social theory. They emphasized in theory the distinction of the spiritual from the secular power, but in practice enlisted the secular power in persecution of the Anabaptists. Holding governments to be ordained by God, they preached the doctrine of passive obedience and thus in general secured the support of the established governments; but both Luther and Calvin limited obedience to those policies believed in harmony with God's—that is, individual or sectarian interpretation of God's, will. There was in this and much more that might be set down no successful effort to get outside the traditional implications of mediæval thought on matters of politics. In religious

[26] See J. T. Shotwell, *The Religious Revolution of To-Day.*
[27] Op. cit.
[28] See his *Physics and Politics.*

matters their appeal was to the Scriptures and the traditions of early Christianity as against the Pope, Scholasticism and Aristotleianism. But religious wars and persecution produced at length a growth of toleration for religious differences and opposition to absolutism in government. The quaintly qualified passive obedience of the founders of Protestantism was nullified in France by the Huguenot works, *Franco-Gallia* (1573) by Francis Hotman, and *Vindiciæ contra Tyrannos* (1579) by a pseudonymous author. The latter especially is one of the earliest of several attacks on the divine right doctrine in which resort was made to the "state of nature," an assumption which made possible the deduction that the right of tyrannicide was justified by a "higher law."

Within the religious and theological field the most effective opponents of heresy were the Jesuits who began to make their influence felt in the Counter-Reformation by the time of the last meeting of the Council of Trent, 1562–1563. Though reactionary in theology the Jesuits were on the whole opponents of kingly absolutism. In the writings of the Spanish Jesuit, Juan de Mariana, *On Kingship and the Education of a King* (1599), is set forth one of the best and earliest expositions of the doctrines centering about the ideas of a state of nature and the law of nature which had been developed by the later Stoics, by Polybius, Seneca and Cicero. In this state, according to Mariana, man lived like an animal, controlled by no authority, and guided by his instinctive desires for food and reproduction. This state was one of comparative ease and peaceful happiness on the whole and evil was unknown. Nevertheless, man was ill-adapted to so crude a state, especially because of the helplessness of human infancy. To increase his powers of resistance to various dangers man formed groups under leaders chosen for their prowess and wisdom. Thus through his divinely implanted timidity and weakness man was led to organize civil society. From this basis Mariana develops a theory of tyrannicide which antedates Locke's theory of the right of revolution by nearly a century. He found the danger of death a wholesome restraint to the tendency of sovereigns to usurp power and a needed antidote to the natural slavishness of men. Of equal or even greater importance for the development of ideas which became the foundation of the political controversies of the seventeenth and eighteenth centuries were the writings of another Spanish Jesuit; Francisco Suarez (1548–1617), metaphysician, theologian and philosophical jurist. In his *Treatise on Law and God the Legislator* (1613) he followed to a great extent lines laid down by Thomas

Aquinas. Though thoroughly scholastic in tone his discussions of *lex naturalis, jus naturale* and *jus gentium* make him the precursor of Hugo Grotius and Samuel Pufendorf.

In a recent book, *The Church and the State,* by two learned American Catholics, Father John A. Ryan and Father M. F. X. Millar,[29] the principles of the American Revolution and the American system of government are traced back to Scholastic sources in Suarez and the Jesuit Cardinal Robert Bellarmin (1542–1621). There can be no doubt that the English Whigs and the French Rationalists, from whom the evolution of modern political theory is usually derived, owed much to these Jesuit authors, who in turn derived their views largely from Marsiglio and Ockam and the controversialists of the Conciliar Movement. The doctrines of the right of representation and of popular sovereignty then evolved have spread wider and deeper century after century and they are still in the course of development.

5. DOCTRINE OF A STATE OF NATURE

It is thus possible to say that by 1600 the ideas which flourished in the English Revolution of 1688, the American Revolution of 1776 and the French Revolution of 1789 had all been more or less systematically set forth. The Stoic conception of natural law or law of nature, the expression of God or a Universal Reason, had been called by Cicero *lex naturalis,* the dictate of right reason, and made the source of *jus naturale,* or natural right. The Roman jurists had called *jus gentium* the body of laws common to many nations and made it the criterion for *jus naturale.* St. Thomas had made *lex naturalis* man's participation through reason in the eternal law which is divine reason. Numerous writers like William of Ockam made natural law and the law of nations superior to all legislation. Suarez followed Aquinas in finding natural law implanted in the human soul and enabling him to distinguish right from wrong. Only after the Reformation does the idea begin to appear that natural law may be separated from God and transferred to impersonal human reason. Melanchthon found natural law in the curious combination of the ten commandments plus deductions from the nature of man. Bodin made natural law the basis for distinguishing right from wrong, a view later accepted by Grotius and Pufendorf. While Suarez distinguished *jus naturale* which is divine from *jus gentium* which is

[29] New York, 1922.

human, Grotius and Locke made natural law the dictate of right reason in the state of nature. Grotius further made natural law immutable even by God, while Montesquieu made it merely deductible from man's nature.

These ideas, which have carried on down to our own time, brought with them more or less well-defined concepts of a state of nature. With Polybius this was typified by a small group of brutish men united by instinct and ruled by the strongest. Mariana made the state of nature one in which man was weak and timid, was ruled by his sex and food instincts, and lived like the animals. George Buchanan (1579) followed Polybius as to the state of nature and found man's escape therefrom in the organization of political and social institutions. Althusius stressed the family as the primary social organization between which and the state was a considerable array of ever wider associations all based on contracts freely entered into by free persons. Grotius looked upon the state of nature as a pre-political state out of which men escaped by the formation of civil society. These conceptions evolved into the more complete form of the social contract philosophy in the writings of Richard Hooker, John Locke, Thomas Hobbes and Jean Jacques Rousseau. We cannot detail them further here. Sufficient has been said to show their source and variety.

To modern realistic thought these assumptions of a state of nature and law of nature represent a metaphysical stage in the evolution of social philosophy. The state of nature existed only in the mind of the author and there took that form which was suitable to the conclusions he expected to deduce from it. If Hobbes made the original state one of war of each against all in which life was nasty, brutish and short, it was to deduce the benefits of absolute government; while Locke so constructed his hypotheses as to vindicate individual freedom, popular sovereignty and the right of revolution. When, however, one recalls the enormous rôle these doctrines have played and still play in popular political and social thought one realizes that the social significance of an idea cannot be measured by its inductive soundness. In general, the social contract theories give systematic and philosophical form to the political aspirations of the developing *bourgeois* element in western nations, but they were used in conflicts between Pope and ecclesiastics within the Church, between king and nobles, between hereditary nobility and burghers. Though the term "people" was frequently used in an unqualified way it seldom was intended by the writers of the contract school to include any one below the third estate. Those peasants and laborers who now constitute

the "democracy" of progressive political literature had no political consciousness and hence no political existence.[30]

6. EARLY MODERNS

We must pass over in a sentence those numerous scientific and geographical discoveries which during the sixteenth and seventeenth centuries are mainly responsible for the modern world. Among those whose names stand immortal in this history are Nicolaus Copernicus (1473–1543), Tycho Brahe (1546–1601), Giordano Bruno (1548–1600), Johann Kepler (1571–1630), Galileo Galilei (1564–1642), Isaac Newton (1642–1727) and Edmund Halley (1656–1742). All these are merely the outstanding figures in the fields of astronomy and astro-physics alone. The earliest of these—Copernicus to Galileo—precipitated a controversy which was more bitter than that due to Darwin more than two centuries later and of even greater importance in freeing science from the deadly and stultifying influence of churchly dominion. Of vast importance also were the explorations following the voyages of Columbus and Vasco de Gama, for these revealed a new earth as the astronomy revealed a new heavens,[31] and helped to reveal the significance of the appeal of Francis Bacon (1561–1626) from the current disputations of Aristotleianism and Scholasticism, to experiment and observation, namely, "Nature is more subtle than any argument." There were also remarkable advances in mathematics, anatomy, botany and zoology. The invention of printing was followed by that of the compass, the telescope, the microscope, and logarithms.

Such an awakening of the modern spirit had its inevitable effects on social philosophy, for in the writings of Jean Bodin (1530–1596) may be discerned the revival of that candor and dependence on factual observation which represent the true spirit of Aristotle. Bodin was much more than a political philosopher. He was a philosopher of history and an anthropo-geographer, much broader in scope of learning, observation, and intellectual interest than Machiavelli, the only other writer during more than a thousand years with whom he need be compared. In political science he had no equal from Aristotle to Montesquieu. He was one of the most distinguished

[30] For a thorough survey of the whole history of the theory of the state of nature, see H. E. Barnes, "The Natural State of Man," in *The Monist*, January, 1923, pp. 33–80.

[31] See H. E. Barnes, in *Scientific Monthly* as cited.

economists of his time and withal a social philosopher of no mean distinction. And yet, he reveals a curious complex of mental traits. Relatively indifferent to religious and theological matters he was often called sceptic and atheist, but has also been claimed by the Calvinists, Catholics, Jews and Mohammedans. He also believed in personal demons, in the potency of lucky numbers and stars and took an active part in the witchcraft persecutions. He attributed society to instinct; the state to force. The earliest and primary form of association he found to be the family from which through a graded series of groupings the state was reached. He discussed in an illuminating way the forms of the state, the nature of citizenship and the forms and significance of revolutions. His definition and discussion of sovereignty are distinctly modern, and his treatment of climate as a factor in political and social life, while of little value now, represented a striking innovation in outlook and method.[32]

But Bodin was a definite symptom of the passing of the Middle Ages. At about the same time Bacon was publishing his Herculean efforts to re-establish the whole basis of science by his eloquent elaboration of the errors and fallacies of deductions from ignorance and authority, and the desirability of induction and experiment. His impetus led to the founding of the Royal Society in 1660, before which was presented two years later John Grant's *Natural and Political Observations on the Bills of Mortality*. This work was not only the beginning of vital statistics but also the fore-runner of the ingenious and illuminating observations of Sir William Petty, King and others of the School of Political Arithmetic. This inductive approach to the study of social life evolved into the statistical science of modern times which includes the work of such brilliant contributors as Süssmilch, Malthus, Quetelet, Galton, Pearson, Bowley, Pearl and Moore.

This recasting of the mold of thought was powerfully stimulated by the highly original philosophical speculations of Hobbes (1588–1679), Spinoza (1632–1677), Leibnitz (1646–1716), Locke (1632–1704), Berkley (1685–1753) and Hume (1711–1776). If the *Celestial Revolutions* of Copernicus constitutes the single work most upsetting to mediæval viewpoints, the *Principia or Mathematical Principles of Natural Philosophy* (1687) of Isaac Newton (1642–1727) must rank as the greatest single monument of scientific mental capacity. The intense intellectual activity evidenced by these writers produced cor-

[32] On Bodin see Fournol, *Bodin, prédécesseur de Montesquieu;* and Chauviré, *Jean Bodin, auteur de la République.*

related changes in the field of social philosophy. These appeared clearly in the *New Science* (1725) of Giovanni Vico (1668–1744) and the *Spirit of the Laws* (1748) of Charles-Louis de Montesquieu (1689–1755). This last work is frequently hailed as the beginning of the comparative historical method in social science. Certainly it must rank as a work of monumental importance, crude as it now appears. It is an example of the observational stage in the development of a science, and as Professor Giddings says, "converted social philosophy into descriptive social science."[33]

The purpose of *L'Esprit des lois* was to discover the relationships between various social institutions and their environment, both social and geographical. "Laws, in their most general signification, are the necessary relations arising from the nature of things." Montesquieu here presents a simple but striking definition of scientific law. To social science Montesquieu's greatest contribution was his insistence that the course of history is governed by general causes and affected only slightly by single events or persons. He held that not chance nor fate ruled the world but reason. As a theist he identified this reason with the universal reason of the Stoic philosophers, St. Thomas and the rest, but he was especially interested to note that it took on a different expression in different times and places. In other words laws and institutions are *conditioned* by a great variety of circumstances. Here is the doctrine of relativity,—that not merely social conventions, customs and parliamentary enactments vary with the cultural medium, but that all institutions—family, state, morals, gods, religions, vary according to causal relationships. To the unsophisticated mind customs and beliefs different from one's own not only seem strange but open to condemnation as both foolish and immoral, when they are not absurd or ridiculous. To Montesquieu they appeared the natural consequences of the historical and environmental conditions in which operated that human nature which he endowed with a tendency to associate, and instincts of food and sex.

While his interest centered largely in questions of governmental organization, especially the means for safeguarding liberty, he considered the influence of climate, topography, and soil, and such varied matters as population, the inequality of the sexes, the relation of climate to sex passion and modesty, forms of the family, and slavery.

[33] Op. cit., p. 108. On Montesquieu see Dunning, *Political Theories from Luther to Montesquieu;* Lichtenberger, op. cit.; Ilbert, *Montesquieu,* Romanes Lecture, 1904; R. Flint, *History of the Philosophy of History;* and F. Pollock, *History of the Science of Politics.* Montesquieu's fundamental dependence upon earlier English political theory is well pointed out in Dedieu's *Montesquieu et la tradition politique anglaise en France.*

7. SOCIAL CONTRACT SCHOOL

The contributions of the Social Contract School were primarily to political theory, as were also the contributions of Milton, Harrington and The Levellers of the mid-seventeenth century. But all of them, especially the Puritan Revolutionists, contributed much to early American thought in all fields. The Puritan took a deeply religious view of life; for him there was a natural order which was the expression of God's will and any violation of which constituted a sin. Life was surcharged with moral values. The Puritan ethics of business expressed the rising influence of capitalism. Every man must have a "calling"; all useful activities are inherently noble; steadiness, industriousness, honesty, thriftiness of time and money are fundamental virtues. Where Calvinism was strong, as in the American Colonies, these ideas combined to form a theory of theocratic aristocracy which steadily moved in the direction of a wider democracy under the influence of the conditions in a new country, but which still finds expression in the viewpoints of those successful American business groups whose ideals are expressed through an orthodox minister, a straight-line Republican, and the booster for the Rotary or Kiwanis club.

In the formulation of the social contract philosophy [84] by Hobbes we have an extremely logical and penetrating theory of governmental absolutism; in that by Locke the theory of governmental responsibility and the right of revolution; and in that of Rousseau the theory of majority rule. All of these, however, expressed themselves on broader questions of social theory, and among them Hobbes is by far the most realistic and permanently valuable. In his presentation of the fundamental importance of self-interest as the motive to action, and of competition and the struggle for power or the means to happiness, Hobbes was infinitely removed from the prevailing theological and religious patter of his day. Less erudite and less influential on the whole than Grotius, he was more rigidly logical and completely systematic. In his conception of the absolutism of the state he carried Bodin's conception of sovereignty to its logical limits and became the forerunner of Fichte and Hegel in the formulation of that metaphysical theory which makes the state not only superior to laws and constitutions, to morality and religion, but the very God itself. Hobbes was extreme in picturing man as wholly unsocial; he was

[84] A splendid work on the social contract school is F. Atger, *L'Histoire des doctrines du contrat social.*

extreme as to the extent of rationality with which man follows his self-interest; he presented, however, a remarkably true view of man in business or political competition, in the struggle of factions for power, and the resolution of states of anarchy by the establishment of a super-authority. Locke found man given by nature to association and living a tolerable existence before the promotion of government, but his analysis of social forces rose little above the current political exigencies. His most important contributions lay in his emphasis upon the importance of property rights as a basis of political life and action, and his exploitation of the contract doctrine in the interest of the justification of political revolution.

It remained for Rousseau (1712–1778) to idealize the noble savage, living free, contented and self-sufficing in a state of peaceful social equality.[35] In his early work, *Discours sur les arts et sciences* (1750), he argued that the arts and sciences spring from human vices, cultivate vanity, luxury, and social corruption, are unsuited to man's intellect and do not satisfy the heart. Four years later in the *Discours sur l'origine de l'inégalité* he finds man good by nature but corrupted by society. He presents a fanciful sketch of man in a state of nature, living in solitude, naked, speechless, without tools, morals or religion and guided only by his instincts and appetites, but incomparably happy; and traces the stages of economic progress, and the rôle of private property in producing social and political inequality. He especially denounced private property in land as the primary source of the strife and jealousy which necessitated the organization of government. This, however, only secured the strong and crafty in power and perfected the fetters of the poor.

Many of these ideas reappear in *Le Contrat Social* (1762). His picture of human nature as moved primarily by self-interest and pity is not well-rounded. His theory of the "general will" preceded numerous modern discussions of "public opinion" as the sovereign, determinative force in democratic societies. He wasted much dialectic in trying to prove the infallibility of this general will; and, while he sought to reserve a sphere of individual rights which this sovereign could not invade, he was not clear as to the limitations. Nor could he show that the will of the individual is certain to harmonize with the general will. His effort, therefore, to reconcile the authority of the state with individual liberty failed as all such efforts must fail

[35] The ideal state of man to Rousseau was not, however, that of the natural savage, but the patriarchal society which he believed to precede the origin of property and the civil state See A. O. Lovejoy, "The Supposed Primitivism of Rousseau's *Discourse on Inequality*," in *Modern Philology*, November, 1923, pp. 165–186.

because there is not a complete harmony of social and individual interests and there cannot be so long as man is largely self-seeking and less social than the bee or ant. Rousseau was a great propagandist. Less rational and scientific than many contemporaries, he was more influential than most of them in the advancement of democratic fervor. In his denunciation of private property he foreshadowed Proudhon's aphorism, "Property is theft." In many respects a philosophical anarchist, he nevertheless stands as the great prophet of the absolutism of popular majorities, *vox populi vox dei.*

The unrealities of much of the social contract theorizing were detected by no one more clearly than by David Hume (1711–1776), empirical philosopher, sceptic, historian and economist. He held the social bonds to be an elaboration of the primary relations set up by the sex impulses. From these arose the family and the feelings of sympathy which generate among those of like condition. The advantages of mutual aid supplement sympathy in holding men in groups. But the contentions due to selfishness give rise to the necessities of government. The state thus originates in war rather than by a contractual agreement. In the numerous groupings of men sympathy is the essential bond and through sympathy and imitation the assimilation of new elements is accomplished. He developed a thoroughly rationalistic explanation of religion in terms of psychology and became one of the founders of Utilitarianism by insisting that self-interest is the universal motive to action and that the value of social institutions must be measured by their social utility. He did not, however, believe that the individual is the best judge of his own or of the social interest. He recognized the inequalities in skill and industry as justifying inequalities in wealth and status but preferred that all have comforts before any have luxuries. While agreeing with Montesquieu as to the relativity of social institutions and the non-existence of an abstract justice he pointed out the existence of a wide generality in social arrangements due to the uniformities of human needs and capacities. Not only in his *Human Understanding* but in his *Essay on Miracles* and his *Dialogues on Natural Religion* he furthered the "Enlightenment" in England, the dawn of the modern scientific spirit.

In the writings of Adam Ferguson, particularly his *History of Civil Society* (1765), one finds another related and highly modern assault upon the state of nature and the social contract philosophy. Ferguson contended that the state arose through the conquest of one group by another, thus anticipating the views of Gumplowicz. He further held that the most natural state of man is the most advanced

and cultured state which he has reached to date, and not the most primitive condition, as some contemporary philosophers asserted.

8. THE RATIONALISTS

Rousseau was only one of many interesting men of pre-revolutionary France. The Abbé Morelly (1753–1756) held that there is no conflict between the passions and the highest moral duties; that the former are legitimately sovereign and should have free play; that they are rendered corrupt and mischievous by the very laws and institutions which pretend to restrain them. The solution of existing difficulties he found in the elimination of avarice, the establishment of communism in property, abolishment of worship, but regulation of marriage by the state. He is reminiscent of Plato and kin to those social idealists everywhere who think of man as genuinely good by nature. Similar in many respects were the Abbé de Mably (1709–1785), his brother the Abbé de Condillac (1715–1780), Claude Adrien Helvétius (1715–1771) and the Baron Paul d'Holbach (1723–1789). These were only a few of *Les Philosophes* and *Encyclopædistes* who advanced the rationalistic and democratic movements of eighteenth century France. Helvétius is especially notable for his advocacy of the doctrine of the innate mental equality of all men and the supreme potency of education and environment, doctrines representing the extreme of democratic faith and not long since elaborated in the *Applied Sociology* of Lester F. Ward.

The Era of the Enlightenment [86] contributed materially to the advancement of social theory but almost wholly through the cultivation of a rationalistic attitude rather than through specific content. In general, all the French writers mentioned, as well as the other *Encyclopædistes*, Diderot, d'Alembert, Voltaire, the Physiocrats, Quesnay, Turgot, and Dupont de Nemours agreed on the necessity of rejecting superstition and authority and adopting the guidance of reason. A rigorous statement of their views is contained in *The Rights of Man* and *The Age of Reason* by Thomas Paine (1737–1809). They cultivated the doctrine that social life is subject to the operation of cause and effect or scientific laws; that these can be detected and made to serve human advancement. At the hands of Turgot and Condorcet in France and William Godwin in England this foundation gave rise to the Perfectionist School who dreamed of the

[86] The best available material on the Rationalists in English is contained in Lord Morley's biographies of Voltaire, Diderot and Rousseau; and in C. B. Kent's *The English Radicals;* and H. N. Brailsford's *Shelley, Godwin and Their Circle.*

infinite perfectibility of man, a dream which gave rise to the social idealizations of Charles Fourier, Henri de Saint-Simon, Robert Owen, and other Utopian Socialists. It was against such utopianism that Malthus directed his *Essay on Population* in 1798, an attack which was contemporaneous with the rise of Utilitarianism with its emphasis on self-interest and of Classical Economics with its emphasis on competition and the niggardliness of nature.

9. THE PHILOSOPHY OF HISTORY

Also set over against the utopians in some respects were numerous philosophers of history who sought in the evolution of culture the evidence of the operation of a beneficent divinity or some metaphysical entity or principle. While Voltaire wrote the first work expressly entitled "philosophy of history" he had no distinct principles of interpretation but only a point of view, namely, be sceptical, avoid credulity, myths, legends and miracles; far from discovering laws or even a universal reign of law, in his *Essai sur les mœurs* he saw in history the kingdom of "sa majesté, la Hazard." Typical of the philosophy of history at its best or worst, as one prefers, is Bishop Bossuet's *Discourse on Universal History*, 1681, in which is set out (1) a world chronology from creation to Charlemagne, (2) the course of true religion, and (3) the rise and fall of empires. He successfully demonstrates to any whole-hearted and guileless believer that history evidences God's dispensation and his purpose to make the Holy Roman Catholic Church the heir of all the ages and the guardian of all spiritual truth. One can skip from Bossuet to Hegel (1770–1831) who found the key to historical evolution in the expanding consciousness of freedom. In doing so one meets an increase in profundity, a reduction in the emphasis on the easy penetration by finite mind into the secret purpose of Infinity, but little change in the nebulosity of generalization. Moreover, the clarity of the bishop's simplistic explanation in terms of divine inspirations has been replaced by the muddy and bewildering metaphysics of the philosopher's mysticism.[37]

Paul Barth's effort[38] to identify sociology and the philosophy of history was unsuccessful because the sociologists prefer to look upon the general science of society as a natural science rather than an ethical or normative one. The philosophy of history as exemplified in

[37] The best survey of the philosophy of history is contained in Robert Flint's *The Philosophy of History in France and Germany* (1874); and an uncompleted revision of this work entitled *The History of the Philosophy of History* (1894).

[38] *Die Philosophie der Geschichte als Soziologie* (1897); new edition, 1915.

Bossuet, von Schlegel, Herder, Hegel and a host of others was fundamentally teleological and deductive. It read into historical events, social movements and institutions, a meaning previously determined upon; it saw in historical processes the realization of an immanent end; it preferred to approve or condemn institutions according as they met the requirements of an absolutistic ethical standard or realized or retarded ideal ends. It must be confessed that sociology has seldom avoided more or less of the contamination which rendered the philosophy of history not only useless but positively detrimental to the advancement of human understanding. In what relates to man it has proven well-nigh impossible to separate the clean-cut effort to know cause and effect relationships from the desire to fortify subjective valuations of what is good or beneficial. Since man is an evaluating animal this separation cannot, in any case, be made permanent; but it is a great step in advance to realize the necessity of separating ethical considerations from the causal inquiry. Moreover, though the philosophy of history as outlined above is utterly to be condemned, there will remain the necessity for a social philosophy. This necessity springs from the need of a synthetic understanding of social processes as a unified whole, many parts of which must remain obscure for generations to come. And, in the second place, even when causal relations are thoroughly clarified there remains the necessity of setting up human ends to be achieved thereby. But social philosophy in this sense is worlds removed from the still popular philosophy of history, handed out every Sabbath and on numerous public occasions between, in which a "purpose" is found that is in process of realization in the drama of the world.

IV. AUGUSTE COMTE

As we thus approach the history of social theory during the last century one is compelled to record that the works of all the great founders of sociology from Comte through Spencer to Ward were mixtures of philosophy of history, social philosophy, pseudo-science and science. But as compared with their predecessors there was a diminution of mere ideation and an increasing impress of fact and observation. Comte is commonly looked upon as the founder of sociology. True it is that he gave it a name but that he supplied much durable content may well be questioned. As Professor Giddings says: "Comte predicted sociology; he did not himself create it."[29] As the formulator of the Positive Philosophy Comte followed

[29] Op. cit., p. 111.

the eighteenth century rationalists, with whom he was connected through St. Simon and Condorcet, in excluding as invalid any reliance on spiritistic or metaphysical beings, forces or entities. His law of the three stages was evidently suggested by the two stages of St. Simon who was familiar with the similar ideas of Turgot and Burdin. He held man's understanding to advance from the theological to the metaphysical modes of explanation, and then finally to the only sound and true explanation in terms of orderly coexistence and sequence. Rejecting all possibility of knowing the "nature of things in themselves" or that assumed inner essence which theologians and philosophers have identified with gods, devils, "humors," "principles," forces and essences, he held it possible actually to know only what events occur together or in sequence. This was, of course, to set a standard for sociological explanation which he himself was far from attaining. And it is interesting to note that most of our social theory still deals with metaphysical terms. It is still almost impossible to write about any sociological question without falling back into metaphysical jargon. For, apart from a perfectly legitimate use of such words as democracy, human nature, Christianity, feminism and countless such terms as collective or descriptive nouns, they are constantly used as though they were spirits, entities or forces in themselves. The strict application of Comte's position would compel the sociologist to content himself with observing, analyzing and comparing, instead of seeking "explanations" in ulterior causes. In the theological stage social phenomena are "explained" as due to the will of a god; in the metaphysical as due to natural law, human nature, instinct, the principle of sovereignty, or the spirit of democracy; in the positive they will be simply co-ordinated and correlated.

The conception of sociology as a sort of social physics and of society as rigidly governed by natural laws was a current doctrine derived from the prominence of Newton's laws and Laplace's *Celestial Mechanics*. In fact, St. Simon had definitely looked upon a possible science of history as a physical science in which some sort of social gravitation was the fundamental law, a suggestion made a century earlier by Bishop Berkeley; Charles Fourier had suggested that "passional attraction" was this fundamental principle; and Comte himself had used the term *Physique Social* until it was made the title of the justly famous work of Adolphe Quetelet in 1835, whereupon Comte coined the word sociology.

Following the lead of Condorcet and St. Simon, Comte also set forth the stages of general social evolution—the Military-Theological, the Critical-Metaphysical, and the Scientific-Industrial. He had at

his command much more extensive materials than his mentors but his results are of interest now only to the antiquarian student of social theory.

Another interesting contribution by Comte was his classification of the sciences as mathematics, astronomy, physics, chemistry, biology (including psychology), and sociology. This is an arrangement from the most general and abstract to the most concrete and special, an order suggested by his teacher, St. Simon. Many of Comte's ideas were reformulated by Lester F. Ward, together with criticism of Spencer's criticism of Comte.[40] We pause only to note that Spencer makes Ethics the final science in his *Classification of the Sciences*, (1864), but Comte had also done so in his later work, the *Politique Positive* (4 vols., 1851–1854). To this Ward objects, preferring to make ethics a subdivision of sociology.[41] It would seem that Spencer was in error in making ethics the cap-stone in the hierarchy for it does not deal with a special set of concrete phenomena not dealt with by sociology. On the other hand, it logically comes after sociology since it derives therefrom. As a normative science setting up standards of right living ethics is dependent upon biology, psychology and sociology for a knowledge of causes and effects, individual and social, of individual action and social policy. Moreover, while it is possible to improve on nature by the control which knowledge gives, the means of improvement and to a great extent the very ends to be sought are implicit in the natural. It should be added that the greatest need of sociology to-day as in the past is to divorce itself from *a priori* ethical considerations. As Comte said, "Admiration and disapprobation should be banished with equal severity from all positive science." In fact, on the basis of the rigid determinism implicit in the positivist theory it is useless to inquire whether things might not have been different, though one may inquire how evils arise and in the answer learn how they may be avoided. Ethical phenomena are only social phenomena of a special class; they are always relative to the social conditions of which they are a part. One may say with Comte, therefore, that each state of social existence has been as perfect as all the conditions affecting it made possible.

Another important Comtian idea was his principle that the validity of historical generalizations should be tested by their agreement with the known and stable attributes of human nature. But Comte cannot be said to have known much about human nature. Moreover, the

[40] See Ward's *Dynamic Sociology*, pp. 143–9, and *Pure Sociology*, Chap. V; for a different classification of the sciences see F. H. Giddings, *Principles of Sociology*, pp. 45–51.

[41] *Pure Sociology*, p. 69.

assumption that it is unchanging was not adhered to by Comte for in his *Positive Polity* he laid down as fundamental the proposition which has been the main plank in the platform of every conservative and orthodox thinker in Christendom, that no improvement in social conditions would be possible except through the moral elevation of men. Spencer contended that human nature was altered by the change from militarism to industrialism. Some recent sociologists [42] have contended that it has remained unaltered since early palæolithic times; but certain philosopher-psychologists [43] view it as indefinitely plastic. The facts seem to be at least four: (1) human nature appears to be extremely variable because (a) of its great plasticity and (b) its extraordinary complexity; (2) it does vary from group to group and time to time through the operation of heredity and differential birth and death-rates, as shown by Galton and Pearson; (3) we as yet are so much in the dark about it that large sections of sociological generalization which rest on it are not much advanced beyond the metaphysical stage of development; and (4) there is a fundamental validity in Comte's principle, for man is man, he is neither ape nor wolf, though he may be like them in some respects, and hence all social events and institutions are expressions of human traits and capacities.

In harmony with the dominant thought of the era Comte laid great stress on the rôle of reason in social evolution. The rationalists, perfectionists and utopians who preceded him saw in the operations of reason in developing scientific knowledge the means for the infinite progress of society. Comte made the Law of the Three Stages not only the history of man's intellectual development but also and in consequence the key to social evolution. This has been a favorite thesis. Buckle [44] at nearly the same time made the growth of knowledge the sole progressive element in social evolution. Ward distinguished unconscious genetic evolution from conscious telic progress by the degree of control which is acquired through scientific knowledge. Recently there has been some reaction from this view and many have been eager to point out that science and, especially the mechanical applications of it which have not only harnessed the forces of nature but ensnared and enslaved man as well, have become a veritable Frankenstein. This attitude—expressed in many works from Samuel Butler's *Erewhon* (1872) to Bertrand Russell's *Icarus, or The Future of Science* (1924) was accentuated by the recent war

[42] Cf. W. F. Ogburn, *Social Change.*
[43] Cf. W. E. Hocking, *Human Nature and Its Remaking.*
[44] *History of Civilization,* 1857–1861.

and has been rather assiduously cultivated by cynics and mystics. There is in fact little to be said for it as a basis for future policy. The fault is not too much science but too little; and the hope of the future is not in the restoration of obscurantism, for the only real remedy for any social abuses that may have developed out of the progress of science thus far is further development of science, especially in the newer fields of biology, psychology and sociology.

It must be added, however, that the view of man as essentially rational, which found expression a century ago in Ricardo's "Economic man"—the doctrine of "enlightened self-interest" as the guiding influence in conduct cultivated even earlier by the French rationalists, by Adam Smith, and the Utilitarians—was hopelessly inadequate as description. The instincts and emotions play a vastly greater rôle than was then imagined. In fact, recent psychology has shown human motivation to be so subtle and complicated and the operation of the reasoning powers so frequently merely an apologetic and diplomatic formulator of "good" rather than "real" reasons, that no one can be genuinely certain of what moves him to his choices and attitudes. But here again advancement is possible only along the line of that scientific understanding which reason makes possible.

Among other theories advanced by Comte may be mentioned: (1) the thesis that society advances from military to industrial activities as it moves from the theological to the positive stages, a thesis reappearing in modified and elaborated form in Spencer and Giddings; (2) the opinion that Catholicism made the great and permanent contribution to social advance of the separation of temporal from spiritual powers, a thesis highly questionable in fact; (3) the distinction of Social Statics or the laws and conditions of social order from Social Dynamics or the conditions of progress, terms again suggesting the *Physique sociale* then current, and like other Comtian ideas reappearing in Spencer, Ward and Giddings; (4) like most other thinkers with a sociological bent the construction of an ideal society in his *Politique positive*.

In summary, it must be said that Comte's sociology remained for the most part outside the field of positive science. It was social philosophy written in a vein which combined most curiously the spirit of positivism and the spirit of mysticism. His contribution was largely his synthesis of certain ideas of his predecessors: his empiricism derived from Locke, Hume and Kant; his main principles of historical interpretation from Montesquieu, Condorcet and St. Simon; his rationalism from pre-Revolutionary France; his desire to construct an ideal social system from the same and the succeeding

epoch. Moreover, his social philosophy did not, except for the intention of its author to imbue it with a scientific methodology, form an integral part of any comprehensive philosophical interpretation.[45]

V. HERBERT SPENCER

Herbert Spencer's sociology, on the contrary, was an intimate part of the *Synthetic Philosophy* which sought to interpret the whole of the universe in terms of his evolutionary concepts. His *Principles of Sociology* is rooted in his *First Principles*. Its fundamental concept is that of universal energy and its primary law that of the tendency toward a state of equilibrium of the energy contained in related forms of matter. This evolution involves processes of differentiation and integration, and, in all living things, a continuous adjustment of internal structures and functions to external conditions. On the sociological plane these principles imply a continuous equilibration between a society and its environment, both physical and political, as well as between the groups and classes within it. There is a resulting co-ordination of social structures and functions in adjustment with the contained and the environing forces which produces those changes called social evolution. While Spencer, like Comte, emphasized the dependence of sociology on biology and psychology, his fundamental principles are derived from mechanics; they represent an interpretation of society in physical terms and necessitate the classification of Spencer along with Comte and Quetelet, the outstanding representatives of the school of social physics.[46]

Excellent summaries of Spencer's sociological theories have been given by Ward, Giddings and Small. We may discuss them under the following headings: (1) the validity of the evolutionary viewpoint; (2) the data of sociology; (3) the organismic conception; (4) the institutional analysis; (5) the origin of religion; (6) evolution

[45] There is a brief summary of Comte's sociological doctrine by H. E. Barnes in *Open Court* for July and August, 1922; and more thorough discussions in M. Defourny's *La Sociologie positiviste;* F. Alengry, *La Sociologie chez Auguste Comte;* and M. De Grange, *La Courbe du mouvement sociétal.*

[46] By all odds the best interpreters of Spencer in this country have been John Fiske, *Outlines of Cosmic Philosophy* (2 vols., 1874, 1875); and F. H. Giddings, *Principles of Sociology*, consult "Index," and "The History of Social Theory," loc. cit., pp. 111–115. The interpretation by A. W. Small, *General Sociology* (1905), pp. 108–153, especially pp. 130–153, fails to relate the sociology to the *First Principles*. Besides Spencer's own works, consult F. H. Collins, *Epitome of the Synthetic Philosophy* (1899); A. M. Tillett, *Spencer's Synthetic Philosophy: What It is All About* (1914); L. F. Ward, *Dynamic Sociology*, Chap. II. There is a brief analysis by H. E. Barnes in the *American Journal of Sociology*, November, 1922.

from militarism to industrialism; (7) individuation versus genesis.

As indicated above, Spencer's approach to sociology was from the basis of a general philosophy. We cannot argue here questions of such broad import. He was, much more than Darwin, the founder and expositor of the philosophy of evolution. This makes man a part of the earth, and society a purely natural phenomenon. The evolutionary theory provides for social integration and dissolution according to natural laws. But, even though the entire formula of Spencerian evolution be applicable to society, it does not suffice for an understanding of social processes. The broad formula of evolution remains substantially without meaning until given substance and content by translation into biological, psychic and social terms.

Moreover, Spencer was continually betrayed by the formula itself. His sociology is at bottom deductive and aprioristic, derived by most ingenious hypothesis from the fundamentals of his philosophy and supported by masses of concrete data from the cultures of all times and places. Now, while the doctrine of evolution is at bottom a theory of perfected adjustment or adaptation, it does not necessarily imply "progress" in the sense of a more perfect realization of human ideals and valuations. Thus Spencer himself says: "Evolution is commonly conceived to imply in everything an *intrinsic* tendency to become something higher. This is an erroneous conception of it." After explaining that it is "co-operation of inner and outer factors until there is an equilibrium, a complete equilibrium if the aggregate is without life, and moving equilibrium if the aggregate is living," he continues: "A social organism, like an individual organism, undergoes modifications until it comes into equilibrium with environing conditions. . . . When the conditions are changed meteorologically, or geologically, or by alterations in the flora and fauna, or by migration consequent on pressure of population, or by flight before usurping races, some change of social structure is entailed. But this change does not necessarily imply advance."[47] And yet, oddly enough, Spencer continually uses the term "social evolution" as implying advance, and over and over again, especially in the chapters "Retrospect and Prospect," he interprets social processes as working for the realization of certain ideal ends. Thus Evolution becomes God. This is in part explained by the fact that Spencer always hoped that the *Synthetic Philosophy* would point the way to a scientific basis for the realization of ideal ethical ends.[48]

[47] *Principles of Sociology*, New York (1877), pp. 106–108.

[48] See his *Autobiography*, Vol. II, pp. 369–370; and "Preface" to *Data of Ethics*.

Spencer found the data of sociology in primitive man and his physical environment and the reaction of these one on the other. For this reason he compiled the encyclopædic material of his *Descriptive Sociology*. He conceived primitive man as representing retarded stages of evolution, and, on the principle that the character of the society is determined by the type of component individual,[49] he viewed early institutions as essentially inferior. His description of primitive man as long-armed, short-legged and pot-bellied successfully demolished the "noble savage" of Rousseauist tradition but failed to do justice to the extraordinary range of variation among primitive types. Moreover, his easy assumption that primitive men were essentially inferior in natural psychic powers, while doubtless true for many cases, is equally untrue of others. Spencer's greatest error here was in assuming a close relation between the state of cultural advancement and inherent mental and character traits. The fallacy of this assumption has been amply exposed for American students by Dewey, Thomas, Boas, Lowie and Goldenweiser. There was in this a wide departure of Spencer from his own fundamentals, for it illustrates again the assumption that social evolution implies some sort of progress or advancement. If, however, evolution is fundamentally an equilibration of energies, then, as Comte said, every state of social organization has been as perfect as all its conditions permitted. His viewpoint prevented Spencer from realizing the tremendous importance of cultural contacts in the determination of social advance. Finally, his theory that the character of the component unit determines the character of the society, while containing an element of truth, is less important than the obverse truth that the society shapes the individual, as set forth by Tarde and Durkheim. In the reaction of society and the individual the mass are molded to type; only the unique individual stands out as an original and originating factor.

In the minds of many students Spencer is almost exclusively identified with the organismic concept. This is strange, even paradoxical, in view of the fact that the philosophy of individualism, which may be traced down through the Papal antagonists of the Conciliar Movement, the Puritan Revolutionists, the French Rationalists, Adam Smith and the Utilitarians, received its final and most complete formulation in his *Social Statics*, *Man versus the State*, and numerous *Essays*. The paradox is not without some possibility of explanation. He did not in fact hold society to be an organism but a super-organism. He introduced the analogies of sustaining, distributing, regulating

[49] See his *Study of Sociology* (1873), Ch. 3, "Nature of the Social Science."

systems, social structures and functions, and social metamorphoses not as explanations nor even as descriptions, but as parallels aiding the imagination. This he makes clear in the final chapter of Part III when he says in substance: "There exists no analogy between the body politic and a living body, save those necessitated by the mutual dependence of parts. The social organism, (1) discrete instead of concrete, (2) asymmetrical instead of symmetrical, (3) sensitive in all its units instead of having a single sensitive center, is not comparable to any single type of organism. If the parallels be dispensed with, the inductions still hold true. Societies grow. Etc."

It cannot be successfully denied, however, that Spencer was attached to his biological conception of society. When Huxley in his *Administrative Nihilism* showed that Spencer's essay on *The Social Organism* (1860) led logically to extreme socialism, the latter was shocked. For at the basis of Spencer's social and political theory was his aprioristic conceptions of natural individual rights. He was the supreme individualist. On the principle that society has no central sensorium, that the individual is the only thinking feeling unit, he made individual welfare the final test of social policy and ethical precept. This is philosophical anarchism, and Spencer never reconciled it with his view of the organic nature of society. Suffice it to say that no society has ever recognized the validity of Spencer's argument as to individual rights or the supremacy of private ends. Every social group sets itself up as supreme; in all matters of group concern it insists on regulating and subordinating individual action and claims; and in times of group crisis the individual finds that he has no rights which he can successfully assert against group domination. There is back of individual competition a fundamental struggle among groups which is basic to every assertion of individual right.

Spencer's ghost theory of the origin of religion [50] was put out about the same time as E. B. Tylor's largely similar theory.[51] He made fear the primary religious emotion; derived the idea of soul from the experiences of the shadow, echo, sleep and dreams, and the idea of ghost from that of soul or "other-self"; and made ancestor worship the universal form of earliest religion. In his view the mind of primitive man worked logically on a high level of reasoning power, but with false assumptions due to his ignorance of causation in the scientific sense. Spencer thus sought by processes of imaginative intro-

[50] *Principles of Sociology*, Part I (1874-76).
[51] *Primitive Culture* (1871).

spection to reconstruct in a logically consistent manner the route by which primitive man had built up his magical and religious ideas and practises. His method, which has been followed by many others, most notably by J. G. Frazer in *The Golden Bough*, was fundamentally one of deductive application of certain psychological principles, especially associationism and logical inference, to early ideas. It was an elaborate "rationalization" of primitive culture. In consequence, its greatest value, along with Tylor's contemporaneous work, was the presentation of a fairly consistent set of hypotheses from which subsequent anthropologists and ethnologists could work. In the nature of the case most of his hypotheses now appear untenable or only partially adequate. For example, that the idea of a double or "other-self" was the first suggestion of spirit now seems doubtful, for Lévy-Bruhl has shown that in some primitive communities the idea of several souls precedes that of one. His theory of totemism as arising from the custom of nicknaming has proven wholly inadequate, if not ridiculously erroneous. Instead of universal ancestor worship, it is found nowhere among very primitive peoples. Fear is doubtless an element in religious control, but that it constituted the emotional tap-root is at least doubtful.[52]

Little need be said of the generalization that society evolves from militarism to industrialism. This was in fact another piece of Spencerian apriorism; a rationalization of one of his deepest and most pious wishes. He contemplated the evolution of man toward a state of perfect adaptation; this involved a continuous reduction of primary conflicts, an increased rule of reason and toleration, and the achievement of that moral perfection which every philosophical anarchist conceives himself to have attained and which he imagines would enable each individual to govern himself in the full light of an effulgent reason and free from every form of social constraint. Spencer thus attached great moral significance to the advancement of peace and worked heroically to that end.[53] It is not impossible that there may ultimately be such an equilibration of energies between cultural and political groups as to end war, but the theory of evolution itself provides for the constant development of new social aggregates containing super-abundant energy and a consequent tendency to disturb the existing equilibrium by a fresh outburst of aggressive force. Life is inexorably dynamic and one cannot even say that static

[52] See Goldenweiser, *Early Civilization* (1922), Part III, especially Chap. XV.
[53] See his *Autobiography*, Vol. II, Chaps. 17, 18 and 19.

universal peace is either a natural or a wholesome ideal, even if attainable. Moreover, history provides no warrant for an assumption that permeates Spencer's ethical and social philosophies of a more or less steady evolution of inherent human nature toward that of the all-wise philosopher.

We need mention only one other Spencerian theory, namely, his argument in Part V of his Biology that there is an opposition between Individuation and Genesis. Space does not permit its elaboration, but from it Spencer drew the conclusion that human evolution would after many generations arrive at such a perfect adjustment to conditions of life on the globe that the natural unrestricted fertility would be about two per couple or just enough to sustain the population in a static state. If true, this theory would have not only allayed all Malthusian fears but revived the rosy visions of the Perfectionists. But he had much difficulty with the increased fecundity of domesticated animals. And just here is the weakness of his argument, for as Professors Eugene Fisher and Franz Boas have contended, man in civilization is in a state of domestication. As Professor Carr-Saunders [14] has demonstrated, the fecundity of man is greater in advanced than in primitive societies. At the same time no one would deny that civilized man is more highly cultivated. Moreover, it is not that organic evolution has taken an opposite direction to what Spencer assumed, but that, as his own theory stated, domesticated animals have a greater quantity and regularity of food and greater protection from exposure. They thus have more energy to devote to generation as well as to growth and the multiplication of activities.

VI. LESTER F. WARD

These few points by no means exhaust the interesting features in Spencer's social theory. He must be viewed as the first great systematizer of concrete sociological data and, therefore, as the real founder of sociology. Comte gave the science its name; Spencer first gave it an enormous collection of systematically arranged data together with a broad and more or less consistent body of theory. Closely associated with both of these men in the triumvirate of founders of sociology was Lester F. Ward (1841–1913), Comtian and Spencerian in his fundamental attitudes. Ward's writings covered many fields; in sociology, besides numerous articles they include; *Dynamic Sociology*, (2 vols., 1883); *Psychic Factors of Civilization* (1893); *Outlines of*

[14] *The Population Problem*, Oxford (1922).

Sociology (1898); *Pure Sociology* (1903), and *Applied Sociology* (1908).[55]

Like Spencer, Ward can be understood only in the light of his philosophical approach. He accepted fully and unreservedly the evolutionary viewpoint with its monistic and deterministic implications. Whereas, however, the absolute reign of causation had in the theories of Comte and Spencer left little or no place for a positive human rôle, Ward sought to avoid this fatalism after the manner of Mill in his *Logic* by magnifying the rôle of reason. Thus all psychic traits and powers he made products of biological genesis. From the simple feelings are evolved all the emotions and desires and these constitute the driving forces to action. But man's reason, once evolved, at once set to work to understand and therefore to control the conditions of his own existence. This constitutes the central and unifying theme of the *Dynamic Sociology* and the *Pure Sociology*. In the *Applied Sociology* the thesis is carried a step farther. In all of Ward's work society, as well as the individual, is seen to be a part of cosmic evolution. It also, therefore, must be saved from the hopelessness of exterior determination and given power to effect its own salvation. Spencer had avoided a pessimistic outlook by giving beneficent ethical implications to evolutionary processes. Ward's solution of the difficulty is in so raising the level of popular intelligence, or intellect plus knowledge, by the universal dissemination of the results of scientific inquiry as to lift society as a whole to the level of telic consciousness. This key to Ward's system shows his connection not only with Comte and Spencer but with Helvétius and the eighteenth century Egalitarians, with Locke, Hume, the Rationalists and all others of that Enlightenment which successfully closed the middle ages and created that antinomy between Revelation and Science which still persists as the deepest contradiction in modern social tradition. In his eloquent and philosophic presentation of the telic potentialities of reason Ward not only rounded out the positivist philosophy but joined hands across a century with those Perfectionists who also had prematurely envisaged a rationalist Utopia. This matter is recurred to later.

The second important feature of Ward's theory, implied in the above, was his emphasis on the rôle of psychic factors in social life.

[55] For summaries and criticisms consult: J. P. Lichtenberger, op. cit.; "Lester Frank Ward—A Symposium," *Amer. Jour. Soc.*, Vol. XXIX (1913), pp. 61–78; W. B. Bodenhafer, *The Comparative Rôle of the Group Concept in Ward's "Dynamic Sociology" and Contemporary American Sociology* (1921). See also J. M. Gillette, "Critical Points in Ward's *Pure Sociology*," in *American Journal of Sociology*, Vol. XX (1914–15), pp. 31–67; and H. E. Barnes, "The Doctrines of Lester F. Ward," ibid., September 1919, pp. 150–69.

No one has more effectively and clearly related feelings of pain and pleasure and the functioning of instinctive tendencies to the whole of those processes of biological genesis which have produced organism and species. In spite of his emphasis on the need of reason as a guide to action his was no shallow rationalism for he repeatedly stressed "the claims of feeling" as representing deep-seated demands of the organism for expression and satisfaction. His psychology, however, was not that of social groups or of gregarious animals; it indicated rather the social significance of inherent, biologically derived, psychic traits of individuals.

And yet, he remained at bottom a rationalist and utilitarian. This comes out quite clearly in his contention that man is not social by nature; that he has no gregarious instinct or tendency, nor had his ancestors; that he forms society in consequence of perceiving the advantages of association; and that he tends to become social in consequence of the socializing processes set up by society. This links Ward at least vaguely with Hobbes's form of the social contract theory.[56] This curious anachronism shows pretty clearly the essentially aprioristic nature of Ward's whole system, a quality revealed in many other ways. In the *Pure Sociology* in what he calls the proto-social state[57] he obscurely implies that the horde is the "simple unicellular" social unit. But whence and why the horde? Ward in fact nowhere explains the fact of association in terms satisfactory to his own premises. If society is the last and highest product of that creative evolution which produced all things it should have a natural basis in human needs and predispositions; but Ward viewed it as the uncertain and artificial product of human reason to be dissolved on occasion His view was fundamentally atomistic, society being really considered a mere aggregation, not an integrated organization. In the *Pure Sociology* he welcomes Gumplowicz's race struggle doctrine as "a true key to the solution of the question of the origin of society."[58] But whence the struggling groups? To say that it was only after conquest that true society began is to take a purely arbitrary point of departure. Ward was correct in strongly emphasizing the importance of "cross-fertilization of cultures" as a social process, but his sociology completely lacked any appreciation of the necessity of finding the primordial and elemental social fact, the basis and *raison d'être* of association. It should be added here that in his intellec-

[56] See *Dynamic Sociology*, I, 460, 463; II, 221; *Outlines of Sociology*, 90–91; *Pure Sociology*, 556.

[57] Pp. 273–4.

[58] Pp. 213–4.

tualism he overlooked the fundamental dualism of human nature. He found many other dualisms, cosmic, biological, ethical, sexual and social; he did not see that the sociologist must view man as controlled now by narrowly egoistic impulses and now by his herd impulses, and that both motivations are deeply rooted in the age-old struggle for existence.

A third rather distinctive theory was that of gynæcocracy or of female superiority at an early stage of social evolution.[59] This theory made the feminine the original sex, as though one could speak of one sex developing prior to the other. It implied that the female originally exercised the power of choice, and through her selection of the superior males brought about "male efflorescence" or the superior development of the male. Thereafter the male became dominant. This theory finds its antecedent in *Das Mutterrecht* (1861) of Bachofen, and has been the fountain head of much recent feminist literature.[60] A critical analysis of Ward's gynæcocentric theory in the light of modern genetics, embryology and endocrinology was made by M. M. Knight in *The New Biology and the Sex Problems in Society*.[61] This showed that there was scarcely a shred of evidence for Ward's fundamental assumptions but that the theory was already out of harmony with biological facts well-established when the *Pure Sociology* was published.

A fourth point concerning Ward's system is that it is dominated by metaphysical conceptions. Not that it is loaded with a vast number of neologisms, for Ward greatly enriched the sociological vocabulary. But many of the new terms are metaphysical in nature, as creative synthesis, sympodial development, chemism, bathmism, zoism, synergy, ontogenetic, phylogenetic and other social forces, and his frequent implications of purpose in nature. Thus synergy "is a universal principle, operating in every department of nature and at every stage in evolution, which is conservative, creative, and constructive." As one reads Ward he sees the cosmos and society being gradually molded by a number of genii whose purposes the philosopher is able to discern. All of which does great credit to Ward's marvelous philosophical capacity, the remarkable breadth and depth

[59] *Pure Sociology*, Chap. XIV.

[60] Examples are Mrs. Charlotte P. Gilman, *The Man-Made World;* Mrs. C. G. Hartley, *The Position of Woman in Primitive Society*, and similar works. Very recently a like viewpoint has been presented in *The Dominant Sex* by Mathilde and Mathias Vaerting, tr. by Eden and Cedar Paul, N. Y. (1923); see review by M. M. Knight in *The Journal of Social Forces*, II (1924), 569–574.

[61] Published in *Taboo and Genetics* by Knight, Peters and Blanchard, New York (1920).

of his intellectual powers, and to a large extent accounts for his enormous influence on budding sociologists during the formative period of the science. But to say that synergy creates and conserves social structures is little better than a theological phraseology.

Finally, as a dominant feature of his system, should be mentioned his *Applied Sociology*. As stated above, Ward's greatest life effort was to prove the possibility of avoiding the pessimistic fatalism of evolutionism by showing that the knowledge which science acquires makes it possible for man to control his own destiny. His demonstration of the superiority of the artificial over the natural is his greatest claim to fame. He did not attempt to deny that human reason and its function in scientific knowledge are within the chain of causal determinism. Reason would itself be useless in any but an orderly world. To be sure, science does not enable man to dispense with natural causation as it affects him, nor to place himself outside it, but rather to adapt himself to it and utilize it for his own ends. Is the same true for society? Ward argued that it was. He approached this problem in a broad way in Part III, "Telesis," of the *Pure Sociology*, where he argued that the raising of the understanding reveals the benefits to be derived from restraint of the individual and the enhancement of social co-operation. Society thus increasingly seeks to affect its own evolution. He envisaged the "socialization of achievement" through an increase of "social regulation" and "social invention" manifesting the highest and final product of evolution, "collective telesis." In the *Applied Sociology*, which he made the cap-stone of his system, he carried the argument farther. He aimed at a social science which could be turned to practical account in "social improvement," by which he meant the elevation and universalizing of individual well-being. Assuming all men substantially equal in native capacities his method for advancing "improvement" was universal scientific education.

In direct contradiction to his fundamental egalitarianism Ward made genius the creative element in culture, and his immediate aim in universalizing education was to release from the mass of mediocrity an increasing number of those geniuses who are by nature highly endowed. We pass over his exaggerated emphasis on the rôle of education, in order to point out in a broad general way the limitations of this theory. It is a highly idealistic theory. Society, unlike the individual, has no actual sensorium. Its ability therefore to utilize scientific intelligence depends on the harmony of interests of controlling individuals and groups who have this intelligence at their command. Ward repeatedly re-iterated that emotion unites, intellect

divides. It is conceivable that a society of highly intelligent and informed persons might so work at cross-purposes as to act most unintelligently—as witness Europe and America since 1918. In the second place, science does not create nature, it only comes to understand her. It may be that pulsations of cultural advance and decline are parts of a cosmic process as far from effective control as pulsations of climate or waves of meteorological phenomena. In any case, the telic control which man hopes to exert will always be within the deterministic causal chain itself. Cultural evolution is indeed a part of cosmic evolution and man cannot hope to control it ultimately. This, however, does not wholly nullify Ward's position, for the very consciousness that science gives power makes possible conscious effort at improvement through scientific technique. But we are as yet so hopelessly ignorant of the final working out of social processes that we cannot be certain that any policy promising some immediate "improvement," as Ward used the term, may not involve future destruction. However this may be, Ward's it will be, undying fame not only to have elaborated the *rationale* of the scientific view of the world, but to have eloquently preached the doctrine of scientific meliorism as against the pessimism of sociological laissez-faireism.

VII. A CONSPECTUS OF RECENT SOCIOLOGISTS

As one leaves the founders and approaches the highly complicated but still amorphous body of writings which constitute the literature of sociology today, he is rather bewildered by its luxuriance and variety and appalled by its mass. In harmony with the Spencerian formula it has undergone differentiation and a tendency toward specialization although the correlated processes of integration and increasing coherency have not, as yet, progressed very far. Certain definite developments may be noted.

There is, first, the tendency for the field to be divided up for intensive cultivation among specialists pursuing the social reality from particular angles. Some of these students may be classed as sociologists, others as geographers, biologists, demographers, psychologists or anthropologists with a sociological interest. Most of these special lines of investigation and interpretation are noted in the outline below.

This tendency toward specialization has many illustrations, whether one views it from the tendency of sociology to split up into major parts or the similar tendency of these parts to split into still more highly individualized segments. Comte, Spencer and Ward covered

the whole field of sociology and while they contributed little except most general notions regarding the significance of geographic, biological or psychic factors in social life, they nevertheless represented more or less faithfully the materials then available. Spencer covered the rôle of the "Original External Factors" in one chapter, but today this constitutes a specialty with a rapidly growing quantity of data and a developing technique. The narrow geographical determinism of Buckle and the sweeping generalities of Ratzel have given place to the more detailed and searching inquiries of Semple, Huntington, and Brunhes. The same is true of studies relating to the rôle of heredity, natural and social selection, and racial differences in social evolution. The ideology of the organismic school has given way to the fact finding inquiries of eugenicists, social hygienists, physical anthropologists and social biologists. Indeed, in this field the development and application of statistical method by Galton, Pearson, Davenport and others has given rise to a highly specialized body of literature unequalled in exactitude of method and rigeur of logic by any other field of sociological interest. Moreover, those interested in the rôle of biological factors in social life are divided into several groups with viewpoints both diverse and supplementary. A glance at the outline of the group designated "Psychological Determinists" reveals similar tendencies.

This tendency toward an atomistic specialization is what one observes in all other fields of scientific effort. It has not been long since a professor of physics, for example, might lay reasonable claim to familiarity with the whole field of physical theory and research. Today the field is so highly specialized that only the textbook writer pretends to omniscience as to the whole field from geophysics to mathematical and electrical physics. Likewise with other sciences. Chemistry ranges from physical chemistry to bio-chemistry with many divisions between. Biology and psychology are far from the simple, homogeneous unity they once had. Moreover, each field of inquiry finds itself under the necessity of supporting itself in part on the related aspects of neighboring fields. Geology supports itself, in part, on physics, chemistry, biology and palæontology; psychology on physics, biology, physiology, anthropology and sociology. More perfect description in one field at once affects the viewpoint and effort in related fields. Sociology in its search for an understanding of the social life of man draws on biology, psychology, anthropology, ethnology, geography and history, and in so doing tends to split into somewhat hostile and mutually-disesteeming segments.

The fear has been expressed by some and the hope by others that

this splitting up of the sociological effort would result in the disappearance of sociology as such. There are no grounds for such expectation. Society is clearly a part of cosmic evolution. As such it requires interpretation in terms of the physical and biological conditions through which it develops and is sustained as well as in terms of the psychological and sociological factors which make it possible and are made possible by it. Society is at once a physical and a psychological entity but with laws all its own. There must, therefore, remain always the need for a synthetic social science interpreting society as a whole in terms of all the forces and factors affecting it, just as general biology studies the general phenomena of life which find concrete expression in botanical and zoological phenomena. Botany and zoology may well lay claim to cover between them all the phenomena of life, but their progress has not swallowed up biology itself. Rather, their advancement has served to give definiteness and assurance to the findings of general biology. The latter is in fact precisely the synthesis of whatever is common to the studies of the botanist and zoologist. Sociology similarly must be viewed as a synthesis of whatever pertains to the activities of groups of associated humans as revealed by any and every manner of studying them. If this general social science still sounds much like social philosophy with a great deal of speculation, broad assumptions, unproven and improbable generalizations, plus naïve rationalizations of subjective desires and aspirations, one can say that progress is being made toward objectivity and positivity.

This analogy between biology and sociology can be carried further. The development of histology, embryology, genetics, bacteriology, biochemistry and other special aspects of the phenomena of life has given rise to specialists such as the histologist, the embryologist, the geneticist, the bacteriologist, the bio-chemist and so forth, all of whom may be and are looked upon as biologists but who prefer to go by the names of their specialties. Persons who pretend to a knowledge of the whole field of studies relating to life tend, in consequence of this specialization, to become much less numerous than they were a generation ago and courses in General Biology occupy relatively less space in college catalogues. But General Biology remains. It might seem to have lost all its problems and to have thus disappeared as a science. But curiously enough the special sciences that might seem to have despoiled biology by taking its problems have greatly enriched it by bringing their special contribution to a clearer understanding of life. In similar fashion the field once pre-empted exclusively by sociology tends to split up. Some of it is taken by the social historian, some by

the ethnologist, the anthropologist, the social economist, the human geographer, the demographer, the eugenicist, the social hygienist, the social psychologist and who not. Some of these persons call themselves sociologists and some do not. Some who call themselves sociologists are driven by the very necessities of the case to be specialists. As time passes more of them will be so compelled because of the limitations of time and human capacities and the development of materials. Departments of sociology in the future, if they pretend to anything like completeness, will of necessity include specialists in the rôle of geographic, biological, psychological and cultural factors in the evolution of social life. Such specialization permits the concentration of effort, the clarification of problems and the detailed research whereby alone scientific progress can be made. Sociologists may become relatively scarcer and specialists of various brands more numerous, but sociology as a synthetic understanding of the life of men living in groups will become less a mere body of rationalizations and pious wishes and more a positive understanding of the greatest of all subjects of investigation.

In the second place, there has been a drift away from the early physical and biological terminology. After the early '90's there was increasing emphasis on features of individual psychology, such as suggestibility, the interests, the wishes, gregariousness and consciousness of kind. Latterly there have appeared hopeful efforts to find some principles of collective life itself. This takes a variety of forms ranging from Durkheim's and Sumner's studies of collective representations or folkways and mores as entities in themselves to Giddings's analysis of pluralistic behavior and Ross's study of group forces, processes and products. Comte and Quetelet, and to some extent Spencer, studied social phenomena in terms of a social physics; Spencer utilized organic analogies, Ward drew some of his terminology from botany and Worms declared that society is an organism pure and simple; and, after Darwin, the rôle of natural selection and race struggle was made the basis of a vast amount of sociological writing; but since the publication of Tarde's *Les lois de l'imitation* in 1890, and Le Bon's *Psychologie des foules* in 1895, the emphasis has been increasingly on psychological viewpoints. Fundamental writings here include works of Tarde, Le Bon, Baldwin, Durkheim, Fouillée, Ward, Giddings, Sumner, Ratzenhofer, Small, Cooley, Ross, Wallas and others. With the publication of Ross's *Social Psychology* and McDougall's *An Introduction to Social Psychology* in 1908 began a great outburst of literature in that field. A special turn was given it by Ellwood's *Sociology in Its Psychological Aspects* (1912).

There has been a continuous controversy, not yet ended, over the conception and rôle of instincts, reflecting a similar controversy among the psychologists.[62] There has also been a wide difference between those primarily interested in explaining human personality in terms of social pressures and impresses and those seeking to explain social phenomena in terms of individual reactions, stimulus and response. Finally, a new set of problems is emerging, centering around the description of collective psychological phenomena without reference to factors of individual psychology.

Two further tendencies, both closely related to the first mentioned, should be noted, namely, the reduced activity in system making and the development of method. The system builders represent the generalizers and philosophers of a science. They are especially numerous and active in the ideological stages of its development, that is, when the foundations are being laid and when plans are being drawn for a new wing. Space has permitted here the study only of Comte, Spencer and Ward. Obviously, a balanced treatment would require a study also of other great founders such as Bagehot, de Roberty, Gumplowicz, de Greef, Tarde, Giddings, Durkheim, Ratzenhofer, Small, Barth, Kidd, Simmel, Sumner and Ross. The era of broad and sweeping generalizations and magnificent summations has happily given way, in the main, to an era of fact finding, of research in differentiated and individualized fields by more and more exact technique. This is as it should be; it was inevitable, if progress was to be made toward scientific exactness and away from muddy metaphysics, meaningless verbiage and the glittering generalities of high-sounding rationalizations. But it is nevertheless well in passing to pay our respects to the extraordinary intellectual power of the system builders. If they built with bricks of unbaked clay the fault was not theirs but their time's. Their work was as essential to the establishment of sociology as was that of Lamarck, Buffon, the elder Darwin. and Chamberlain for the founding of biology. Moreover, the elaboration of sociology as the generalized social science dealing with the essential nature of the life of human groups will repeatedly require the same sort of architechtonic genius which these founders displayed, in order to fashion new bricks, compounded of the enduring substance of tested observation.

Not the least important factor in ending the era of philosophical elaboration has been the development of method. The most obvious

[62] See "Papers on Social Psychology Presented Before the 1923 meetings of the American Sociological Society," *Jour. of Abnormal Psychology and Social Psychology*, vol. 19; and L. L. Bernard, *Instinct: A Study in Social Psychology*, N. Y. 1924.

feature here has been the elaboration of statistical technique by Quetelet, Galton and Pearson. Quetelet's conception of individual variations about a mean or type called the average man has proven of wide validity and has necessitated not merely counting the individuals of a group but finding their average, the range and intensity of their distribution, and the quantitative measure of the association between one and another of their traits. The development of the social survey, of the description both by quantitative measures and by standardized terminology of particular families, groups or communities, and the intensive study of family and group pedigrees have all tended to give a check to loose generalization, a zest to research and an exactness of knowledge which are immeasurable gains. Moreover, with increasing specialization sociological inquiry has been greatly affected by the development of methods and results in the related fields of geography, biology and psychology.

Space does not permit a critical analysis of recent and current theories, so that it has seemed best to present a classification of them in outline form. Society is, as Spencer put it, a product of superorganic evolution, which means merely that it is a product of evolutionary, *i. e.*, natural, forces operating on a plane above the purely and simply organic. There are, therefore, phenomena peculiar to society, forces which are generated by it. At the same time the whole life of any society cannot be understood except as some account is taken of the physiographic conditions to which it is adapted, the biological factors which determine its potentialities, the general psychological principles which reveal the mode of functioning and behavior of the human mind at all times and places, and those modes of behavior characteristic of social groups. Professor Giddings has defined sociology as the explanation of "the origin, growth, structure and activities of society by the operation of physical, vital and psychical causes working together in a process of evolution."[63] In the light of recent developments in theories of cultural evolution one must add to Giddings's list of "causes," the distinctly "social," meaning the cultural milieu itself in all its relations and contacts, or what Kroeber, recalling Spencer's terminology, has called the "superorganic."[64]

Such a conception forms the basis of the following classification. Sociology is necessarily synthetic and takes account of all aspects of a society's life; but so vast a field not only breaks up into parts but finds eager and enthusiastic advocates of this or that specialized ex-

[63] *Principles of Sociology*, p. 8.

[64] "The Possibility of a Social Psychology," *American Journal of Sociology*, Vol. XXIII (May, 1918), pp. 633–650.

planation of the social reality. If Huntington sees the rise and fall of cultures in terms of meteorological conditions, Gobineau and Grant see them in terms of race purity and race mixture. It is possible, therefore, to classify sociologists according as they emphasize objective physical factors, as climate, selection, race, or the subjective psychic factors, as imitation, sympathy, interests. Such a classification is suggested by Professor Giddings's theory of social causation or the joint operation of objective and subjective conditions. It is, however, not complete as it does not provide a logical place for the distinctly social factors, such as pluralistic behavior or the rôle of institutions. We have, therefore, made the primary classification fourfold according as the emphasis is on the physiographic, the biological, the individual psychological, or the collective psychological factors.

Even this classification does not include all the literature that passes for sociological. For the sake of completeness merely, a fifth division has been added to include the social idealists of various faiths and the social philosophers more or less separable from the social scientists. Many of these cannot, of course, be considered sociologists, except in a broad popular sense.

A special section might well have been set aside for the Methodologists of various types, to include all those who have been interested in a more accurate method of measuring social phenomena, had this study not already grown too long. In every field of sociology the quantitative method is becoming ascendent, and the classification of the workers in the four major fields of sociological effort will indicate the progress of more exact methods of research and more competent technical specialization.

No part of this outline can claim to be exhaustive; nor final. It is merely a first trial at an orderly presentation of what is in fact highly chaotic and nebulous. Nor is the classification of many of the authors exclusive, for they may have emphasized aspects of the social reality other than that with which they are most identified. Thus, Trotter, while identified with the herd instinct, also emphasizes the food and sex instincts. Occasionally an author is placed under two headings, different works requiring separate categories as in the case of Professor Ross. Most sociologists attribute some importance to the physical and vital conditions of social life even though they think of society primarily in psychic or in cultural terms. No claim is made, therefore, that this classification adequately characterizes the work of the authors mentioned; the aim has been to connect the author with the viewpoint which most accurately represents his special em-

phasis or contribution. It is for this reason that many persons making contributions of sociological interest from the standpoint of some specialty have been included along with those who are professed sociologists.

There have been appended brief bibliographies which follow the plan set forth in the outline of theories. If any one misses himself or his favorite author in outline or in bibliography let him correct and supplement both the outline and the bibliography as his opinion suggests.

CLASSIFICATION OF SOCIAL THEORIES *

I. *Geographical Determinists:* deriving from astronomy, geology, physiography and meteorology and dealing with the significance of material factors for social organization and historical events.

1. Writers covering the general field of anthropo-geography, embracing all the major environmental influences: [65]

J. G. von Herder	A. Guyot	E. C. Semple
A. von Humboldt	F. Ratzel	J. Fairgrieve
K. Ritter	E. Reclus	A. Kirchhoff
O. Peschel	P. Vidal de la Blache	I. Bowman
J. G. Kohl	J. Brunhes	W. M. Davis

2. Those dealing chiefly with topography, routes of travel, strategic position and cultural contacts resulting therefrom: [66]

E. Demolins	C. Vallaux	J. Cvijić
A. R. Cowan	H. J. Mackinder	A. B. Hulbert

* The writer is indebted to the editor for the addition of numerous names and titles in the bibliographies and for the sub-classes under I.

[65] J. G. von Herder, *Ideen zur Philosophie der Geschichte der Menschheit* (1784); A. von Humboldt, *Cosmos* (1845–58); K. Ritter, *Die Erdkunde im Verhältniss zur Natur und zur Geschichte der Menschen* (1817–59); see also W. L. Gage, *Ritter's Geographical Studies* (1863); O. Peschel, *Vergleichende Erdkunde* (1870); *Physische Erdkunde* (1883–5); J. G. Kohl, *Der Verkehr und die Ansiedelungen der Menschen* (1874); A. Guyot, *Earth and Man* (1861); F. Ratzel, *Anthropogeographie* (2 Vols. 1899); *Politische Geographie* (1903); E. Reclus, *L'Homme et la terre* (6 Vols. 1906–8); P. Vidal de la Blache, *Principes de géographie humaine* (1921); J. Brunhes, *Human Geography* (1921); J. Brunhes and C. Vallaux, *La Géographie de l'histoire* (1921); E. C. Semple, *The Influences of Geographical Environment* (1911); J. Fairgrieve, *Geography and World Power* (1921); A. Kirchoff, *Man and Earth* (1914); I. Bowman, *The New World* (1921); W. M. Davis, numerous articles and unpublished lectures, *Physical Geography* (1898); and *Geographical Essays* (1909).

[66] E. Demolins, *How the Route Creates the Social Type* (English edition, 1923–4); A. R. Cowan, *Master-Clues in World History* (1914); C. Vallaux, *Géographie sociale: le sol et l'état;* and *Géographie sociale: la mer* (1911); H. J. Mackinder, *Democratic Ideals and Reality* (1919); J. Cvijić, *La Péninsule balkanique* (1918); A. B. Hulbert, *Historic Highways of America* (1902–5).

3. Those emphasizing climate and weather: [67]

J. Hann	R. DeC. Ward	W. Hellpach
E. Huntington	E. G. Dexter	C. E. Woodruff

4. Those treating primarily food and natural resources: [68]

A. Demangeon	J. R. Smith	E. Deckert
G. G. Chisholm	W. D. Jones	K. Hassert
W. Goetz	J. McFarlane	K. Dove
O. D. von Engeln	P. Clerget	F. Heiderich

5. Those interested mainly in the relation between geographic facts and the historical development of mankind: [69]

H. T. Buckle	M. I. Newbigin	A. P. Brigham
F. Hellwald	E. J. Payne	F. J. Turner
H. Helmolt	H. J. Mackinder	E. C. Semple
L. Metchnikoff	P. Mougeoulle	F. J. Teggart
W. H. Riehl	N. Shaler	H. B. George

6. Those who base a theory of social reconstruction on a primary consideration of geographical factors: [70]

F. Le Play	V. Branford
P. Geddes	E. Huntington

[67] J. Hann, *Handbuch der Klimatologie* (New edition, 1910); E. Huntington, *The Pulse of Asia* (1907); *Civilization and Climate* (1915); and *Climatic Changes* (1922); R. De C. Ward, *Climate* (1908); E. G. Dexter, *Weather Influences* (1904); W. Hellpach, *Die Geopsychischen Erscheinungen* (1911); C. E. Woodruff, *The Effects of Tropical Light upon White Man* (1905); *The Expansion of Races* (1909); *Medical Ethnology* (1917).

[68] A. Demangeon, *America and the Race for World Dominion* (1921); G. G. Chisholm, *Handbook of Commercial Geography* (1905); W. Goetz, *Historische Geographie* (1904); O. D. Von Engeln, *Inheriting the Earth* (1923); J. R. Smith, *Industrial and Commercial Geography* (1913); and *The World's Food Resources* (1919); W. D. Jones, *An Introduction to Economic Geography* (1924); J. McFarlane, *Economic Geography* (1915); P. Clerget, *Géographie économique* (1912); E. Deckert, *Das britische Weltreich* (1916); K. Hassert, *Die Vereinigten Staaten von Amerika* (1922); K. Dove, *Allgemeine Wirtschafts geographie* (1921); and *Allgemeine Verkehrsgeographie* (1921); F. Heiderich, *Wirtschaftsgeographie* (1917).

[69] H. T. Buckle, *History of Civilization in England* (2 Vols. 1858–61); F. Hellwald, *Kulturgeschichte in ihrer natürlichen Entwicklung* (4 Vols., 1874); H. Helmolt, *The History of the World* (8 Vols. 1902–7); L. Metchnikoff, *La Civilisation et les grands fleuves historiques* (1889); W. H. Riehl, *Naturgeschichte des Völkes; Land und Leute* (1853); M. I. Newbigin, *The Mediterranean Lands* (1924); E. J. Payne, *A History of the New World Called America* (1902); H. J. Mackinder, *Democratic Ideals and Reality* (1919); P. Mougeoulle, *Les Problèmes de l'histoire* (1886); N. Shaler, *Nature and Man in America* (1893); A. P. Brigham, *Geographic Influences in American History* (1903); F. J. Turner, *The Frontier in American History* (1920); and *Select References on the History of the West* (1923); E. C. Semple, *American History and Its Geographic Conditions* (1903); F. J. Teggart, *The Processes of History* (1915); H. B. George, *The Relations of Geography and History* (1903).

In this conspectus of anthropo-geography we can readily perceive the processes of specialization carried to the second degree. Not only is the geographic factor in social life and institutional growth being investigated today primarily by trained geographers, but even among these there is coming to be a definite specialization along lines of individual interest and competence, both as to subject-matter and geographical regions and areas. Yet sociologists must from time to time take cognizance of these studies by geographers, and attempt to assess their importance for an understanding of the processes of human society. A comprehensive effort to do this for the past and present contributions of anthropo-geography has just been executed by Professor Franklin Thomas in his *Environmental Basis of Society* (1925).

II. *Biological Determinists:* deriving their inspiration and information from biological data, and emphasizing the significance of vital principles and processes for social organization and evolution.

1. Organismic School: applying biological analogies to the interpretation of social structures and processes:[71]

A. Comte	A. Schaeffle	J. Novicow
J. K. Bluntschli	P. Lilienfeld	G. De Greef
H. Spencer	R. Worms	A. Fouillée

2. The Social Darwinists: emphasizing the struggle of racial, national and social groups as a fundamental condition of social evolution:

A. Advocates or expounders of the doctrine:[72]

W. Bagehot	F. Oppenheimer	E. Jenks
L. Gumplowicz	G. Simmel	L. F. Ward
G. Ratzenhofer		

[70] F. LePlay, *La Réforme sociale en France* (3 Vols. 1878); P. Geddes, *Cities in Evolution* (1915); P. Geddes and V. Branford, *The Coming Polity* (1919); E. Huntington, *The Character of Races* (1924).

[71] A. Comte, *Principles of a Positive Polity* (4 Vols. 1851–54); J. K. Bluntschli, *Allgemeine Staatslehre* (1852); H. Spencer, *Principles of Sociology* (Vol. I, 1876); A. Schaeffle, *Bau und Leben des socialen Körpers* (2 Vols. 1875–8); P. Lilienfeld, *Gedanken über die Socialwissenschaft der Zukunft* (5 Vols. 1873–81); R. Worms, *Organisme et société* (1896); J. Novicow, *Conscience et volonté sociales* (1897); G. DeGreef, *Introduction à la sociologie* (2 Vols. 1886–9); A. Fouillée, *La Science sociale contemporaine* (1880). F. W. Coker, *Organismic Theories of the State* (1910).

[72] W. Bagehot, *Physics and Politics* (1877); L. Gumplowicz, *Der Rassenkampf* (1883); *Outlines of Sociology* (1899); G. Ratzenhofer, *Wesen und Zweck der Politik* (3 Vols. 1893); F. Oppenheimer, *The State* (1914); G. Simmel, *Soziologie* (1908); *Über sociale Differenzierung* (1890); E. Jenks, *The State and the Nation* (1919); L. F. Ward, *Pure Sociology* (1903).

B. Critics or opponents: [73]

P. Kropotkin	G. Nasmyth	B. Russell
J. Novicow	D. S. Jordan	N. M. Butler
A. Sutherland	N. Angell	W. Sombart
W. James	G. F. Nicolai	

3. Malthusians, Neo-Malthusians and Demographers: deriving from Malthus, economics and modern biology, and emphasizing the relation of population to the means of subsistence, social prosperity and cultural achievements: [74]

F. Nitti	W. F. Willcox	H. Cox
A. Dumont	W. S. Thompson	H. Wright
P. E. Levasseur	E. M. East	J. Swinburne
J. Bertillon	A. M. Carr-Saunders	H. P. Fairchild
G. von Mayr	R. Pearl	E. B. Reuter

4. Anthropo-Sociologists, Social Selectionists, Eugenicists: interested primarily in the biological history of man, and emphasizing the selective rôle of organic traits and differential endowment in individual status and class stratification: [75]

F. Galton	C. B. Davenport	S. J. Holmes
P. Jacoby	W. Schallmayer	F. W. Mott
G. Vacher de Lapouge	H. W. Siemens	W. E. Kellicott
O. Ammon	F. Lenz	A. E. Wiggam
G. Hansen	A. Ploetz	H. H. Goddard
K. Pearson	E. G. Conklin	R. R. Gates

[73] P. Kropotkin, *Mutual Aid: A Factor in Evolution* (1904); J. Novicow, *La critique du Darwinism social* (1910); A. Sutherland, *Origin and Growth of the Moral Instinct* (2 Vols. 1898); W. James, "*The Moral Equivalent of War*," in his *Memories and Studies;* G. Nasmyth, *Social Progress and the Darwinian Theory* (1916); D. S. Jordan, *War and Waste* (1913) and *War's Aftermath* (1913); N. Angell, *The Great Illusion* (1910); *The Price of Victory* (1921); G. F. Nicolai, *The Biology of War* (1918); B. Russell, *Why Men Fight* (1916); N. M. Butler, *The International Mind* (1913); W. Sombart, *Krieg und Kapitalismus* (1913).

[74] F. Nitti, *Population and the Social Question* (1894); A. Dumont, *Dépopulation et civilisation* (1890); P. E. Levasseur, *La Population française* (3 Vols. 1889–1892); J. Bertillon, *La dépopulation de la France* (1911); G. von Mayr, *Bevolkerungsstatistik* (1922, 1924–5); W. F. Willcox, numerous essays; W. S. Thompson, *Population: a Study in Malthusianism* (1915); E. M. East, *Mankind at the Cross-Roads* (1923); A. M. Carr-Saunders, *The Population Problem* (1922); R. Pearl, *Studies in Human Biology* (1924); H. Cox, *The Problem of Population* (1923); H. Wright, *Population* (1923); J. Swinburne, *Population and the Social Problem* (1924); H. P. Fairchild, *Immigration* (1913); E. B. Reuter, *Population Problems* (1923).

[75] F. Galton, *Hereditary Genius* (1869); *Natural Inheritance* (1889); *Inquiries into Human Faculty* (1883); P. Jacoby, *Études sur la sélection* (1881); G. Vacher de Lapouge, *Les sélections sociales* (1896); O. Ammon, *Die Gesell-*

5. Racial Determinists: emphasizing hereditary racial superiorities and inferiorities:

A. Advocates or expounders: [76]

J. A. de Gobineau	O. Ammon	C. Brigham
H. S. Chamberlain	A. P. Schultz	C. W. Gould
H. Lea	M. Grant	W. McDougall
G. Vacher de Lapouge	L. Stoddard	H. F. K. Gunther
		E. Huntington

B. Critics and opponents: [77]

W. B. Babington	R. H. Lowie	J. Finot
F. Boas	T. Simar	E. Demolins
A. A. Goldenweiser	A. L. Kroeber	J. Oakesmith

It is, of course, obvious that there is no little overlapping and duplication in this classification. Indeed, many students have done work in more than one of these fields. Nevertheless, these schools or groups of writers are distinguishable on definite and valid grounds, and they represent the main types of effort which have thus far been

schaftsordnung und ihre naturlichen Grundlagen (1895); G. Hansen, *Die drei Bevolkerungsstufen* (1889); K. Pearson, *National Life from the Standpoint of Science* (1905) numerous *Memoirs* and *Lectures;* C. B. Davenport, *Heredity in Relation to Eugenics* (1911); W. Schallmayer, *Vererbung und Auslese im Lebenslauf der Volker* (1903); H. W. Siemens, *Race Hygiene and Heredity* (1924); F. Lenz, *Menschliche Auslese und Rassenhygiene* (1923); A. Ploetz, *Sozialanthropologie* (1923); E. G. Conklin, *Heredity and Environment in the Development of Man* (1919); *The Direction of Human Evolution* (1923); S. J. Holmes, *The Trend of the Race* (1922); F. W. Mott, *Nature and Nurture in Mental Development* (1914); W. E. Kellicott, *The Social Direction of Human Evolution* (1911); A. E. Wiggam, *The Fruit of the Family Tree* (1923); H. H. Goddard, *Human Efficiency and Levels of Intelligence* (1920); R. R. Gates, *Heredity and Eugenics* (1923).

[76] J. A. Gobineau, *Essay on the Inequality of the Human Races* (English edition, 1915); H. S. Chamberlain, *Foundations of the Nineteenth Century* (English edition, 2 Vols. 1911); H. Lea, *The Day of the Saxon* (1911); G. Vacher de Lapouge, op. cit.; O. Ammon, *Die naturliche Auslese biem Menschen* (1883); A. P. Schultz, *Race or Mongrel* (1908); M. Grant, *The Passing of the Great Race* (1916); L. Stoddard, *The Rising Tide of Color* (1921); *Racial Realities of Europe* (1924); C. Brigham, American Intelligence (1923); C. W. Gould, *America: A Family Matter* (1922); W. McDougall, *Is America Safe for Democracy* (1921); H. F. K. Gunther, *Rassenkunde des deutschen Völkes* (1923).

[77] W. B. Babington, *Fallacies of Race Theories* (1895); F. Boas, *The Mind of Primitive Man* (1911); A. A. Goldenweiser, "Race and Culture in the Modern World," in *Journal of Social Forces*, November, 1924; R. H. Lowie, *Culture and Ethnology* (1917); A. L. Kroeber, *Anthropology* (1923); T. Simar, *Etude critique sur la formation de la doctrine des races* (1923); E. Demolins, *Anglo-Saxon Superiority* (English edition, 1899); J. Oakesmith, *Race and Nationality* (1919); J. Finot, *Race Prejudice* (1906).

expended in the attempt to show the bearing of the chief biological facts and processes upon the course of human history and the organization and functioning of human society. What is most needed just now is a competent and judicious synthesis and appraisal of these diverse contributions in a comprehensive work on biological sociology. The works recently published by Kelsey, Tenney, Conklin, Thomson, Dendy, Wiggam and Bushee,[78] while brief and elementary, are, perhaps, indicative of an apprehension of this need, and may suggest the execution of more comprehensive achievements. The most impressive thing about the development of biological sociology in the last quarter century is the trend away from vague analogies by men for the most part philosophers not technically trained in biology, towards the effort to discover the social implications of actual biological processes by highly competent professional biologists with a broad social interest.[79]

III. *Psychological Determinists:* deriving from psychology, and viewing society as primarily a psychic phenomenon and process.

1. Emphasis on particular inherent psychic traits and their social effects. Center of attention: the nature and social significance of inherent human qualities:

A. Dominant position of Reason: Rationalists and Utopians from Condorcet and Godwin to H. G. Wells and his disciples.[80]

B. Sympathy: sociability and social consciousness:[81]

Adam Smith	J. Fiske	A. Sutherland
H. Drummond	J. S. Mackenzie	F. H. Giddings

C. Suggestibility, Imitativeness and Acquired Habit:[82]

[78] C. Kelsey, *The Physical Basis of Society* (1916); A. A. Tenney, *Social Democracy and Population* (1907); J. A. Thomson, *What is Man?* (1924); A. Dendy, *The Biological Foundations of Society* (1924); A. E. Wiggam, *The Fruit of the Family Tree* (1924); F. A. Bushee, *Principles of Sociology* (1924).

[79] See for example R. Pearl's *Studies in Human Biology* (1924).

[80] Cf. H. G. Wells, *Men Like Gods* (1923). Most of the writers of this type are listed under Section V as social philosophers and reformers.

[81] A. Smith, *Theory of the Moral Sentiments* (1759); H. Drummond, *The Ascent of Man* (1894); J. Fiske, *Outlines of Cosmic Philosophy* (2 Vols. 1874–5); J. S. Mackenzie, *Introduction to Social Philosophy* (1893); A. Sutherland, *Origin and Growth of the Moral Instinct* (2 Vols. 1898); F. H. Giddings, *Principles of Sociology* (1896).

[82] W. Bagehot, *Physics and Politics* (1877); G. Tarde, *The Laws of Imitation* (English edition, 1903); G. LeBon, *The Crowd* (English edition, 1903); S. Sighele, *La Foule criminelle* (1901); *Psychologie des sectes* (1898); J. M. Baldwin, *Social and Ethical Interpretations in Mental Development* (1897); E. A. Ross, *Social Psychology* (1909); B. Sidis, *The Psychology of Suggestion*

W. Bagehot	S. Sighele	B. Sidis
G. Tarde	J. M. Baldwin	F. M. Davenport
G. Le Bon	E. A. Ross	W. Bechterew [83]

D. The Instincts: [84]

(1) Innate Tendencies: Original Nature of Man:
E. L. Thorndike R. S. Woodworth I. Edman

(2) Primary Instincts and accompanying emotions:
W. McDougall A. Shand S. Eldridge

(3) Gregariousness: the Herd, Tribal Instinct:
W. Trotter C. Read A. Keith

(4) Sex and the Repression of instinctive urges and cravings: Freud and the Psychoanalysts
A. G. Tansley E. R. Groves O. Tead
E. D. Martin C. Parker

(5) Preponent impulses: the Conditioned Reflex and psycho-social *adjustment:*
F. H. Allport W. H. Burnham F. L. Wells

(6) Combativeness:
P. Bovet F. Nietzsche

(7) Companionship, assertiveness and submissiveness:
F. C. Bartlett J. Lee

(8) Habit-forming tendencies:
W. James J. Dewey L. L. Bernard

(9) Critics of Instincts:
C. C. Josey F. H. Allport Z. Y. Kuo
J. Dewey J. B. Watson C. E. Ayres
J. R. Kantor L. L. Bernard E. Faris

(1898); F. M. Davenport, *Primitive Traits in Religious Revivals* (1905); W. Bechterew, *Die Bedeutung der Suggestion im socialen Leben* (1905).

[83] See also number 3 below in this section.

[84] E. L. Thorndike, *The Original Nature of Man* (1913); R. S. Woodworth, *Dynamic Psychology* (1918); *Psychology* (1922); I. Edman, *Human Traits* (1921); W. McDougall, *Introduction to Social Psychology* (1908); A. F. Shand, *The Foundations of Character* (1914); S. Eldridge, *Political Action* (1923); C. Parker, *The Casual Laborer* (1920); O. Tead, *Instincts in Industry* (1918); W. Trotter, *The Instincts of the Herd in Peace and War* (edition of (1919); C. Read, *The Origin of Man and of His Superstitions* (1921); A. Keith, *Race and Nationality from an Anthropologist's Point of View* (1919); S. Freud, *Group Psychology and the Analysis of the Ego* (1923); A. G. Tansley, *The New Psychology and Its Relation to Life* (1920); E. D. Martin, *The Behavior of Crowds* (1920); E. R. Groves, *Personality and Social Adjustment* (1923); F. H. Allport, *Social Psychology* (1924); W. H. Burnham, *The Normal Mind* (1924); F. L. Wells, *Mental Adjustments* (1917); *Pleasure and Behavior* (1923); P. Bovet, *The Fighting Instinct* (1923); F. C. Bartlett, *Psychology and Primitive Culture* (1923); J. Lee, *Play in Education* (1915); W. James, *Principles of Psychology* (1890); J. Dewey, *Human Nature and Conduct* (1922); C. C. Josey, *The Social Philosophy of Instinct* (1922);

2. Emphasis on the Socialization of the individual through the molding of inherent psychic traits and tendencies by the social heritage. Center of attention: the Socius:

A. The Interests: [85]

G. Ratzenhofer	A. W. Small	J. M. Williams

B. The Wishes: [86]

The Freudians	E. B. Holt	W. I. Thomas

C. The Social Self: [87]

J. M. Baldwin	C. H. Cooley	G. H. Mead

D. Socialization of attitudes: [88]

E. S. Bogardus	A. G. A. Balz	W. E. Hocking
J. Dewey	A. D. Weeks	L. L. Bernard

E. Behaviorism: reaction of individual to concrete situations: [89]

J. B. Watson	M. F. Meyer	E. R. Guthrie

3. Emphasis on collective psychological activities and products: Center of attention: the Group viewed as an integrated and continuing psychic unity:

A. Building on an analysis of human nature; primary interest in a coordinated and functioning social group: [90]

J. Dewey, op. cit.; Kantor and Allport, in *Journal of Abnormal Psychology*, Vol. XIX, pp. 3 ff.; J. B. Watson, *Psychology from the Standpoint of a Behaviorist* (1919); L. L. Bernard, *Instinct: A Study in Social Psychology* (1924); on Kuo, Ayres and Faris see Eldridge, *Political Action*, Chap. xxxi.

[85] G. Ratzenhofer, op. cit.; A. W. Small, op. cit.; J. M. Williams, *The Principles of Social Psychology*.

[86] S. Freud, *General Introduction to Psychoanalysis* (1920); E. B. Holt, *The Freudian Wish* (1915); W. I. Thomas, *The Polish Peasant in Europe and America* (Vol. I, 1918); *The Unadjusted Girl* (1923).

[87] J. M. Baldwin, *Mental Development in the Child and the Race* (1895); C. H. Cooley, *Human Nature and the Social Order* (1902); G. H. Mead, numerous articles, especially in the *Psychological Bulletin*.

[88] E. S. Bogardus, *Fundamentals of Social Psychology* (1924); J. Dewey, op. cit.: L. L. Bernard, *Instinct* (1024); A. G. O. Balz, *The Basis of Social Theory* (1924); A. D. Weeks, *The Control of the Social Mind* (1924); W. E. Hocking, *Human Nature and Its Remaking* (1915).

[89] J. B. Watson, op. cit.; M. F. Meyer, *Fundamental Laws of Human Behavior* (1911); E. R. Guthrie, *General Psychology in Terms of Behavior* (1922).

[90] The works of Spencer, DeGreef, Fouillée and Novicow as cited; also Spencer, *Man versus the State* (1884); the works of LeBon and Martin as cited; also E. Durkheim, *De la division du travail social* (1893); *Les Règles de la méthode sociologique* (1895); and *The Elementary Forms of the Religious Life* (1914); W. McDougall, *The Group Mind* (1920); M. P. Follett, *The New State* (1918); G. Wallas, *The Great Society* (1914); W. Lippmann, *A Preface to Politics* (1913); *Public Opinion* (1922); C. A. Ellwood, *Sociology in Its Psychological Aspects* (1912); C. H. Cooley, *Social Organization* (1909); *Social Process* (1918); L. T. Hobhouse, *Social Evolution and Political Theory* (1911); *Development and Purpose* (1913); F. H. Giddings, *Studies in the Theory of Human Society* (1922); R. M. MacIver, *Community: a Sociological Study* (1918); the works of Ward as cited.

(1) Contractual basis of the social group:
H. Spencer A. Fouillée J. Novicow
G. De Greef
(2) The mind of the Crowd:
G. Le Bon E. Durkheim E. D. Martin
(3) The Group Mind:
W. McDougall M. P. Follett
(4) The Great Society:
G. Wallas W. Lippmann
(5) The Social Co-ordination; intercommunication:
C. A. Ellwood C. H. Cooley L. T. Hobhouse
R. M. MacIver
(6) Pluralistic behavior:
F. H. Giddings
(7) Collective Telesis:
L. F. Ward L. T. Hobhouse L. Stein

B. Human nature assumed; psycho-social products viewed as instruments of control, and frequently thought of as constituting a sort of "social mind." Center of interest: Elements of Culture:[91]

(1) Folk-psychology and stages of culture:
Wilhelm Wundt A. Vierkandt
(2) Collective representations and the collective consciousness:
E. Durkheim H. Hubert M. Mauss
L. Lévy-Bruhl
(3) Folkways and Mores:
W. G. Sumner J. G. Frazer E. Westermarck
(4) *Les idées forces:*
A. Fouillée
(5) Psychic planes and currents; institutional social control:
E. A. Ross E. S. Bogardus
(6) The social heritage:
G. Wallas J. K. Hart J. H. Robinson

Nothing is more certain than that this classification of those who emphasize the psychological factors in social life will prove unsatisfactory to many informed readers. It can pretend to nothing more than a rough sketch of the actual situation. The classification is, in the first place, too simply logical to fit the complex facts. The basic

[91] W. Wundt, *Elements of Folk-Psychology* (1916); Durkheim, as cited; L. Lévy-Bruhl, *Primitive Mentality* (1923); Hubert and Mauss, various articles in *L'Année Sociologique* and elsewhere; W. G. Summer, *Folkways* (1907); J. G. Frazer, *The Golden Bough;* E. Westermarck, *Origin and Growth of Moral Ideas* (1906–8); A. Fouillée, as cited; E. A. Ross, *Principles of Sociology* (1920); G. Wallas, *Our Social Heritage* (1921). J. H. Robinson, *Mind in the Making* (1921); J. K. Hart, *The Discovery of Intelligence* (1924).

principle of the outline is a three-fold classification according as the primary interest centers about (1) the out-working of inherent individual traits, (2) the formation of plastic capacities by the social milieu, or (3) the social group considered as a special entity. Now, it is obvious enough that no writer can be crowded wholly into one of these categories, with the result that the class in which an author is here placed represents only a part, but, it is believed, a characteristic part of his work.

In the second place, one might have worked out a different type of classification altogether, based on the degree of emphasis on the rational element in human nature and the possibilities of rational social control. The non-intellectualism or even anti-intellectualism of McDougall, Trotter and Eldridge contrasts sharply with the older, now to all appearances, naïve intellectualism of such men as Lester F. Ward. But there has been a backward swing, as might have been anticipated, to the softened and modified but hopefully anticipatory intellectual utopianism of Weeks (*The Control of the Social Mind*).

In the third place, there is considerable question as to the validity of the grouping under "The Instincts." There is clearly a wide stretch from Thorndike and McDougall to Dewey. But if one dispense with the subtle deceits of language the difference appears one more of emphasis than of actuality. One only deceives himself by unreal distinctions when he thinks to dispose of the general theory of instincts by using some fresh term such as "predisposition to react," "determining tendency," "motor set," "conditioned reflex," "prepotent impulse" and similar terms, all of which indicate that man's nervous mechanism responds in a differential manner to external stimuli. There is, to be sure, a difference in the manner also in which the innate tendencies, predispositions and capacities of the human organism are conceived, but for the most part the difference lies in the fact that McDougall and Thorndike are more interested in "original human nature" and Dewey more interested in formed character. There would, in fact, be considerable justification for putting Dewey exclusively in class "2."

Finally, the distinction between the two groups in class "3" is more or less questionable in several cases. None of the writers in the first group of this class give any extensive analysis of human nature in the works here referred to. McDougall, Durkheim and Martin are the only ones who pretend to be professional psychologists. The former's *Group Mind* has his *Social Psychology* as basis. But something similar might be claimed for Wundt who is put in the second group. Similarly one might claim that there is as clear an outline of

human nature in Sumner as in Ward or Giddings, and it could also be charged that there is little logic in putting Graham Wallas in both groups. To all these possible criticisms one can point out, as partial extenuation, that the first group is based on their primary interest in a co-ordinated and functioning social group, while the second is interested primarily in elements of culture. This last group has a very close affinity to the fourth main category, the Cultural Determinists.

Perhaps the most striking and promising aspect of the developments outlined above is the fact that psychological sociology is no longer, as it was in the Tarde-LeBon stage, based upon the sociological exploitation of a rule-of-thumb and common-sense psychology, but is now being cultivated by highly specialized, expert and technical psychologists interested in particular phases of the subject. We are now on the road to a real understanding of human nature and its social basis and significance. The enormous advance in the field of psychological sociology in the last fifteen years can best be comprehended by comparing the above conspectus of the field today with the material which could be used by M. M. Davis in his admirable *Psychological Interpretations of Society*, published in 1909.

IV. *Cultural-Determinists:* Emphasis on institutions and cultural elements as self-originating and self-perpetuating phenomena.

1. Emphasis on Economic Institutions: [82]

K. Marx	W. J. Ashley	F. Müller-Lyer
The Socialists	W. Sombart	C. A. Beard
T. Veblen	The Webbs	A. Loria
E. R. A. Seligman	G. D. H. Cole	F. Oppenheimer
G. Schmoller	The Hammonds	R. H. Tawney
		A. M. Simons

[82] K. Marx, numerous works following *The Communist Manifesto* (1848); J. Spargo and G. L. Arner, *The Elements of Socialism* (1912); T. Veblen, *The Theory of the Leisure Class.* (1899); *The Theory of Business Enterprise* (1904); *The Vested Interests and the State of the Industrial Arts* (1919); E. R. A. Seligman, *The Economic Interpretation of History* (1902); G. Schmoller, *Grundriss der allgemeinen Volkswirtschaftslehre* (1900); W. J. Ashley, *Surveys: Historic and Economic* (1900); W. Sombart, *Der moderne Kapitalismus* (2 Vols. 1921); S. and B. Webb, *A History of Trade Unionism* (1894); *The Decay of Capitalist Civilization* (1922); G. D. H. Cole, *Guild Socialism* (1921); J. L. and B. Hammond, *The Town Labourer* (1919); and many other works of this sort on the Industrial Revolution; F. Müller-Lyer, *History of Social Development* (English edition, 1920); C. A. Beard, *The Economic Basis of Politics* (1922); A. Loria, *The Economic Foundations of Society* (1899); F. Oppenheimer, *The State* (1914); R. H. Tawney, *The Acquisitive Society* (1920); A. M. Simons, *Social Forces in American History* (1911).

2. Emphasis on Ethical Values and Religious Institutions: interpretation in terms of religious, ethical or authoritarian values and ideals:[93]

B. Kidd	S. Mathews	H. Belloc
Max Weber	R. Eucken	C. A. Ellwood
T. N. Carver	W. H. Mallock	P. A. Parsons

3. Anthropological Schools:

A. Orthogenetic Evolutionists:[94]

E. B. Tylor	L. H. Morgan	J. G. Frazer
H. Spencer	E. Westermarck	E. S. Hartland
J. Lubbock	A. Lang	F. B. Jevons
A. H. Post	C. Letourneau	D. G. Brinton

B. Diffusionists The Historical School:[95]

A. Bastian	W. Foy	W. H. R. Rivers
F. Ratzel	B. Ankermann	G. Elliot Smith
F. Graebner	W. Schmidt	C. Wissler

C. Critical School Historical-Psychological Ethnologists:[96]

R. R. Marett	F. Boas	A. L. Kroeber
P. Ehrenreich	R. H. Lowie	W. F. Ogburn
L. T. Hobhouse	A. A. Goldenweiser	A. M. Tozzer

[93] B. Kidd, *Social Evolution* (1895); Max Weber, numerous monographs and articles of which the most famous is his *Die protestantische Ethik und der Geist des Kapitalismus* (1905); T. N. Carver, *Essays in Social Justice* (1915); S. Mathews, *The Spiritual Interpretation of History* (1916); R. Eucken, *Die Einheit des Geisteslebens* (1888); *Einfuhrung in eine Philosophie des Geisteslebens* (1908); W. H. Mallock, *Religion as a Credible Doctrine* (1902); *The Reconstruction of Belief* (1905); H. Belloc, *The Servile State* (1912); C. A. Ellwood, *The Reconstruction of Religion* (1921); P. A. Parsons, *An Introduction to Modern Social Problems* (1924).

[94] E. B. Tylor, *Primitive Culture* (2 Vols. 1871); *Anthropology* (1881); H. Spencer, *Principles of Sociology; Descriptive Sociology;* J. Lubbock (Lord Avebury), *Prehistoric Times* (new edition, 1913); A. H. Post, *Der Ursprung des Rechts* (1876); L. H. Morgan, *Ancient Society* (1878); E. Westermarck, *History of Human Marriage* (1894); and op. cit.; A. Lang, *Custom and Myth* (1884); *Magic and Religion* (1901); C. Letourneau, numerous works on the evolution of property, law, religion, the family, etc.; J. G. Frazer, op. cit; and *Totemism and Exogamy* (4 Vols. 1910); E. S. Hartland, *Primitive Paternity* (1910); F. B. Jevons, *Introduction to the History of Religion* (1896); D. G. Brinton, *The Religion of Primitive Peoples* (1897); *The Basis of Social Relations* (1902);

[95] A. Bastian, *Der Mensch in der Geschichte* (1860); F. Ratzel, *Völkerkunde* (2 Vols. 1877–8); F. Graebner, *Methode der Ethnologie* (1911); W. Foy, articles in *Ethnologica* (1909 ff.); B. Ankermann, *Kulturkreise und Kulturschichten in Afrika* (1905); W. Schmidt, numerous articles in *Anthropos;* W. H. R. Rivers, *The History of Melanesian Society* (2 Vols. 1916); E. Smith, *Migrations of Early Culture* (1918); C. Wissler, *Man and Culture* (1922).

[96] R. R. Marett, *Anthropology* (1911); P. Ehrenreich, *Zur Frage der Beurtheilung und Bewerthung ethnographischer Analogien* (1903); L. T. Hobhouse, *Morals in Evolution* (new edition, 1915); *The Material Culture and Social*

4. Archæologists:[97]

G. de Mortillet	J. Déchelette	M. Burkitt
M. Boule	H. Obermaier	J. M. Tyler
H. Breuil	R. R. Schmidt	H. H. Wilder
E. Cartailhac	H. F. Osborn	G. G. MacCurdy
A. Rutot	O. G. S. Crawford	J. de Morgan

5. The Cultural Historians:[98]

K. Lamprecht	J. H. Robinson	F. S. Marvin
K. Breysig	J. H. Breasted	H. Berr
E. Gothein	J. T. Shotwell	F. J. Teggart
W. Dilthey	H. E. Barnes	P. Smith
		L. Thorndike

The work of the critical anthropologists, archeologists and cultural historians is of special importance for genetic sociology and the study of social origins. As the result of their labors we are now free from the mysticism and vagaries of the philosophy of history, as well as from those of the orthodox writers which followed Eusebius and Augustine in deriving their facts and interpretation of chronology and of social and religious evolution from the Old Testament. While

Institutions of the Simpler Peoples (1915); F. Boas, *The Mind of Primitive Man* (1911); R. H. Lowie, *Primitive Society* (1920); A. A. Goldenweiser, *Early Civilization* (1922); A. L. Kroeber, *Anthropology* (1923); W. F. Ogburn, *Social Change* (1922); A. M. Tozzer, *Social Origins and Social Continuities.*

[97] G. de Mortillet, *Essai de classification* (1869), and many succeeding works; on Boule, Breuil and Cartailhac see the bibliography in H. F. Osborn, *Men of the Old Stone Age;* A. Rutot, *Les Industries primitives* (1902); J. Déchelette, *Manuel d'archéologie préhistorique* (2 Vols. 1908–13); H. Obermaier, *Der Mensch der Vorzeit* (1912); R. R. Schmidt, *Die diluviale Vorzeit Deutschlands* (1912); H. F. Osborn, *Men of the Old Stone Age* (1915); O. G. S. Crawford, *Man and His Past* (1921); M. C. Burkitt, *Prehistory* (1921); J. M. Tyler, *The New Stone Age in Northern Europe* (1921); H. H. Wilder, *Man's Prehistoric Past* (1923); G. G. MacCurdy, *Human Origins* (2 Vols. 1924).

[98] K. Lamprecht, *What is History?* (1905); K. Breysig, *Kulturgeschichte der Neuzeit* (1900–); E. Gothein, *Die Aufgaben der Kulturgeschichte* (1889); W. Dilthey, *Einleitung in die Geisteswissenschaften* (1883); J. H. Robinson, *The New History* (1913); *Mind in the Making* (1921); *History of Western Europe* (new edition, 2 Vols. 1924–5); J. H. Breasted, *Ancient Times* (1917); *The Origins of Civilization* (1920); J. T. Shotwell, Unpublished Columbia University Lectures on the history of civilization; *Introduction to the History of History* (1922); H. E. Barnes, *The New History and the Social Studies* (1925), and with M. M. Knight and F. Fluegel, *Economic and Social History of Europe* (1925); F. S. Marvin, *The Living Past* (1914); *The Century of Hope* (1920); and the volumes of the Unity Series; H. Berr, *La Synthèse en histoire* (1911); and editor of the great series *L'Evolution de l'humanité* (1919–); F. J. Teggart, *Prolegomena to History* (1916); *The Processes of History* (1918); P. Smith, *The Age of the Reformation* (1921); L. Thorndike, *History of Magic and Experimental Science* (1921).

sociologists, narrowly conceived, are singularly and regrettably inactive in the field of historical sociology, there is no longer any reason why the properly informed sociologist cannot obtain adequate information as to the history of civilization, the evolution of social institutions, and the methodology of scientific research into the history of human society. What this means can best be comprehended by a comparison of the writings of Comte on the philosophy of history with Kroeber's *Anthropology,* Breasted's *Ancient Times,* and the new edition of Robinson's *History of Western Europe.* A general prospectus and bibliography of the field of historical sociology and cultural determinism in social evolution is provided by H. E. Barnes in his *Social History of the Western World* (1921).

V. Social Philosophers, Idealists and Reformers.

1. The Rationalists: Utopia through Reason, Science, and Education:[99]

Lester F. Ward	J. H. Robinson	The Professional
H. G. Wells	John Dewey	Liberals
G. Wallas	W. Lippmann	

2. Libertarians and Anarchists: Utopia through the destruction of restraints on the individual:[100]

William Godwin	Paul Eltzbacher	Elisée Reclus
P. J. Proudhon	Peter Kropotkin	Max Stirner
Michael Bakunin	Johann Most	Emma Goldman

3. Egalitarians, Socialists, Communists, Syndicalists and Bolshevists: Utopia through equality, democracy and collectivism:

A. Socialism:[101]

(1) Utopian:

Comte de St. Simon	Robert Owen	H. G. Wells
Charles Fourier	William Morris	

[99] Owing to their peripheral nature with respect to sociology no attempt will be made in the bibliographic footnotes to Section V to give the most representative work of each author mentioned. Rather we shall mention a few characteristic books, and certain surveys of each field. The best bibliography for this section is S. Zimand, *Modern Social Movements* (1921).

L. F. Ward, *Applied Sociology* (1906); H. G. Wells, *The Salvaging of Civilization* (1901); G. Wallas, *Our Social Heritage* (1921); J. H. Robinson, *The Humanizing of Knowledge* (1923); J. Dewey, *Democracy and Education* (1916); W. Lippmann, *Public Opinion* (1922). For an anthology of such opinion see L. D. Edie, *Current Social and Industrial Forces* (1919).

[100] E. V. Zenker, *Anarchism: A Criticism and History of Anarchist Theory* (1898); P. Eltzbacher, *Anarchism* (1908).

[101] T. Kirkup, *History of Socialism* (1913); R. T. Ely, *French and German Socialism* (1883); K. Marx, *Capital: A Critique of Political Economy* (English edition, 3 Vols. 1906-9); E. Bernstein, *Evolutionary Socialism* (English edi-

(2) "Scientific" or Marxian:

Karl Marx	Karl Kautsky	Karl Liebknecht
Friedrich Engels	Arturo Labriola	H. M. Hyndman
Ferdinand Lassalle	Louis Boudin	W. Z. Foster
August Bebel		

(3) Revisionist and Collectivist:

S. and B. Webb	F. Turati	Morris Hillquit
Eduard Bernstein	J. A. Hobson	W. E. Walling
Werner Sombart	J. Keir Hardie	Harry Laidler
Jean Jaurès	Ramsay MacDonald	
Emile Vandervelde	Philip Snowden	

(4) Guild Socialists:

S. G. Hobson	A. R. Orage	G. D. H. Cole
A. J. Penty	M. B. Reckitt	

(5) Christian Socialists:

Bishop von Ketteler	F. D. Maurice	Vida Scudder
F. Naumann	H. C. Vedder	Walter Rauschenbush
A. De Mun	John G. Brooks	H. F. Ward

(6) Critics of Socialism

Wm. G. Sumner	W. H. Mallock	O. D. Skelton
T. N. Carver	J. A. Ryan	Hartley Withers

B. Syndicalism:[102]

Georges Sorel	Emile Pouget	Wm. D. Haywood
Victor Griffuelhes		

C. Bolshevism:[103]

Nicholas Lenin	Leon Trotsky	Maxim Litvinoff

4. Co-operators: Utopia through co-operative buying and selling:[104]

C. R. Fay	Albert Sonnichsen	J. H. Warbasse
G. J. Holyoake	Charles Gide	L. S. Woolfe
Herbert Myrick		

tion, 1909); E. Pease, *A History of the Fabian Society* (1918); N. Carpenter, *Guild Socialism* (1922); G. D. H. Cole, *Social Theory* (1920); *Guild Socialism* (1922); F. Nitti, *Catholic Socialism* (1908); P. T. Moon, *The Labor Problem and the Catholic Social Movement in France* (1921); C. E. Raven, *Christian Socialism* (1921); W. Rauschenbush, *Christianizing the Social Order* (1912); H. F. Ward, *The New Social Order* (1920); W. G. Sumner, *What Social Classes Owe to Each Other* (1883); W. H. Mallock, *A Critical Examination of Socialism* (1907); O. D. Skelton, *Socialism: A Critical Analysis* (1911).

[102] L. Levine, *Syndicalism in France* (1914); P. F. Brissenden, *The I. W. W.: a Study in American Syndicalism* (1920).

[103] I. D. Levine, *The Man Lenin* (1924); Lenin, Bukharin and Rutgers, *The New Policies of Soviet Russia* (1923); N. Lenin and L. Trotsky, *The Proletarian Revolution in Russia* (1918); L. Trotsky, *Problems of Life;* M. Hillquit, *From Marx to Lenin* (1921); J. Spargo, *Bolshevism* (1919).

[104] C. R. Fay, *Cooperation at Home and Abroad* (1908); G. J. Holyoake, *The History of Cooperation in England* (2 Vols. 1906); J. H. Warbasse, *Cooperative Democracy* (1923).

5. Advocates of Industrial Co-partnership as a solution of poverty and industrial unrest:[105]

Aneurin Williams	H. D. Lloyd	N. P. Gilman
Lord Leverhulme		

6. Christians: Utopia through an application of the teachings of Jesus (See also Christian Socialists above):[106]

Bishop B. F. Westcott	Washington Gladden	Sherwood Eddy
W. Cunningham	Francis G. Peabody	Shailer Mathews
Lyman Abbott	J. H. W. Stuckenberg	C. A. Ellwood
W. D. P. Bliss	S. D. Headlam	
Josiah Strong	George Hodges	

T. N. Carver (Militant and "efficient" Protestantism).

7. Trade Unionists: Improved condition of workers through organization:[107]

Samuel Gompers	Arthur Henderson	R. F. Hoxie
The Webbs	George Soule	S. Hillman
John Mitchell	J. H. Thomas	W. M. Leiserson

8. Single Taxers: Utopia through a "natural" system of taxation:[108]

Henry George	F. C. Howe	T. G. Shearman
C. B. Fillebrown	Francis Neilson	S. D. Headlam

9. Neo-Malthusians: Elevation of the masses through birth limitation:[109]

Annie Besant	Harold Cox	Margaret Sanger
Charles Bradlaugh	W. J. Robinson	Marie Stopes
C. R. Drysdale	Dean W. R. Inge	Edward M. East
Havelock Ellis	E. A. Ross	

10. Moralistic Metaphysicians:[110]

A. Those seeking some abstract "good" as the goal of social evolution:

J. S. Mackenzie	J. Royce	B. Bosanquet
S. Alexander	R. Eucken	

[105] A. Williams, *Co-partnership and Profit-sharing* (1913); H. D. Lloyd, *Labour Co-partnership* (1898); N. P. Gilman, *A Dividend to Labour* (1900).

[106] F. G. Peabody, *Jesus Christ and the Social Question* (1900); W. Cunningham, *Christianity and Social Questions* (1909); S. Mathews, *The Social Teachings of Jesus* (1897); *The Gospel and the Modern Man* (1909); C. A. Ellwood, *The Reconstruction of Religion* (1921).

[107] S. Gompers, *Seventy Years of Life and Labor* (2 Vols. 1924); S. and B. Webb, *A History of Trade Unionism* (1911); *Industrial Democracy* (1902); R. F. Hoxie, *Trade Unionism in the United States* (1917); Budish and Soule, *The New Unionism in the Clothing Industry* (1921).

[108] H. George, *Progress and Poverty* (1879); C. B. Fillebrown, *The A. B. C. of Taxation* (1904); S. D. Headlam, *The Fabian Society and the Land Question* (1905).

[109] W. J. Robinson, *Birth Control* (1920); M. Sanger, *The Pivot of Civilization* (1922); E. M. East, *Mankind at the Cross-Roads* (1923).

[110] H. W. Schneider, "The Political Implications of Recent Philosophical

B. Those interested in pragmatic application of Social Science to human betterment:

J. Dewey	L. T. Hobhouse	M. Otto
J. H. Tufts	B. Russell	

11. Scientific Philanthropists: Application of Social Science to relief and prevention of dependency: [111]

A. G. Warner	J. Addams	R. Cabot
A. Butler	H. Folks	M. R. Coolidge
E. T. Devine	Edith Abbott	P. R. Lee
J. L. Gillin	M. E. Richmond	F. S. Chapin
S. M. Lindsay	J. Ford	J. Lee
G. Taylor	J. B. Peixotto	E. E. Southard

12. Penologists and Criminologists: [112]

Z. R. Brockway	G. Tarde	G. Ives
S. J. Barrows	W. Bonger	O. F. Lewis
E. C. Wines	R. Garofalo	H. E. Barnes
F. H. Wines	W. D. Morrison	L. N. Robinson
C. Lombroso	T. M. Osborne	E. S. Whitin
E. Ferri	G. W. Kirchwey	F. Tannenbaum
E. Ruggles-Brise	W. Healy	P. A. Parsons
T. Dwight	B. Glueck	E. H. Sutherland
C. R. Henderson	B. Lewis	A. C. Hall
H. H. Hart	M. Parmelee	A. Vollmer

Any classification of sociologists must confront the problem of some disposition of that vast array of writers who have been less interested in social analysis than in social improvement. The rise of the humanitarian movement, which found an early expression in Mill's concern over the future of the working classes and which has been deeply concerned to improve the lot of the less fortunate, foreshadowed the rise of both Social Economy and Sociology. It has not, therefore, been an accident that departments of sociology have given much attention to poverty and the means of its elimination. Nevertheless, the multifarious literature of the social uplift has rested on

Movements," Chap. VII in C. E. Merriam and H. E. Barnes, *History of Political Theories: Recent Times* (1924); L. T. Hobhouse, *Development and Purpose* (1913); *The Rational Good* (1921); M. Otto, *Things and Ideals* (1924).

[111] A. G. Warner, *American Charities* (1896); E. T. Devine, *Principles of Relief* (1910); J. L. Gillin, *Poverty and Dependency* (1921); M. E. Richmond, *Social Diagnosis* (1917); J. Lee, *Constructive and Preventive Philanthropy* (1902).

[112] F. H. Wines, *Punishment and Reformation* (1895); C. R. Henderson, (Ed.) *Penal and Reformatory Institutions;* T. M. Osborne, *Society and Its Prisons* (1916); W. Healy, *The Individual Delinquent* (1915); M. Parmelee, *Criminology* (1918); F. Tannenbaum, *Wall Shadows* (1922); E. H. Sutherland, *Criminology* (1924) E. Ruggles-Brise, *Prison Reform at Home and Abroad* (1925).

little more than moving sentiment and constructive imagination. This is still the case. There is little indication that permanent improvements of measurable proportions have resulted from numerous movements and programs which have from time to time caught the sentimental enthusiasm of various types of propagandists, professional reformers and naïve sociologists.

It was thus, again, not a matter of chance that sociology came to be identified not only in the minds of the general public but also in the minds of a large portion of the academic world with the study of human *derelicts* or with some prevalent "ism." It has, therefore, seemed best to include here a brief outline of some of this idealistic, propagandist and reformative literature.

This section suffers the defects of the preceding ones. It is often impossible to make clean-cut distinctions between programs, while a number of writers have at different times advocated different plans for social betterment and thus should be identified with more than one. Thus Industrial Unionism borders on Syndicalism; but it has an affinity also with Guild Socialism. Moreover advocates of one or other of these three programs may have at some time advocated orthodox Socialism of some brand, or Collectivism, or Co-partnership, or Co-operation, or even ordinary Trade-Unionism. Such may be illustrated by The Webbs. Or take that heroic soul, Daniel De Leon, an avowed Socialist and an early and warm advocate of Industrial Unionism. Then there is Bertrand Russell who has been everywhere and yet appears to be nowhere. One is certain at times that he is a philosophical anarchist; but one is equally certain at other times that he is a utopian communist, but you end by classing him as a free-thinking philosopher having a little fun with his mind in moments when he needs recreation by poking paradoxes at our prejudices. It is thus easy to distinguish movements and programs from one another by logical definition, but it is difficult to find writers who have invariably confined their discussions to logically-exact fields.

The variety and productivity of scholarly effort in the present generation devoted to the study of various aspects of social processes and problems amply demonstrate that the sociologist will no longer be lacking in reliable information concerning every phase of his subject. The great problem will rather be to assimilate, assess the value of, and synthesize the great mass of new material which is continually appearing. Though some still attempt to achieve this synthesis single-handed, as exemplified by Professor A. J. Todd's *Theories of Social Progress* (1918), and F. A. Bushee's *Principles of Sociology* (1924), it is becoming difficult to do more than assemble and arrange repre-

sentative and pertinent excerpts from the current literature, as has been done by Park and Burgess in their excellent *Introduction to the Science of Sociology* (1921), and more recently by C. M. Case in his *Outlines of Introductory Sociology* (1924). It would seem that the field of sociology is now rapidly becoming so diverse and complicated that even the task of synthesis will be one which must be co-operative if it is to be competently executed. The day is fast approaching when it will be no longer accurate to designate the trained sociologist as "the fake professor of a pretended science."

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F. W. Coker, *Organismic Theories of the State.*
M. M. Davis, *Psychological Interpretations of Society.*
R. Flint, *A History of the Philosophy of History.*
G. De Greef, *Le Transformisme social.*
W. A. Dunning, *A History of Political Theories from Luther to Montesquieu.*
W. A. Dunning, *A History of Political Theories from Rousseau to Spencer.*
R. Gonnard, *Histoire des doctrines de la population.*
P. Jacobs, *German Sociology.*
J. P. Lichtenberger, *A History of Social Theory.*
C. E. Merriam and H. E. Barnes, *A History of Political Theories: Recent Times.*
F. Squillace, *Die soziologische Theorien.*
L. Stein, *Die soziale Frage im Lichte der Philosophie.*
F. Thomas, *The Environmental Basis of Society.*
A. J. Todd, *Theories of Social Progress.*
L. F. Ward, *Outlines of Sociology.*

CHAPTER VII

ECONOMICS[1]

By Karl Worth Bigelow

I. INTRODUCTION

Nowadays it has become a commonplace to say that no idea stands alone. Even that rarity, a new idea, may not be understood except in the light of the circumstances which attended its birth, and which include its relation to other ideas as well as to material facts; while a notion that is old is certain to have an illuminating history. An adequate understanding of present-day economic doctrines, accordingly, requires allowance for the influence not only of current institutions and events, but also of earlier beliefs. An examination of such beliefs may, indeed, save us from hailing as discoveries what are mere rediscoveries, thus teaching us due humility, and at the same time promoting that tolerant and catholic attitude which makes possible a wise and balanced eclecticism. In this sketch of the development of economic thought, chief attention will be paid to those ideas which have contributed more or less directly to conceptions commanding allegiance at the present time. Economic facts, moreover, will be referred to only when needed for the proper comprehension of a theory. Such limitations of scope, regrettable from many points of view, seem dictated by restrictions of space. The same restrictions, moreover, forbid us to examine the writings of any people earlier than the ancient Greeks, a point of departure which, however, may seem to many readers too early rather than too late.

Yet let it be noted that while economic science, as a body of independent and systematically coördinated doctrines, was founded in the eighteenth century by the Physiocrats,[2] economic thought has ex-

[1] While taking complete responsibility for the views herein represented, the writer nevertheless desires to express his special indebtedness to the instruction, at Harvard University, of Professors C. J. Bullock and A. A. Young.

[2] This is the common view, supported by such authorities as A. Dubois, *Précis de l'histoire des doctrines économiques*, Paris (1903); C. Gide et C. Rist, *Histoire des doctrines économiques*, 4th ed., Paris (1922); A. Oncken, *Geschichte der Nationalökonomie*, 2nd ed., Leipzig (1920); and O. Spann, *Haupttheorien*

isted from the earliest days of man. It is to be found in the most primitive records; it appears in the folk-lore, the poetry, the religion, the early philosophy of all peoples; and its comparatively late development into a separate branch of human inquiry is to be explained only by the absorption of previous thinkers in the more general questions of human conduct and political organization. From the sixteenth to the eighteenth centuries, however, two circumstances combined to make the emergence of a system of economics inevitable. One was that increase in the magnitude and complication of the economic factors in society which accompanied the expansion of Europe and the Commercial Revolution. This phenomenon naturally commanded attention; yet, after all, commercial and industrial awakenings had previously taken place without bringing about even remotely similar results. The more significant circumstance, therefore, was the appearance and spread of literacy and learning among men to whom the old problems of theology, ethics, and politics no longer seemed of all-consuming importance; who were consequently willing to devote their attention to other and narrower questions; and who were able to publish their conclusions. The greatest of these were scholars who were thoroughly acquainted with the masterpieces both of ancient thought, which had had so great an influence since its revival at the Renaissance, and of medieval thought, which had dominated the immediately preceding centuries. Thus the economic ideas of this important pre-physiocratic period can be fully understood only after some investigation of the economic doctrines to be found in Hellenic and Scholastic philosophy, in Roman and in Canon Law. To such an investigation we may now proceed.

II. ECONOMIC THOUGHT TO ADAM SMITH

1. ECONOMIC THOUGHT IN GREECE AND ROME

From the seventh to the fifth centuries B. C. Greece sustained a true commercial and industrial revolution, and definitely advanced from that state of rural household economy which some writers have mistakenly considered typical of all ancient times. If agriculture never lost its preëminence in many of the city states, there developed, nevertheless, a general division of labor. The importation of food became common, export industries were developed, and an active

der Volkswirtschaftslehre, 12th ed., Leipzig (1923). Other scholars, however, have dated the beginnings of the science from the writings, respectively, of Serra, Montchrétien, Mun, and others.

foreign trade was carried on with the aid of simple bankers and usurers.[3] Yet throughout this period and afterwards, those great thinkers who might have achieved an economic science were, as we have noted, otherwise employed. Speaking in general, they were seeking to find a satisfactory way of life, and this chiefly involved studying the conduct of the individual, and the organization of the all-important state. While the necessity of economic activity was recognized, it was considered hardly worthy of a philosopher's attention. Manual labor, as the mere appropriation of nature's products[4] and the pursuit of inferior men, was quite generally disregarded, while trade and industry were largely left to despised aliens and freedmen. Finally, it must never be forgotten that to the Greek philosophers economic activity was but one means to an end, the end being the achievement of a "good" life. Money-making for its own sake was accordingly condemned as fatal to a proper symmetry, either in the life of the individual or in the state. Moderation and balance were the twin ideals of Hellenic thought.

In the fifth century B. C. the Sophists inaugurated a period of intellectual ferment and scepticism during which the ground was cleared for the two greatest figures in the realm of Greek philosophy: Plato (427–347 B. C.), and Aristotle (384–322 B. C.). Both of the latter deserve the economist's attention. Plato's masterpiece, the *Republic*,[5] described an ideal commonwealth where inequality of the free inhabitants in native ability and temperament was the basis of their separation into three fixed classes, with consequent division of labor, and exchange. For the two upper and ruling classes was prescribed a sweeping communism as the best means of subordinating the naturally selfish individual to the interests of the superior entity, the state. The life in the Republic was to be simple, the wealth (both private and public) moderate, and the population restricted. Unity and self-sufficiency were to be eternally sought. This asceticism was mitigated somewhat in the *Laws* where the best practicable state was described; yet even here private property was strictly limited, interest-taking was proscribed, and a household economy, enlarged and combined with restrained exchange, was commended.

[3] The economic sophistication of the Greeks is indicated by the fact that in his popular play, *The Frogs* (405 B. C.), Aristophanes utilized a casual reference to that monetary principle now known as Gresham's law,—which declares that bad money always drives out good.

[4] This exalted view of nature is found, e. g., in the *Works and Days* of Hesiod, one of the earliest Greek poets.

[5] The best translation of Plato is that of B. Jowett, 3rd ed., revised, Oxford (1888).

Plato's work stands in vivid contrast to that of his pupil, Aristotle, who employed an historico-philosophical method where his master's had been abstract and deductive, and who had less interest in the ideal. Aristotle attacked the *Republic* sharply; but the attainable state sketched in his *Politics*[6] does not in essence significantly differ from that of the *Laws*, except that public wealth here gains approval. However, more attention is paid to economic considerations in the *Politics*, and economics is given a place with ethics and politics as a division of practical philosophy. The term "economics" is used to describe the science of household management which includes "natural" acquisition, i. e., the appropriation, for the limited purpose of meeting the needs of life, of what nature has provided. "Unnatural" acquisition or money-making for its own sake, especially likely to be connected with the less simple economic phenomena such as money and exchange, is condemned, and usury most of all.[7] This opposition to interest-taking was due to Aristotle's strange failure to appreciate money's function as capital-fund, although he understood most of its other functions perfectly and recognized its legitimate usefulness. He also noted its relative stability, and saw that it was valuable for what it would buy rather than because of its commodity worth. Aristotle derived value in exchange from value in use and stated that both were based on need, utility being the common quality in exchanged goods.[8] Yet he believed that exchange actually takes place when "the quantity of shoemaker's work bears to the quantity of husbandman's work [which exchanges for it] the same ratio that husbandman bears to shoemaker"—which seems to be some sort of labor-cost theory of value.[9] Thus early appeared both the cost and the utility theories of value, the reconciliation of which was to prove such a task centuries later. Enough has been noted to indicate the

[6] The *Politics*, although of the greatest importance, is badly organized, and contains certain glaring errors which make it impossible to believe that Aristotle himself was responsible for its final form. Moreover, there is no translation which is satisfactory from the viewpoint of an economist. Of those available, the best is that of B. Jowett, Oxford (1885).—In addition to the *Politics*, the *Nichomachaean Ethics* merits the economist's examination. The *Economics*, formerly attributed to Aristotle, is no longer thought genuine. The more striking passages from Aristotle which discuss economic matters have been gathered together by A. E. Monroe in his valuable *Early Economic Thought*, Cambridge (Mass.) (1924).

[7] *Politics*, I, x, 4–5. It should be recalled that until modern times the term "usury" did not mean merely the taking of exorbitant interest, but the taking of any interest whatsoever. It is used in the latter, original sense throughout this chapter.

[8] *Nichomachaean Ethics*, V, 5.

[9] *Loc. cit.*

bent of Aristotle's philosophy, and his remarkable grasp of some of the essential principles of a subject which he made no effort to analyze fully. His great ability and, above all, his tremendous influence upon the thinkers of medieval as well as ancient times make him by far the most important of the Greeks for the economist.

Certain later thinkers, however, deserve brief mention. The school of Epicurus (342–270 B. C.) evolved a sensualistic morality not unlike the pleasure-pain calculus which was to appear in nineteenth century economics. More consequential, however, was the very full and forceful statement given by Zeno (c. 346–c. 264 B. C.) and his Stoic followers to that universalistic conception of Natural Law which Heraclitus (c. 500 B. C.) had advanced, and which Plato and Aristotle had shared. This identification of Natural Law with a divine, rational world-order to which it was man's duty to adapt himself, profoundly affected Roman law, and was a cornerstone of the thought of the Physiocrats.[10]

The rival philosophies of Stoics and Epicureans considerably influenced the literature of the Romans, who were noted for their reliance upon the ideas of other peoples. But even the stimulus of Rome's economic development in the early Empire could not extract from these systems any new theories of economic import. Indeed, at no point in her full cycle of political and economic history did Rome produce a writer who passed beyond the conventional Greek praise of agriculture and deprecation of trade. Even that complete *bourgeois*, Cicero (106–43 B. C.), approved commerce only on a scale large and profitable enough to enable the merchant to retire and purchase an estate, where he might live like a gentleman; while the writers on actual economic subjects, the *scriptores de re rustica* such as Cato the Elder (234–149 B. C.), Varro (116–27 B. C.), and Columella (middle of the first century B. C.), and the *scriptores de re agraria*, contributed nothing of theoretical value.

The real contribution of Rome to economic thought came as a result of the influence of Roman law. Private in character, and developed during a period of capitalistic dominance, this law generated a tradition of individualism which was quite in opposition to the universalism of the Greeks.[11] When revived, centuries later, it had

[10] A penetrating discussion of the evolution of the idea of Natural Law is to be found in the *Studies in History and Jurisprudence*, New York (1901), by James Bryce (Viscount Bryce).

[11] The great influence upon economic thought of a fundamental philosophical bias towards either individualism or universalism has been pointed out by Spann, *op. cit.* Individualism "traces society and the state back to the individual," whom it considers fundamentally autonomous. Society is a mere

a significant and widespread effect on economic facts and institutions in Europe, and thereby on economic thought. Its doctrine of private property was absolute (although at the time of its development a balance of mitigating social customs existed), the pecuniary aspect of all assets was perceived, and interest, which was compared with rent, was accepted without question. All of this served to improve the theoretical position of the propertied class; labor remained undervalued, its part in the productive process being considered negligible as compared with that played by nature. The idea of nature was, indeed, one to which Roman jurists paid considerable attention. The Stoic notion of Natural Law was particularly strengthened by the concept of the *jus gentium,* which dealt with non-Romans and was therefore thought of as being common to all mankind, the law which natural reason had created.[12] Nor were there lacking references to a "natural economic order." Yet perhaps the chief effect of Roman law upon economic thought was methodological. Like every other science, political economy is indebted to the great jurisconsults for their example in the exact formulation of ideas and in the facile use of abstraction.

2. THE MIDDLE AGES, AND THE INFLUENCE OF CHRISTIANITY

With the fall of the Roman Empire the Western World entered upon a period concerning which little is known. In the East, of course, the old civilization persisted for many centuries and there the late development of the law was considerable. But the West, although never completely divorced from the influence of Constantinople, underwent a very marked change. It is possible that the economic character of this change has been generally misunderstood and that it did not represent a true decadence. The Roman order, marked by a flourishing urban life, by notable commercial activity,

collection of such autonomous individuals, comparable to an avalanche of stones in which each stone remains absolutely independent and which represents an associative action which is joint only in an external and mechanical way. Universalism, on the other hand, considers the important thing to be the spiritual cohesion of the so-called individuals in a whole which is believed to be superindividual and necessarily primary. According to this view the essential personality of any being is, and always has been, indissolubly linked with other personalities: is, therefore, derivative and secondary. "In political economy," Spann concludes, "it is theoretically and practically of decisive importance whether one pays homage to the individualistic or universalistic conception of society." (P. 27.) One view leads towards a policy of free trade, free competition, and self-aid; the other towards a policy of protection, economic organization, and social politics.

[12] Bryce, *op. cit.*

and by splendid avenues of communication—features which now all but disappeared—may have lacked a solid foundation: the new emphasis upon agriculture may have been very salutary. Whatever the interpretation, however, the facts seem fairly well attested. From the fifth to the eleventh centuries, the Germanic races were occupied in establishing their sway over the territory which they had conquered, and in learning the rudiments of culture from the Romanized Celts. During this time, by far the leading economic activity was agriculture; trade, although it never came to a full stop, became a distinctly minor affair.

For the historian of economic thought the most important phenomenon in this period is Christianity, the strongest tie between the old civilization and the new, and a force of preëminent and enduring influence. The extraordinary religious fervor and peculiar circumstances of the earliest Christians, with their expectancy of an imminent second Advent, had led them to make numerous communistic experiments, which had established a tradition despite their lack of success. But with the Church's rise to a position of responsible power, its official attitude towards practical matters had to be defined,—and there was a surrender to the world. Communism was declared an ideal made unattainable by the fall of man, and ordinary economic activity, subject to certain moral regulations, was approved. Yet although private property was accepted, indifference to wealth was taught: the achievement of an individual and collective life conformable with Christian dogma and assuring one of salvation being considered the proper object of human endeavor. Thus slavery was condemned as incompatible with the brotherhood of man and the immortality of the human soul. Native inequalities and consequent probable differences in economic and social attainment, however, were plainly recognized. Idleness was frowned upon, for it was believed that labor had in principle been imposed on everyone by that same fall which had doomed communism. Finally, none of all this was thought to be beyond the possibility of ultimate change. With the notion of the coming Kingdom of God had emerged certain consistent ideas of progress and improvement. It should be added, however, that these ideas were frequently nullified by the strong tendency among Christians of the period to fix the attention upon a future world and to neglect the present.

In the eleventh century it became evident that the period of preparation was approaching a close, and this promise was fulfilled by the twelfth, one of the greatest creative centuries in human history. In the first place, the stage was being set for that long struggle in which

Pope was to humble Emperor, only to yield in turn to the superior political power of the new national states. Moreover, a notable commercial and industrial renaissance was beginning; the days of feudalism were now numbered, and the Crusades, the permanent results of which were to be largely economic and cultural, broke down ancient barriers to trade while creating a demand for foreign goods. ["Ships were multiplied; new articles of commerce brought into use; new routes opened; geographical knowledge increased; villages were transformed into cities; money came into more general use: wealth was accumulated, and with wealth power and influence in a new class, the Third Estate."[13]

During the ripening of these tendencies from the twelfth to the fifteenth centuries, medieval thought found its highest expression in two bodies of writing. The Church or Canon Law was first compiled about 1140 by the monk Gratian at Bologna, where the Roman law had recently been revived; like the latter, it distinguished a divine Law of Nature from the human laws of custom which it and the civil law comprised. The Scholastic philosophy, on the other hand, which culminated in the work of St. Thomas Aquinas (c. 1225–1274),[14] constituted an effort on the part of ecclesiastical thinkers, aided by ancient philosophy—especially that of Aristotle, to present Christian doctrine as a unity. Yet if ancient law and philosophy contributed much to the thought of this period, it was only after they had been passed through the minds of the then monopolists of literacy, the Churchmen. Here they were denuded of their pagan and individualistic elements and given the coloring of Christian dogma. One consequence of this process was the general agreement of the doctrines of the Canonists and Schoolmen; another was the consistent subordination of notions on economic matters to an abstract, unified philosophy of life.

As with the Greeks, economic activity was considered a means to an end. Private property was accepted (as a concomitant of existing human nature) by the same Natural Law which considered communism ideal; but the social responsibilities of wealth were habitually stressed. Labor of every sort was believed noble, although those commendable activities, *artes possessivae vel acquisitivae,* having as

[13] G. B. Adams, *Civilization during the Middle Ages,* New York (1900), 449.

[14] Leading passages from his *Summa theologica* are to be found in translation in Monroe, *op. cit.* Aquinas' *Commentaries on Aristotle, De regimine principum,* and *Letters* are also worth the economist's attention. Of the other Schoolmen, Albertus Magnus (c. 1193–1280), Jean Buridan (c. 1300–c. 1358), Heinrich von Langenstein (Henricus de Hassia) (c. 1340–1397), and Jean Charlier de Gerson (1363–1429) may be mentioned here.

an object the physical production of consumable goods, were distinguished from the less simple and more suspicious pursuits, *artes pecuniativae,* which sought to procure artificial riches. Among the latter was usury, and this was absolutely forbidden as being contrary to the teachings both of the Gospel and of Aristotle.[15] Only when the lender was adversely affected, either by suffering some injury (*damnum emergens*), by missing an opportunity to make profitable investment (*lucrum cessans*), or, as was finally admitted, by undergoing some risk (*periculum sortis*), might interest be justly collected. But in a period of growing commercialism these restrictions could not possibly be enforced. Usury was ever more openly practiced, and the Christian thinkers themselves were driven to approve customs which only casuistry could distinguish from interest-taking.

In the field of trade, speculation and private monopoly were denounced, while the resale of unchanged goods at advanced prices only won grudging recognition, here and there, as being justified by the increase in utility due to change in place. Commerce was never, indeed, viewed with complete equanimity. The propriety of profit-taking, for instance, seemed by no means obvious, and the qualified approval which it finally received throws considerable light upon the Schoolmen's Aristotelian mode of reasoning. Such an imponderable as the purpose of the profit-maker was called upon to serve as the test: if the latter sought to provide adequately for himself and his family and to acquire, in addition, the wherewithal for the performance of good works, then he might take profit with a clear conscience; but if his aim were mere accumulation for its own sake, condemnation must be his portion. In a similar effort to maintain proper commercial standards the "just price" and "just wage" were regularly invoked. These were fixed chiefly by custom and common estimation, and were intended to make it possible for each person to live according to his class. The putting into practice of such notions was largely left to the gilds.

One of the most striking accompaniments of the growth of commerce was the increase in the amount of money, and monetary phenomena were shrewdly observed. Here Nicole Oresme (Oresmius) (c. 1320–1382) [16] ably summed up the views of the Schoolmen, cor-

[15] Aquinas, *Summa theologica,* Question LXXVIII. See Monroe, *op. cit.*—Although the Roman law was beginning to be revived, its individualistic acceptance of interest could not at once displace the definite disapproval of the church.

[16] The more important sections of his *De origine, natura, jure et mutationibus monetarum* (*Traictie de la première invention des monnoies*) (c. 1360) are to be found in translation in Monroe, *op. cit.*

rectly explaining the rôle and nature of money, and condemning alterations of the currency and other monetary frauds which were frequently practiced by the princes of that day, but which he declared to be worse than usury. Gresham's law was set forth by Oresme, and the terms according to which a bimetallist régime must function were laid down with considerable exactness.

A summary judgment of the economic thought of these Christian writers will not differ greatly from that respecting the Greek philosophers. There were, of course, some important new ideas, such as those of progress and of the dignity of human labor; but the fundamental orientation was the same as in Aristotle's day. Moral, ethical, and religious considerations ruled, and universalistic traditions and views were defended in the face of a growing individualism, incidental to the commercial and industrial advance. Heard and heeded through many centuries, the preaching of the ecclesiastics was nevertheless doomed to ultimate failure,—for Western civilization was preparing to step from the cathedral into the market-place.

3. THE COMMERCIAL REVOLUTION AND MERCANTILISM

The chief beneficiaries of the commercial and industrial revival which had followed the Crusades had been the Italian city states, but they were unable to maintain their advantage. They were too small to compete forever with the increasingly powerful national states; and the outcome of an unequal duel was settled when the Great Discoveries, at the turn of the sixteenth century, shifted the center of commercial activity from the Mediterranean to the Atlantic. The growth of nationalism was accompanied, accordingly, by the modern development of capitalism. In the wealthy *bourgeoisie* the national monarchs had found valuable allies in their struggles with recalcitrant feudatories and pretentious Popes, while the Third Estate had profited by the security and privileges bestowed by grateful—or exacted from impecunious—kings; for a long time, concentration of power in the hands of the state did not prove inconsistent with growing freedom for the middle class.

A further incident of the period was the Renaissance, itself greatly affected by the political and economic ferment. The spirit of this great intellectual movement was individualistic, independent, and secular; and it gave learning to men who represented this spirit, and who were sometimes engaged in the study of natural science and sometimes active on the bourse itself. Thus men whose thinking regarding economic activity was completely realistic were enabled to

defend in writing their views of life, and by means of the newly invented device of printing to spread such defence wide through the Western World.[17] Finally, the Reformation brought a measure of religious impetus to the new tendency, for if Luther's economic ideas were orthodoxly ascetic, Jean Calvin (1509–1564) proved a stout defender of interest-taking and saw in material success an evidence of divine favor.[18]

All these circumstances[19] led to the iteration, during the three hundred years following 1450, of a number of more or less connected doctrines which are nowadays thought of as the tenets of Mercantilism —or the mercantile, or commercial system. They constitute a naive, but natural, interpretation of the tremendous economic stirrings observable in early modern times, and offer a specific economic policy. The basic beliefs of the Mercantilists may be simply stated: (1) The state is not only the natural political, but also the natural economic unit.[20] (2) In its transactions with other states, a gain by one party can only mean a loss by the other.[21] (3) Each state must, therefore, constantly strive to gain more than it loses, for national power varies directly with national wealth. (4) In the resultant struggle, the chief object of gain should be money and the precious metals, which, if not identical with wealth, are at least the most generally useful forms thereof, the means, indeed, whereby all other forms are to be

[17] It was at this time, moreover, that intellectual specialization set in, and from the days of *Les six livres de la république*, Paris (1576), by Jean Bodin (1530?–1596), we may trace the growing tendency to separate politics from economics. Francis Bacon (1561–1626), in his *De dignitate et augmentis scientiarum*, London (1623), first mapped out, as a separate field, what is now thought of as economics; but Bacon still considered it a subdivision of politics.

[18] The importance of these Calvinistic views is admirably discussed by R. Gonnard, *Histoire des doctrines économiques*, Paris (1921–22), I, 110 ff.; by Sir W. J. Ashley in his *Economic History* (1920), I, Part II, 456 ff.; and by R. H. Tawney, "Sixteenth Century Religious Thought," in *Journal of Political Economy*, XXXI (1923), 461 ff., 637 ff., 804 ff.

[19] The best summaries of these historical changes ushering in modern times are contained in W. Cunningham, *Western Civilization* (1900), II, Book V; Preserved Smith, *The Age of the Reformation* (1920), xi, xiv; W. R Shepherd, "The Expansion of Europe," in *Political Science Quarterly*, XXXIV (1919), 43 ff., 210 ff., 392 ff.; J. E. Gillespie, *The Influence of Overseas Expansion on England to 1700* (1920); and J. B. Botsford, *English Society in the Eighteenth Century as Influenced from Oversea* (1924).

[20] Policies distinctly mercantilistic in essence, however, had been utilized by the towns and city states before the rise of the nations. See Gustav von Schmoller's essay, "Das Merkantilsystem in seiner historischen Bedeutung," published in his *Jahrbuch*, Leipzig (1884); and translated and edited by Sir W. J. Ashley, New York and London (1895). As a matter of fact, mercantilistic ideas may be discovered in antiquity.

[21] This was the regular medieval notion regarding exchange—leading no longer, however, to condemnation.

obtained. This conclusion, exalting artificial above natural wealth, was something new in economic thought, but it seemed reasonable enough in a period when American silver and gold were flooding Europe,[22] and kings were finding them of increasing usefulness in connection with such important new institutions as national taxes, mercenary armies, and centralized administration.

The program based upon these fundamental principles, explicitly or tacitly recognized, was admirably logical.[23] Everything was considered subject (theoretically, at least) to national regulation in the national interest. At home, particularly in connection with domestic trade, unification and self-sufficiency were sought by various means;[24] in foreign intercourse, above all in foreign trade, a system of policies calculated to attract and retain money and the precious metals was employed. Of such policies, by far the most important, ultimately, was that of the favorable balance of trade, involving the steady export of more goods than were imported, and thus necessitating the payment by other nations of a money balance.[25] To this end home industry for the production of export articles was stimulated in every possible way, while the import of manufactured goods was hindered by tariffs, or even prohibited. On the other hand, cheap raw materials, including food for laborers, were sought, and their free import, especially from monopolized colonies, was unimpeded. Export of such commodities, however, was frequently prohibited, and agriculture was in general neglected in the interest of commerce and industry.[26] Simi-

[22] The price revolution resulting from this was most interestingly discussed by Bodin in *La reponce de maistre Jean Bodin, avocat, au paradoxe de M. Malestroict, touchant l'encherissement de toutes choses et le moyen d'y remedier*, Paris (1568), parts of which are to be found in translation in Monroe, *op. cit.* The substance of this tract was also incorporated in the *République*.

[23] It was also more interesting to the Mercantilists—who were practical men—than were the theories upon which it was based.

[24] Schmoller, *op. cit.*, stresses this "nation-building" aspect of Mercantilism.

[25] The balance-of-trade period has been described as the last of three stages in the development of Mercantilism. Of these, the first stage was that of direct action, i. e., the maintenance of the gold supply was first sought by the utilization of such crude expedients as the actual prohibition of gold exports and the abolition of foreign exchanges when the rates became unfavorable. The second stage involved the control, by means of the staple system, of merchants' dealings with one another. Foreign merchants were required to accept domestic goods in part payment of their claims, domestic merchants were required to demand gold for exported goods. The balance-of-trade policy represented a great advance in economic reasoning as well as in effectiveness. From the close of the sixteenth century its influence spread; before then it had been of little importance although its basic idea had been expressed as early as the fourteenth century by Richard Aylesbury. (See W. A. Shaw, *History of Currency, 1252 to 1894*, London, 1895, p. 52.)

[26] This was not true in England, however, where the landholding class possessed sufficient political power measurably to protect its interests.

larly, a large population and other circumstances calculated to keep labor cheap and subservient were favored. Moreover, financial institutions, as aids to industry, were encouraged. A concomitant of their growth was an increasing belief in the propriety of interest-taking, something which was argued by Calvin and Carolus Molinaeus (Charles Dumoulin) (1500–1566) in the sixteenth century and completely demonstrated by Claudius Salmasius (Claude de Saumaise) (1588–1653) in the seventeenth.[27] Finally, shipping and foreign commerce were fostered, and, in general, the whole machinery of the state was utilized to establish and maintain what seemed to be favorable circumstances.

It is of the very greatest importance clearly to understand that the picture just presented is in the nature of a composite photograph! A creature of its period, nationalistic in its point of view, definitely favoring the interests of the monarchs and the Third Estate, and relying on crude, common-sense observation rather than on reasoned analysis, Mercantilism was really neither systematic nor theoretical. Yet there was essential unity of opinion, despite wide variations over time and space, and despite emphasis upon commerce in Italy, Holland and England, upon industry in France and Germany. The policies outlined were, in general, followed by such statesmen as Charles V, Cromwell, Colbert, and Frederick the Great. They are found in the writings of Antonio Serra (late sixteenth and early seventeenth centuries), Antoyne de Montchrétien, Sieur de Vatteville (c. 1576–1621), (who originated the term "political economy"), Thomas Mun (1571–1641), Philipp Wilhelm von Hornick (c. 1638–c. 1712), and Sir James Denham Steuart (1712–1780).[28] All but Steuart were essen-

[27] Calvin's work has already been referred to in n. 18. Parts of Molinaeus' *Tractatus commerciorum et usurarum redituмque pecunia constitutorum & monetarum*, Paris (1546), are to be found in translation in Monroe, *op. cit.* Salmasius' great works are the *De usuris liber*, Leiden (1638), and the *De modo usurarum liber*, Leiden (1639).

[28] The leading works of the writers mentioned are: Serra, *Breve trattato delle cause che possono far abbondare li regni d'oro e d'argento dove non sono miniere*, Naples (1613); Montchrétien, *Traicté de l'œconomie politique*, Rouen (1615); Mun, *England's Treasure by Forraign Trade*, London (1664); Hornick, *Oesterreich über alles, wann es nur will*, Passau (1684); Steuart, *An Inquiry into the Principles of Political Œconomy*, London (1767). Passages from Serra, Mun, and Hornick appear in Monroe, *op. cit.*—Other notable Mercantilists were: John Hales (d. 1571), Sir Josiah Child (1630–1699), Charles Davenant (1656–1714), and Antonio Genovesi (1712–1769). In Germany the later Kameralists, who combined with economic theory, financial science, administrative theory, and some technology, included, besides Hornick, Johann Joachim Becher (1625?–1682), Wilhelm Freiherr von Schröder (d. 1689), Veit Ludwig von Seckendorf (1626–1692), Johann Heinrich Gottlob von Justi (1720?–1771), (the first German systematic writer on economics and part of whose *System des*

tially practical men, only incidentally treating of matters of theory; and all were thinking of the kingdoms upon earth, not, like their medieval precursors, of the Kingdom of Heaven. Yet if Mercantilism was not completely universalistic, neither did it exhibit the sort of individualism which Classical political economy was to embrace: to the thinkers of this pre-physiocratic era the nation, and no lesser entity, was the proper object of solicitude, a view which, to the present day, has never lacked powerful adherents. Indeed, no authoritative voice was raised against this notion or the rest of the mercantilistic doctrines until the national state seemed firmly established. Then some writers, rejecting the over-emphasis upon the value of money and upon the necessity of ruthless competition between states, began to perceive that "the primary and enduring source of wealth is the home production of goods." [29] In the meantime, however, economics had been secularized, economic information and ideas had increased, and economic knowledge had been unified, by emphasis upon a particular point of view, in a fashion which prepared the way for the next advance.

4. THE BIRTH OF ECONOMIC SCIENCE: PHYSIOCRACY

Like other systems of thought, Mercantilism bore within itself the seeds of its own destruction, and with the dissipation of that mutual weakness which had brought absolutism and capitalism into alliance, the defects of the partnership became increasingly evident. As industry and commerce increased in strength and variety, they grew resentful of the interference of national regulations which had once been welcomed as protection. At the same time it began to be suggested that firmly established states need not pursue self-sufficiency without relenting, but should consider the economic advantages of national interdependence and freer trade. Moreover, the ridiculous over-valuation of money as a factor in national wealth could not hope to survive long familiarity with a relatively stable supply of the precious metals; even the sacred doctrine of the balance of trade sustained occasional attack. Finally, the claims of agriculture to better treatment were becoming both more audible and also more obviously justified; and the place of land, as well as of human labor, in the

Finanzwesens, Halle, 1766, is to be found in translation in Monroe, *op. cit.*), and Joseph Reichsfreiherr von Sonnenfels (1733–1817).

[29] It is, perhaps, not entirely fair to intimate that the Mercantilists were in no wise aware of this truth; yet if they did not completely identify wealth with the precious metals, it was nevertheless money itself which was emphasized, rather than the production that it fostered.

production of national wealth, received increasing stress. Thus the writings of such practical men as Nicholas Barbon (1640?–1698), Sir Dudley North (1641–1691), and Richard Cantillon (c. 1680–1734); and of such thinkers as Émeric de Lacroix (Cruceus) (c. 1590–1648), Sir William Petty (1623–1687), Pierre le Pesant, Sieur de Boisguillebert (1646–1714), Bernard de Mandeville (1670?–1733), and David Hume (1711–1776) stimulated a dissatisfaction with Mercantilism which was not at all mitigated by the mad career of pre-Revolutionary French finance under the supposed influence of the system.[30]

The first systematic challenge to Mercantilism, however, appeared in the middle of the eighteenth century in the writings of the Physiocrats, that devoted group of disciples to Dr. François Quesnay (1694–1774).[31] These men not only formed the first real school of economists, but also may be said to have founded economics as a science,[32] for they seized upon the notion of Natural Law (recently popularized by the baron de Montesquieu [1689–1755]) [33] and utilized it as it had

[30] The leading works of the writers mentioned are: Barbon, *A Discourse of Trade*, London (1690); North, *Discourses upon Trade*, London (1691); Cantillon, *Essai sur la nature du commerce en général*, London (1755); Lacroix, *Le nouveau cynée*, Paris (1623); Petty, *A Treatise of Taxes and Contributions*, London (1662); *Political Arithmetick*, London (1690, written in 1676); *Political Anatomy of Ireland*, London (1691, written in 1672); Boisguillebert, *Le détail de la France*, Rouen (1695); *Le factum de la France*, Rouen (1706); Mandeville, *The Fable of the Bees*, London? (1714); Hume, *Political Discourses*, Edinburgh (1752). Passages from Cantillon, Petty, and Hume appear in Monroe, *op. cit.*—Other precursors of Physiocracy were: the marquis d'Argenson (1694–1757), the seigneur de Vauban (1633–1707), and Josiah Tucker (1712–1799).—A noteworthy fact is that of these men, Barbon, Petty, and Mandeville had been trained in medicine, then the chief road to scientific learning. Quesnay, the leader of the later Physiocrats, was also a physician.

[31] Quesnay's economic writings comprise articles on *Grains* (1757) and *Fermiers* (1756) in Diderot's *Encyclopédie*, and the famous *Tableau économique*, Versailles (1758). Passages from the latter work appear in translation in Monroe, *op. cit.*—Of the Doctor's followers, these deserve mention: Victor Riquetti, Marquis de Mirabeau (1715–1789), Paul Pierre Mercier de la Rivière (*c.* 1720–c. 1793), Guillaume François Letrosne (1728–1780), Karl Friedrich, Margrave of Baden (1728–1811), Pierre Joseph André, Abbé Roubaud (1730–1791), Nicolas, Abbé Baudeau (1730–c. 1792), and Pierre Samuel Du Pont de Nemours (1730–1817) who originated the term "Physiocracy."—A school of thought very similar to that of the Physiocrats and seldom distinguished therefrom was led by Jean Claude Marie Vincent, Seigneur de Gournay (1712–1759), a prominent businessman, and included Claude Jacques Herbert (1700–1758), and André, Abbé Morellet (1727–1819).

[32] See above, n. 2.

[33] The part played by Hugo Grotius (Huig van Groot) (1583–1645) in keeping alive the concept of the Law of Nature should also be mentioned. Especially stimulating to the Physiocrats was the example of the natural scientists who had so fruitfully utilized the notion of natural laws since Bacon's day. But Natural Law and natural laws are not at all the same thing, as Bryce (*op. cit.*) has pointed out, and so we cannot say that the French school really paralleled Newtonian thought.

not been utilized before, i. e., as the pivotal principle in a true system. A conscious effort was made to view the economic scene as a whole in confident expectation of finding therein certain unifying regularities. To be sure, their idea of Natural Law was not the rigidly empirical view of modern science: the Physiocrats, although deriving their concepts in part from Newton and the Deists, envisaged a divinely ordained *ordre naturel,* which was to be discovered and faithfully served.[34] And they naïvely identified that which seemed best to "reasonable, cultivated, liberal-minded men" [35] like themselves with what was natural. Nevertheless, however faulty their methods of seeking for laws may have been, their emphatic belief that there are laws to be sought was pregnant with possibilities; it truly marked a new era.

The Natural Law of the Physiocrats, although reminiscent in other respects of that of the Stoics,[36] was not universalistic, but frankly individualistic. Its chief tenet was to the effect that in the long run the individual interest coincides with that of the group, and leads to the attainment of the *ordre naturel;* from which it seemed to follow that progress will be most stimulated when the individual, who—it was assumed—must know his own interest best, is least interfered with by the state. In other words, *laissez-faire* now became the slogan of a liberalized economics; the regulations of Mercantilism received fundamental disapproval; and free competition, free labor, and free trade were set up as the new guide-posts to general prosperity. Indeed, free trade (with especial reference to internal trade) was defended in terms now classic, and the fallacies of the balance-of-trade theory were vividly set forth. Wealth was to be attained, not by the hoarding of precious metals, but by the production and exchange of natural riches under the direction of unimpeded self-interest.[37]

In their analysis of economic phenomena, the Physiocrats revealed not only their indebtedness to their predecessors and to existing circumstances, but also the abstract-deductive quality of their thought, so reminiscent of Plato and the Roman law.[38] Despite previous contributions to the subject by Cantillon, however, Quesnay and his fol-

[34] Quesnay's article, "Le droit naturel," in the *Journal de l'agriculture,* 1765, is very illuminating on this point.

[35] Gide et Rist, *op. cit.,* 10.

[36] See above, pp. 337, 338.

[37] It is important to note that *laissez-faire* was not considered to be necessarily implied by the fact of a natural order, which might, indeed, have been thought attainable only, as in Plato's *Republic,* through rigid state regulation. There is something more than a benevolent teleology here.

[38] The distinction made by Quesnay between the ideal *ordre naturel* and the best possible *ordre positive* also reminds one of Plato.

lowers failed to evolve any intelligible theory of value, and consequently they interpreted wealth exclusively in material terms. They divided those engaged in the production of such wealth into three classes: the proprietary (landholding) class which provides the land; the productive (agricultural) class which cultivates the land; and the sterile (industrial-commercial) class which transforms and transmits the raw materials raised upon the land. All of these classes were thought to be useful, but only the second (*classe productive*) was believed to be capable of producing a surplus over and above its own consumption. This surplus was the famous *produit net*.[39]

Seeking to explain the division of this *produit net* among the three classes, the Physiocrats became pioneers in what was later known as distribution theory; their striking ideas regarding the circulation of wealth were set forth in the *Tableau économique*. They believed that the proprietary class inevitably received the whole *produit net*, and this arrangement was strongly defended as being in accordance with the *ordre naturel*. But if the landowners were respectfully thought of as the chosen earthly representatives of God (from whom, in the ultimate analysis, all wealth flows), they were also given many arduous duties, including that of paying the single, direct tax (*impôt unique*), which, since it must ultimately come out of the *produit net* in any case, was thought to be better taken directly therefrom in the first instance.[40]

The Physiocrats' accomplishments must not be disparaged. To be sure, they overrated agriculture as it had before been underrated; they were neither truly exact nor truly scientific in their analyses; and their dogmatic optimism retarded the progress of French economic thought for many years. On the other hand, they struck a severe blow at Mercantilism; agriculture has never completely lost the preëminence which they gave it; and their emphasis upon the existence of ascertainable social laws laid the firm basis for all subsequent economic science. The immediate popular success of their doctrines was incredible. Yet they were not without critics. Perhaps to some extent inspired by the abbé Ferdinando Galiani (1728–1787), Anne Robert Jacques Turgot, Baron de l'Aulne (1727–1781), although a Gournayist and admirer of Quesnay, pointed out many of the physiocratic errors, in a manner and spirit not unlike that of

[39] This idea of an agricultural surplus is found in the writings of Petty, Boisguillebert, and Cantillon, who, however, never carried it to such absurd lengths as did the Physiocrats.

[40] Petty had approved a similar scheme of taxation, but only for a new country.

Adam Smith.[41] More important, however, is the abbé Étienne Bonnot de Condillac (1715–1780), who published "a genuine economic treatise" in 1776.[42] This writer foreshadowed the psychological theory of value with all its implications, thus making a notable advance over physiocratic doctrine. But his book made little impression, and soon passed into a temporary oblivion.

III. THE CLASSICAL POLITICAL ECONOMY

1. ITS FOUNDATION BY ADAM SMITH

In the same year in which Condillac's work appeared (1776), there was published in London the most influential economic treatise ever written, entitled *An Inquiry into the Nature and Causes of the Wealth of Nations.* Its author was a Scotch scholar, Adam Smith (1723–1790), whose *Theory of Moral Sentiments* had already won him note.[43] Intellectually, Smith was a follower of the great English liberal and Deistic tradition,[44] while he also owed much to the influence of Francis Hutcheson (1694–1746), his predecessor in the chair of moral philosophy at Glasgow University, and of his friend, David Hume, who had been one of the first in England to attack Mercantilism. He was further affected to some extent by the writings of de Mandeville, and by the ideas of the Physiocrats whom he met on his travels in France.[45]

Smith's attitude towards Natural Law at once distinguishes him from the Physiocrats, however. Evidences of their notion of a divine

[41] Parts of Galiani's *Della moneta libri cinque,* Naples (1750), in which the best known early defense of usury in Catholic Italy appears, are to be found in translation in Monroe, *op. cit.*—Turgot, besides being the author of the *Réflexions sur la formation et la distribution des richesses* (first published serially in Du Pont de Nemours' *Éphémérides du citoyen,* 1769–70, and parts of which are to be found in translation in Monroe, *op. cit.*) was also controller-general and minister of finance of France from 1774 to 1776, during which period he instituted many important economic reforms.

[42] *Le commerce et le gouvernement considérés relativement l'un à l'autre,* Amsterdam and Paris (1776).

[43] Both this work (London, Edinburgh, 1759) and his *Lectures on Justice, Police, Revenue, and Arms,* reported by a student in 1763 and edited by Edwin Cannan, Oxford (1896), must be considered in addition to the *Wealth of Nations* by anyone who hopes to understand Smith's thought.

[44] As represented by such thinkers as Thomas Hobbes (1588–1679), John Locke (1632–1704), Anthony Ashley Cooper, third Earl of Shaftesbury (1671–1713), Joseph Butler (1692–1752), and David Hartley (1705–1757).

[45] Since the publication of his *Lectures on Justice, Police, Revenue, and Arms,* however, we know that most of his ideas were formed before he came in contact with the French school.

world-order may be found in the *Wealth of Nations,* but its author had been trained in British empiricism, and so we find the modern, scientific view of natural laws predominating. Economics, which had remained with the Physiocrats, despite their progress in the proper direction, chiefly a prescriptive art, now became, despite Smith's interest in practical application, fundamentally a descriptive science.[46] His laws were rooted in the common "propensities" of everyday human nature; they operated actually and inevitably.

In his efforts to comprehend the economic "organism" observed as a whole, Smith was particularly impressed by the spontaneity with which its parts developed, fell into place, and functioned; and from this he drew two logically distinct conclusions which he, however, tended to confuse. First, he believed that for the generality of men, most of the time, "the natural effort of every individual to better his own condition" is the controlling force in the development of economic institutions. Second, he believed that this mechanism usually leads to the best of all possible results, all things being considered; and he referred reverently to the "invisible hand" by which man seemed to be led.[47] Characteristically, to be sure, Smith was not an absolutist, either in his theories of human nature or in his faith in the beneficence of the existing order, but he nevertheless thought he was justified in drawing inferences from the above views as premises.

Now, despite an attack upon mercantilistic policies which destroyed the last vestiges of their authority, Smith's basic interest was that of the Mercantilists: he sought to ascertain how national welfare, and especially national wealth, might best be attained.[48] To this problem he applied the reasoning of the last paragraph, and emerged with the conviction that the best national program is one of the *laissez-faire.* This meant agreement with the conclusions of the Physiocrats; but the superiority of Smith's theory is apparent. Moreover, he was less the slave to his own doctrine, and admitted numerous exceptions. For example, he demolished the mercantilistic arguments for state regulation, and supported free trade and free money; but at the same time he approved the restrictive Navigation Acts, setting national

[46] It remained for J. B. Say, however, explicitly to extol description as the sole task of the economist.

[47] His empiricism saved him, however, from embracing a belief in benevolent teleology—something of which he has, nevertheless, been accused.

[48] In *The Theory of Moral Sentiments,* Smith had concluded that private wealth was not worth striving for, and he had marvelled at the thought that if the efforts of individuals to better their condition often brought no real satisfaction, the public wealth, which was truly valuable, was by such efforts increased.

defense above national wealth. His followers, unfortunately, were not usually so ready to recognize exceptions, and developed, in the course of time, a relatively rigid doctrine of general non-state-intervention.

In his analysis of production, Smith recognized that every factor plays its part, but he emphasized the importance of labor. He thought of a nation as a huge workshop full of coöperating workmen, the annual industry (or, as he less exactly put it, "the annual labor") of which "is the fund which originally supplies it with all the necessaries and conveniences of life which it annually consumes." Thus, in the first sentence of his book, Smith propounded a quite new view of wealth as a flow of goods and services, rather than as a supply of stock on hand such as the Mercantilists had thought of. Moreover, this statement constituted a repudiation of the agricultural fetishism of the Physiocrats, although, curiously enough, Smith does not seem to have realized this, and always himself displayed no little awe of land and landholders. The chief means of increasing productivity and consequently of bringing about progress seemed to Smith to be the extension of the division of labor. This was thought to be limited only by the extent of the market and by the quantity of capital available; and its advantages were explained in terms of dexterity, saved time, and stimulus to invention.[49] Yet he recognized the dangers of a deadening monotony which might be involved in specialization, and suspended *laissez-faire* to advocate state education as a counterbalance.

The "natural propensity" to barter and exchange, which lay at the back of division of labor, pretty completely dominated Smith's mind when he sought to evolve a value theory. He distinguished value in use from value in exchange only to ignore the former thenceforth, and he finally deserted his organic view of industry by inconsistently denying productivity to such labor as failed to result in material goods upon the market. But the wide fluctuations of prices, which were recognized as being controlled by the spontaneous forces of demand and supply, drove Smith—as they have ever driven economists—to seek for some stable, underlying, "real" or "natural" value. This latter proved elusive, and Smith finished by vacillating between two different views of the matter. According to the first, real value varied directly with the amount of labor involved in the production

[49] It is interesting to note that whereas Plato defended division of labor and exchange in terms of innate differences in human ability, Smith started out with exchange and the division of labor, and averred that they lead to acquired differences in human ability.

of a good,[50] according to the second, the determinant was the entrepreneur's cost of production, itself determined in a fashion which was by no means satisfactorily analyzed. In general, it may be said that Smith inclined towards the latter view; certainly his successors of the Classical School did so, while Marx went back to the labor theory.[51]

Smith's doctrine of distribution has proved even less satisfactory than that of value, although it, too, stimulated a great deal of thought. Under physiocratic influence, he interpreted rent, apart from interest on improvements, as being due to the aid which nature peculiarly lends to the monopolizing landowner; wages were explained as fixed at any moment by demand and supply, while tending in the long run to find the minimum-of-subsistence level; interest, profits, and the wages of management were hopelessly confused as a single category.

Yet, after all, it is hard to exaggerate the importance of the man or of the book. Smith's own most striking quality was undoubtedly his great balance, a trait which had distinguished Aristotle. His breadth of outlook was marked; he considered the needs of both state and individual; he checked his deductions with historical knowledge and personal observation; and, finally, he wove his original ideas into a fabric which also contained the best which his consummate skill could select from the products of other minds. He struck the final blow at Mercantilism and admirably interpreted the new spirit of individualism,[52] yet he was always cautious, and never doctrinaire. His views were clearly, penetratingly, and charmingly expressed, but he never systematized them, and, like most great minds, his cannot, as we have seen, be accused of consistency. The *Wealth of Nations* was, what its author called it, "an inquiry," and in his search for the truth Smith discovered the germs, at least, of nearly all the economic ideas which have subsequently been developed into rival systems. Stimulating and provocative, the work attained a success, and has retained an influence, such as have been the lot of few books since books began.

2. THE ELABORATION BY MALTHUS AND RICARDO

For twenty years after the publication of the *Wealth of Nations* England produced no new economist of importance, although during

[50] The labor theory of value goes back to Hobbes' *Leviathan*, London (1651), xxiv, and is also to be found in the writings of Petty, Locke, and Cantillon.

[51] See below, p. 369.

[52] He was not, however, as some have thought, the prophet of the Industrial Revolution, which had hardly begun when his ideas were formed. As a matter of fact, Smith heartily disliked traders and manufacturers.

that period Jeremy Bentham (1748–1832) was preaching the famous utilitarian principle, "the greatest happiness of the greatest number," as well as the hedonistic calculus which so strongly influenced later economic thought. In 1798, however, Thomas Robert Malthus (1766–1834), a young parish clergyman, published his epoch-making *Essay on the Principle of Population.*[53] In this book, and in its 1803 and later revisions, he laid down the stern thesis that human numbers tend to increase more rapidly than food supply, and are limited only by such positive checks as war, famine, and cachectical disease, or by the preventive check of prudential abstention from marriage. This pessimistic implication that beyond a certain point an increase in population is undesirable was in direct opposition to a view which had been orthodox from the days of the Schoolmen except among a few men who, however, had easily assumed that human reason could be relied upon to discern and maintain the proper limits.[54]

Such views Malthus swept aside, questioning whether reason or even self-interest is capable of controlling the sexual instinct, and arguing that most human misery is the effect of too rapid reproduction. Wages, he believed, must tend to sink to the level of the minimum of subsistence; when they have done so, the positive checks will function. Thus the poor were faced with a hard choice between destruction and celibacy, and if they refused the latter could only blame themselves for subsequent suffering. The rich, accordingly, were under no moral obligations to give alms, but might conscientiously devote their whole fortunes to the support of their own presumably large and well-fed families.[55]

Malthus' book precipitated a violent controversy, which has raged intermittently ever since. The improvements in agricultural methods, and the successful utilization of wide new areas for food production, during the nineteenth century, ushered in a season of plenty which seemed to belie his gloomy forebodings; yet the quantity of subsistence increased only slightly faster than the population, which

[53] This work (London) fixed Malthus' fame and has consequently overshadowed his important treatises upon more general economic subjects. Among these were: *Observations on the Effects of the Corn Laws,* London (1814); *An Inquiry into the Nature and Progress of Rent and the Principles by Which It Is Regulated,* London (1815); *Principles of Political Economy Considered with a View to Their Practical Application,* London (1820); and *Definitions in Political Economy,* London (1827).

[54] Of the latter sort were the marquis de Condorcet (1743–1794), and William Godwin (1756–1836), whose writings had, indeed, served as an inspiration of Malthus' reply.

[55] It should not be supposed, however, that Malthus was personally hard-hearted; he was really very humane, but his studies had convinced him that charity was useless.

presses ever harder in a world where little uncultivated soil longer remains. We may not, therefore, deny the validity of the law of population as a statement of tendencies.[56] Numbers do tend to increase swiftly and are limited by food supply, which can scarcely be expected to expand indefinitely. When the limits are reached, the effective but cruel positive checks can be relied upon to prevent any surplus.

The only alternative is to control population by means of the preventive checks. In his second edition Malthus considered this possibility somewhat fearfully. If it meant what he termed "moral restraint," i. e., the living of a chastely celibate life, he lent it approval—but doubted its success, man being what he is. If, on the other hand, it involved the indulgence in practices calculated to satisfy the sexual passions while avoiding the "natural" consequence, reproduction, then the problem might possibly be solved—but at the cost of conduct which seemed to the good clergyman thoroughly vicious.[57] But fortunately standards change, and today many moralists approve what Malthus condemned. With an increasing separation, then, of the functions of sex and of reproduction, population is becoming more subject to human control, and problems of quality rather than of quantity seem nowadays predominant.[58]

For our present purposes, however, the important facts are that Malthus' arguments and more melancholy conclusions appeared to

[56] W. S. Thompson, in his careful study in Malthusianism (*Population*, New York, 1915), demonstrates that Malthus himself thought of his law as such a statement. He concludes: "The Malthusian position then really is this: Although at any normal time there is food enough to keep alive all members of the population, yet it is only actual pressure upon subsistence (operating in certain portions of the population) or fear of pressure (which assumes manifold forms) which keeps population from multiplying more rapidly than it actually does." (P. 14.)

[57] However, Malthus did agree that if birth-control were the only means of avoiding over-population, then it was probably to be approved on utilitarian grounds, as involving less vice than that which would be certain to accompany the alternative poverty and misery. At any rate, he had, by 1826 when his sixth edition appeared, mustered sufficient confidence in the preventive checks to write: "On the whole, therefore, though our future prospects respecting the mitigation of the evils arising from the principle of population may not be so bright as we could wish, yet they are far from being entirely disheartening, and by no means preclude that gradual and progressive improvement in human society, which, before the late wild speculations on this subject, was the object of rational expectation." (Vol. II, pp. 440, 441.)

[58] For a modern discussion of the population problem, the following books in addition to the work of Thompson, already cited, should be consulted: P. P. Leroy-Beaulieu, *La question de la population*, Paris (1913); A. M. Carr-Saunders, *The Population Problem*, Oxford (1922); E. M. East, *Mankind at the Crossroads*, New York (1923); E. B. Reuter, *Population Problems*, Philadelphia, London (1923); H. Wright, *Population*, London (1923).

his most influential contemporaries quite unanswerable, and that consequently the rationalism and perfectibilism which Quesnay and Smith had represented seemed no longer quite justified. The resultant gloom was deepened, and the new orientation of English political economy was fixed, by the writings of another influential thinker who appeared at this juncture.

David Ricardo (1772–1823) was a broker who had made himself extremely wealthy in the midst of the economic dislocations to which the Industrial Revolution, the French Revolution, and the Napoleonic Wars had contributed. Naturally enough, his thought was deeply affected by the circumstances of his time, and he was especially interested in the violent fluctuations in the price of corn, and in the connected and much-mooted question of rent. In 1817 he published his greatest work, *On the Principles of Political Economy and Taxation*,[59] and, obscure, contradictory, and unsystematic as it was, it nevertheless served to earn him a very high place as an economist.

Ricardo believed that the chief object of economic inquiry should be the distribution of wealth. Furthermore, he believed that of the three distributive categories, rent, wages and profits, the first is the most interesting and important. Upon the phenomenon of rent, accordingly, he centered his attention, seeking to explain it in terms which had been hinted at by Smith, and to a considerable extent utilized by Malthus, James Anderson (1739–1808) and Sir Edward West (1782–1828). There resulted the famous law of differential rent which is always associated with his name and which may be outlined here. Beginning with the Malthusian notion of the constant tendency of population to expand, Ricardo pointed out the consequent necessity of regularly bringing under cultivation lands previously unoccupied because relatively infertile. These marginal lands, presumably free for the taking, would be without value or rent, and consequently their entire product would be available for rewarding the labor and capital applied—the share of each of which would necessarily vary inversely with the share of the other. But similar amounts of labor and capital would produce, on all other lands, a surplus varying directly with superiority of fertility; this surplus, since competition must keep wages and profits the same as on the

[59] The *Principles* was published in London. Of Ricardo's other writings, the most notable were: *The High Price of Bullion*, London (1810); *An Essay on the Influence of a Low Price of Corn on the Profits of Stock*, London (1815); *Proposals for an Economical and Secure Currency*, London (1816); *On Protection to Agriculture*, London (1822); *Plan for the Establishment of a National Bank*, London (1824). His *Letters* to Malthus, McCulloch, and others are also illuminating.

rentless lands, could only go to the landlord as rent. Nor could this tribute to the proprietors be avoided by a refusal to till new lands, old lands being intensively cultivated instead. For here the law of diminishing returns, already stated by Turgot and Malthus, taught that increasing investment on a given plot of land would bring a constantly decreasing return, analogous in every way to the product of marginal land.[60]

Rent being disposed of, Ricardo turned to the other distributive shares, and explained wages, in Malthusian fashion, as constantly tending to seek the level of the minimum of subsistence. The product remaining after the payment of rent and wages, was available as interest and profits. It followed—and in this Ricardo was peculiarly interested—that as the population grows and there is greater pressure upon the land, rent must increase; labor must continue to receive its subsistence wages; and the gain of the landlord will consequently be at the expense of the capitalist, whose profits, being residual, must fall. Finally the stationary state must result.

In the value problem, which he believed quite separate from that of distribution, Ricardo was somewhat less interested. In general, he thought of "normal," long-time value as proportional to labor-cost,[61] but such phenomena as the accretion of worth of aging wine, forced him to admit that time must be somehow involved. He was never satisfied with his treatment here, however. Ricardo was particularly opposed to the Corn Laws, which protected English landlords from the competition of fertile foreign soils; and he defended free trade in a theory far more thorough and elaborate than that of any of his predecessors.[62] He stressed the advantages of the territorial division of labor, and propounded the doctrine of comparative costs in international trade. The latter teaches that each country gains by specializing in the production of those goods which it can turn out at lowest cost compared with other countries, and by exporting these

[60] Ricardo does not specifically consider the possibility of a scarcity rent, but the law of diminishing returns would have enabled him to explain it without deserting his idea of it as a differential category.

[61] Rent was considered value-determined, and consequently no part of cost; interest was thought of as a return upon a crystallized form of past labor. Accordingly, all cost might be held to trace back to labor of some sort. But neither Ricardo nor anyone else has ever found any successful common denominator of labor other than value itself; which forces every labor theory into circularity.

[62] His friend Malthus, indeed, was a partisan of protection as a means to national self-sufficiency, arguing that free trade could at best only postpone the ultimate day of more or less miserable equilibrium. Moreover, Malthus and Ricardo, although on excellent terms, also disagreed as to method, the former relying to a considerable degree upon induction.

goods as payment for such other products as it may need and consequently import.

It is not difficult to understand the tremendous controversy which Ricardo aroused, for he dealt with burning questions and expressed strong views plainly. His theories threw into bold relief the fact that the interests of the different social classes are far from identical, and portrayed the landholders as innocent but parasitical receivers of an unearned increment.[63] He was thus a prophet of strife rather than of harmony, while his law of diminishing returns joined with Malthus' law of population and the "brazen law of wages" to earn for economics the title of "the dismal science."

Yet Ricardo dominated English economic thought for a generation, focussing attention upon distribution and value, and firmly establishing the use of an abstract-deductive method.[64] Here he was extremely effective. He dealt in what has been called "imaginative experimentation"; he took for granted the institutions and class divisions of his day; and he assumed the universal desirability, in economic transactions, of those human characteristics which he had observed in his fellow-businessmen, particularly of obedience to the dictates of self-interest. Yet let it be noted that it was concrete induction, and not practicality, which Ricardo rejected; for on the basis of his "common-sense" premises, he sought to build up "valid theories," and then persuade all mankind to adapt themselves, and therefore the "facts," thereto.[65]

3. DEVELOPMENT OF THE CLASSICAL DOCTRINE AT HOME AND ABROAD

The immense popular success of the Ricardian economics, its remarkable practical results (culminating in the establishment of complete free trade in England in 1846),[66] and its long period of

[63] Although Ricardo himself, despite his dislike for the landlords, was always a strong advocate of the security of property, it is not surprising that one of his followers, James Mill, advocated the nationalization of land. (See also below, pp. 362 and 373.)

[64] As he did not employ mathematics, he was forced to keep his assumptions simple, and therefore, unusually artificial. This blemish was greatly magnified in the work of his successors.

[65] For instance, he hoped, with Malthus, that the laboring man might somehow learn to follow his real self-interest and shake off his fatal (and fertile) addiction to "the delights of domestic society." He did not favor birth-control, however.

[66] This victory was chiefly due to the efforts of the so-called Manchester School, led by Richard Cobden (1804–1865) and John Bright (1811–1889). This group represented in England the same naive and enthusiastic exaggeration of the Classical doctrines as did the French Optimists. (See below p. 360.)

dominance are to be explained on several grounds. Of great influence was the early utilization of the Classical theories to support the political program of the manufacturing class which, because of the Industrial Revolution, had risen to great power. This class found much satisfaction in doctrines which put the landholders on the defensive, which pronounced low wages inevitable, and which demanded that the government refrain from any interference with individual enterprise. In the political arena, of course, Ricardo's hypotheses soon hardened into dogmas, a fate for which their abstract-deductive character only too well suited them. For even when facts widely at variance with the conclusions of the Classical theory were pointed out, answer might be—and was—made that economic science deals with tendencies, that these had already been demonstrated with flawless logic, and that evidence of what must be temporary aberrations need not disconcert the economist. Thus political economy was able to give a wholly false impression of accuracy and finality. This impression was greatly strengthened by the writings of the leading English post-Ricardian economists, James Mill (1773–1836), John Ramsay McCulloch (1789–1864), and Nassau William Senior (1790–1864).[67] Rigidly, they restated the postulates of their predecessors, dispensing, however, with their caution and humility. Senior alone made an important original contribution,—a theory that interest represents the reward of abstinence, exercised by capitalists in refraining from currently consuming their incomes.

In the meantime, the ideas of Smith and his followers had not failed to penetrate to the Continent of Europe. There they made a great stir. In France, their earliest important representative was Jean Baptiste Say (1767–1832) [68] who clearly and logically arranged the ideas which he found in the *Wealth of Nations,* systematizing them under the headings which have become conventional—Production, Consumption, Exchange, and Distribution—and stressing the general principles thus made manifest. He did not, however, share Smith's predilection for agriculture or his doubts regarding the productivity of the labor that provides merely immaterial goods (services). Moreover, as a factory-owner, he was led to make the important distinction between entrepreneur and capitalist, treating

[67] The leading works of these three writers were: Mill, *Elements of Political Economy,* London (1821); McCulloch, *The Principles of Political Economy,* Edinburgh (1825); Senior, *An Outline of the Science of Political Economy,* London (1836). The latter, a reprint of a contribution to the *Encyclopædia Metropolitana,* may be regarded as the first manual of political economy.

[68] His most notable writings were: *Traité d'économie politique,* Paris (1803); and *Cours complet d'économie politique pratique,* Paris (1828–1829).

the former as the pivot of a distributive process in which the functioning of demand and supply and the influence of scarcity were emphasized. The authority of Say became very great indeed, and he established a Liberal tradition which was faithfully carried on by his successors at the Collège de France, Comte Pellegrino Rossi (1787-1848) and Michel Chevalier (1806–1879).[69]

After Say, the most influential French representative of Liberalism was Frédéric Bastiat (1801–1850),[70] a remarkable expositor whose advocacy of individualism and *laissez-faire* was unlimited. He is best known, however, for his refusal to share the pessimism which had clung to the doctrines of Malthus and Ricardo; he vigorously argued the existence of a quite harmonious Providential order. Bastiat had faith that complete liberty and really free competition would prove destructive of all economic evils, and Socialism and Protection—neither of which lacked advocates even in his time [71]—were his particular *bêtes noires*. To justify his optimism, he sought with ingenious but sophistical and unconvincing arguments to remove the sting from the laws of population, rent, and wages; rent, for instance, he declared to represent no more than a proper return to the landlord upon his labor and other outlays. Bastiat's ideas were remarkably paralleled by those of that able American, Henry Charles Carey (1793–1879) [72] (who, indeed, accused the Frenchman of plagiarism), and they strongly influenced another American, Arthur Latham Perry (1830–1905).[73] Charles Dunoyer (1786–1862),[74] a rather superficial Frenchman to whom free competition was the key to the economic millennium, also belongs to this group of Optimists.

In Germany the Liberal economics found its most important advocate in Johann Heinrich von Thünen (1783–1850), who utilized the abstract method with marked ability in his significantly titled work, *Der isolirte Staat* (Hamburg, 1826–1863). Here Thünen passed beyond Ricardo in studying the effect upon rent of the distance of the land from the market. In the writings of Karl Heinrich Rau (1792–

[69] Rossi was the author of: *Cours d'économie politique*, Paris (1840–1854); Chevalier, of: *Cours d'économie politique fait au Collège de France*, Paris (1842–1850). It should be noted that the latter was to some extent affected by the views of St.-Simon. (See below, pp. 364, 365.)

[70] His most notable book was: *Les harmonies économiques*, Paris (1850).

[71] See below, pp. 363 ff., 377, and 378.

[72] Carey was the author of: *Principles of Political Economy*, Philadelphia and London (1837–1840).

[73] Perry wrote: *Elements of Political Economy*, New York (1866).

[74] Dunoyer wrote: *De la liberté du travail, ou simple exposé des conditions dans lesquelles les forces humaines s'exercent avec le plus de puissance*, Paris (1845). In briefer form and under a different title this book had appeared twenty years earlier.

1870) [75] the tendency of the orthodox economics to degenerate into a mere logical manipulation of a few basic propositions found a new and exaggerated expression, and this author's acceptance as a fair representative of the Smithian school did much to bring down upon the great Scotsman unwarranted German criticism. Another German writer who absurdly distorted the doctrines of Liberalism was John Prince-Smith (1809–1874). Friedrich Benedikt Wilhelm von Hermann (1795–1868) [76] is also usually grouped with these writers. He was, however, much more independent and original, for he recognized a social motive in economic activity, and also pointed out the possibility of a differential rent of capital as well as of land.

4. THE CULMINATION OF CLASSICAL POLITICAL ECONOMY WITH JOHN STUART MILL

Appropriately enough, the culmination of the Classical economics took place in England; it was marked by the publication in London in 1848 of the great treatise of John Stuart Mill (1806–1873), the son of James Mill. This book, *Principles of Political Economy with Some of Their Applications to Social Philosophy,* was better written than any of its forerunners and was brilliantly logical.[77] In it, moreover, were combined and organized into unforgettable formulae all of the essential doctrines of the English school. Here were to be found that belief in self-interest as the sole motive of economic activity,—which was individualism; [78] that trust in *laissez-faire* and free competition as the most likely ways of giving self-interest proper expression,—which was Liberalism; [79] and that traditional faith that the result of a Liberal policy would be most generally satisfactory. Here, in Mill's pages, there appeared again the idea of market-value as responding to demand and supply; of "natural" or "normal"

[75] He wrote a *Lehrbuch der politischen Oekonomie,* Heidelberg (1826–1837).

[76] Hermann was the author of: *Staatswirthschaftliche Untersuchungen,* Munich (1832).

[77] Mill was primarily a philosopher and his greatest work was his *System of Logic,* London (1843), a leading English contribution to philosophy in the nineteenth century. The section on the method of the social sciences (Book VI) is of especial interest to the economist.

[78] It should not be forgotten that the older Classical economists never denied the existence of motives other than self-interest, merely claiming that the latter alone functions in the economic field: or, as Bagehot puts it: "Dealing with matters of 'business,' it [the orthodox economics] assumes that man is actuated only by motives of business." (*Economic Studies,* London, 1880, p. 5.)

[79] This did not necessarily mean a defense of the existing order: for instance, monopoly in every form was anathema to the Liberals. Consider James Mill's advocacy of land-nationalization.

value as fixed by cost of production. Here, finally, were restated the Malthusian law of population, the Ricardian law of rent, and the theory of abstinence which was Senior's; all set forth as scientific statements of universal fact. In his exposition of these theories Mill made no pretense at originality; yet some contributions may be discerned. For instance, the circularity of the old law according to which demand and supply both determine and are determined by price did not escape him, and it was now restated in terms of the oscillation of value about that point of equilibrium where the quantity offered is equal to the quantity demanded. Moreover, the wage-fund theory was further developed, the notion being reiterated that wages can never be raised except by (1) increasing the amount of capital available for distribution to the laborers as wages, or (2) decreasing the number of laborers among whom the existing amount must be distributed. Finally, a notable restatement of the Ricardian theory of free trade was achieved. Protection was approved only in support of infant industries; and even then there were qualifications.

In one respect, however, Mill was very different from previous English economists: he was, in general, far more sympathetic towards human suffering. It was this characteristic—as well as the influence of Auguste Comte and Mrs. John Stuart Mill—which opened his ears to many criticisms of the Classical views with their little hope for the poor and downtrodden, and led him, as he grew older, to incline farther and farther in the direction of a mild interventionism. The result was the appearance of a number of contradictions in his writings, and a startling apostasy in the form of his late repudiation of the wage-fund theory.[80] Yet Mill never deserted the deductive method of thought, and his proposals for reform were always calculated to fit into a Liberal-individualistic scheme of things. Such proposals included the substitution of coöperative producers' associations for the wage-system, the state appropriation of rent by means of a heavy tax on land, and the diffusion of property by means of the regulation and taxation of inheritances.

For these attempts at social self-control, Mill offered a theoretical justification which he himself regarded—not without reason—as his chief contribution to political economy. This justification rested upon an important distinction between production and distribution. The former, he agreed, is subject to inexorable natural laws beyond

[80] Francis Davy Longe (1831–1910) had been one of the first to question the wage-fund doctrine. The most effective attacks thereon, however, came from the pens of two American economists, Francis Amasa Walker (1840–1897), in his *The Wages Question*, New York (1876); and F. W. Taussig, *Wages and Capital*, New York (1896).

the control of men; but the latter is an arbitrary process, "a matter of human institutions solely." Consequently, as human nature improves—and Mill believed such improvement quite possible—institutions, and thereby the whole distributive process, may confidently be expected to grow better and better. Thus was a heartening prospect for social amelioration provided, on the basis of an argument which later economists have not hesitated to expand.

It is easy to see that the writings of John Stuart Mill form a sort of bridge from the pure Liberalism of James Mill to the frank interventionism of Sismondi and the Socialism of the St.-Simonians. We are not surprised, then, to find that after 1848 the current of dissent, which had long been swelling and to a consideration of which we must shortly turn, took on dominating proportions. Only a few more truly orthodox figures emerge. Of these, the most important was surely John Elliott Cairnes (1823–1875),[81] whose theory of non-competing groups sought to explain the failure of wages and profits to find a single general level, and in whose hands political economy became a perfect, but a bloodless, hypothetical science. As for the rest, only the Frenchman, Jean Gustave Courcelle-Seneuil (1813–1892), the Swiss, Antoine Élisée Cherbuliez (1797–1869), and the German reformer, Franz Hermann Schulze-Delitzsch (1808–1883) can here be mentioned.[82]

IV. THE SOCIALIST TIDE

1. ITS GENESIS: ST.-SIMON TO PROUDHON

As the Industrial Revolution wore on, it became increasingly evident that sensitive men could not view with equanimity all of its results. Conditions among the new class of factory workers were particularly appalling. The work was divided among men, women and children—the latter sometimes of the tenderest years; and it had often to be performed through incredibly long hours, in unwholesome surroundings, and for starvation wages. Moreover, widespread and devastating unemployment now became a frequent phenomenon, the concomitant of the periodical business crises which had begun to exhibit an intensity hitherto unknown. Such circumstances as these produced tremendous suffering, in the face of which the Liberal economists—as economists at least—seemed cruelly indifferent. True to

[81] His most notable book was: *Some Leading Principles of Political Economy Newly Expounded*, London and New York (1874).

[82] For some notice of the still later persistence of the Liberal tradition in France, see below, pp. 384, 385.

their doctrines, they refused to countenance state intervention in the interest of the sufferers; they told the proletariat that it must rely upon its own competitive power to improve its condition; and finally, they insisted that, since the general wealth was unquestionably increasing, the fortunes of the individuals must, despite all apparent evidence to the contrary, be also advancing.

Such an attitude could hardly be expected to satisfy the tender-minded, or appeal to the working-classes. Consequently it is not difficult to understand the appearance of a group of writers who hotly denounced the economists as creatures of the *bourgeoisie* and who declared themselves to be the defenders of the proletarian cause. These Socialists, as they came to be called, were at first predominantly—and always to a great extent—motivated by moral and ethical considerations, and they usually emphasized human welfare rather than wealth. Naturally, reform, and not mere scientific observation and description, was their object. Yet curiously enough, the Socialists, despite their name, were seldom universalists: they were concerned over the sufferings, not of society, but of individuals in society. With them, as with the Liberal economists, the individual was the end; the fundamental difference between the schools was that whereas the economists left the individual to take care of himself (thus favoring the strong and capable), the Socialists proposed that society take a hand in the game (with the clear purpose of improving the lot of the weak and ill-equipped).[83] The means which the Socialists have in general believed that society should employ in its ameliorative endeavor have been three; in every socialist program one or more of these is advocated. They are: (1) the destruction, or at least the weakening, of private property—that institution which had been tacitly accepted by the orthodox school as the eternal cornerstone of the economic order; (2) the substitution for free competition and economic spontaneity of a rational, systematic, and usually authoritarian coördination of economic forces; (3) the establishment of human equality.

The first appearance of modern Socialism[84] was in the writings

[83] For an illuminating discussion of the essential basic agreement of Liberalism and modern Socialism, see Gonnard, *op. cit.*, III, i.—The important exceptions to the rule should not be forgotten, however. Rodbertus was a universalist, and Marx himself, despite his debt to the Liberal School, seems, when his evolutionary view of society is taken into account, to belong in the same category.

[84] Of course, Socialism has never lacked some sort of expression. We have already noted its appearance as communism in Plato's *Republic* and in Christian thought. Other famous communistic schemes were those of Sir Thomas More (c. 1478–1535) and Tommaso Campanella (1568–1639). In the eighteenth

of the disciples of Claude Henri de Rouvroy, Comte de St.-Simon (1760–1825), notably Barthélemy Prosper Enfantin (1796–1864) and St.-Amand Bazard (1791–1832).[85] St.-Simon himself was satisfied to advocate a sweeping reorganization of society—government and all—to form a single great efficient industrial organization in which idling would be impossible, and expert guidance and control fully provided for.[86] The St.-Simonians, however, who anticipated most of the later socialistic ideas, condemned private property, and particularly its inheritance, as making possible and probable the distribution of the instruments of production according to selfish purposes and "the accident of birth." They noted the conflict between capitalists and laborers, and deplored the "exploitation" in which the former could and did indulge. Collective property and collective control of industry seemed to them more likely to bring about productive efficiency. Production goods might then be distributed "to each according to his capacity"; consumption goods, "to each capacity according to its performance," i. e., in proportion to what it had produced. From the latter formula it is apparent that equality was by no means sought.

St.-Simon has been called the socialist prophet of industrialism. François Marie Charles Fourier (1772–1837),[87] however, represented a reaction in favor of agriculture. This thinker, moreover, relied for the motive power of his proposed reforms, not upon any external authority, but upon the quite voluntary association of enlightened individuals in self-sufficing communities. In these elaborately organized *phalanstères* he believed conditions might be realized so scientifically adapted to human passions and desires that work itself

century an egalitarian passion led a number of writers, including the abbé Morelly (?—?), the abbé de Mably (1709–1785), Jean Pierre Brissot de Warville (1754–1793), François Noël Babeuf (1760–1797), and Godwin, to attack the institution of private property. Their influence upon nineteenth century socialistic thought was negligible, however.

[85] Among St.-Simon's many works may be mentioned: *L'industrie* (with Augustin Thierry, Auguste Comte, and others), Paris (1817–1818); *Du système industriel*, Paris (1821–1822); and *Nouveau christianisme*, Paris (1825). Bazard's *Doctrine de Saint-Simon, Exposition, Première année*, Paris (1828–1829) should also be referred to. See also W. A. Dunning, *Political Theories from Rousseau to Spencer* (1920), 355 ff.

[86] The fact has often been noted that St.-Simon was followed by a considerable number of active workers of the stamp of Ferdinand de Lesseps, who afterwards built the Suez and attempted to build a Panama Canal.

[87] His leading works were: *Théorie des quatre mouvements, et des destinées générales*, Leipzig and Lyons (1808); *Traité de l'association domestique-agricole*, Besançon and Paris (1822), 2nd edition in the *Œvres complètes*, Paris (1841–1845), under the title, *Théorie de l'unité universelle;* and *Le nouveau monde industriel et sociétaire*, Paris (1829).

would be attractive.[88] In England, Robert Owen (1771–1858),[89] a humanitarian capitalist, set forth ideas which were very like Fourier's. He was convinced that man is always the creature of his environment which, if properly modified, may be relied upon to produce a millennial society of contented beings. In profit he saw the great evil of the existing milieu, and this he would have suppressed by substituting, for metallic money, notes issued to correspond with labor-time expended. To test his ideas, he established several agricultural associations in Scotland and in the United States of America. These, like others which had taken their inspiration from Fourier, failed. An attempt in London to put the labor-note scheme into operation was similarly unsuccessful.[90] A third Associationist, and one whose passion for equality led him to espouse a crushing authoritarianism within the association, was Étienne Cabet (1788–1856).[91] His personal effort to establish a Utopia in the United States met the same fate as had other associationist experiments.

With the approach of the Revolution of 1848, two new figures appeared in French Socialism and sounded a new note. Louis Blanc (1811?–1882)[92] has often been classed as an Associationist because of his faith in the reformative efficacy of his proposed associative social workshops. These workshops, however, were to be initiated and regulated by the state, and this departure from the previously held ideal of purely spontaneous association is most significant. It certainly justifies the separate classification of Blanc, the logic of whose doctrine unquestionably led towards State Socialism.[93] During the Revolution, Blanc became for a short time a member of the French Gov-

[88] Fourier had few followers. Of these, Victor Prosper Considérant (1808–1893) was by far the most important.

[89] Owen delivered his message by word of mouth rather than in writing. However, his *New View of Society*, London (1813–1814), and *The Life of Robert Owen Written by Himself*, London (1857–1858), are worth consulting.

[90] Although he was not aware of it, Owen's most permanently valuable accomplishment was the inspiration which he provided for the famous Rochdale experiments with coöperative associations.—Owen founded no school: however, his disciple, William Thompson (c. 1785–1833), deserves notice because of the remarkable grasp of socialistic theory exhibited in his *Inquiry into the Principles of the Distribution of Wealth*, London (1824). Yet, except on Marx, Thompson's thought had but slight influence.

[91] The author of *Voyage . . . en Icarie*, Paris (1840); and *Le vrai christianisme suivant Jésus-Christ*, Paris (1846).

[92] Blanc's principal economic works were: *Organisation du travail*, Paris (1839); and *Le socialisme. Droit au travail*, Paris, Brussels, and (in English translation) London (1848).

[93] This aspect of his thought may not have been very clear to Blanc himself. It was, however, definitely developed by his followers, Constantin Pecqueur (1801–1859) and François Vidal (1814–1872), both of whom anticipated several of Marx's ideas.

ernment, and the failure of certain of his projects served to discredit the whole body of his theory.[94]

It was at this same time that Pierre Joseph Proudhon (1809–1865) [95] sought with equal lack of success to establish his Exchange Bank. This bank was to serve as agent in an ingenious but fundamentally unsound scheme for making interest, rent, and similar rewards to private property—which in this aspect Proudhon denominated "theft"—no longer possible. Thus would idlers be deprived of a revenue stolen from those who were believed to be alone productive, the laborers. Proudhon won the approbation of the orthodox economists when his anarchistic passion for liberty and his philosophy of gradual growth led him to attack St.-Simon and the Associationists with great effect. Yet like these men he was an egalitarian, and an idealist—indeed a perfectibilist.[96]

2. THEORETICAL SOCIALISM AT THE FLOOD: RODBERTUS TO MARX

With the failures of the Revolution of 1848, French Socialism suffered discredit, and the leadership in radical thought passed to Germany. Here there was a gain in precision and in force. Moreover, the change undoubtedly represented a swing from an ethical to an economic orientation. Nevertheless, the continuity of thought is marked.

Johann Karl Rodbertus (von Jagetzow) (1805–1875),[97] for instance, has been called "the Ricardo of Socialism" for his services in organizing the ideas of the French Socialists and introducing them into Germany. A thoroughgoing universalist, as so many of his countrymen tended to be under the influence of the philosopher, Georg Wilhelm Friedrich Hegel (1770–1831), Rodbertus believed that the state, "an historical organism," should guide its own destiny. He opposed private property for much the same reasons as had Proudhon; he also deplored the organization of production for profit instead of for the satisfaction of social need—a phrase left vague. But Rodbertus was

[94] Rist has pointed out (Gide et Rist, *op. cit.*, 352 ff.) that the *national* workshops which Blanc sponsored as emergency measures in 1848 and which failed dismally were not at all similar to the *social* workshops which he had advocated as the permanent bases of a new society.

[95] His most notable works were: *Qu'est-ce que la propriété?*, Paris (1840); *Système des contradictions économiques, ou philosophie de la misère*, Paris (1846); and *De la justice dans la révolution et dans l'église*, Paris (1858).

[96] The latter characteristic exposed him to the scorn of Marx, whose *Misère de la philosophie* was intended by its author to be a reply to Proudhon's *Philosophie de la misère*.

[97] Rodbertus' principal work was: *Die Forderungen der arbeitenden Klassen*, written 1837 or 1839, published posthumously, Berlin (1885).

no revolutionary, and, recoiling from the logical implications of his own theories, he ended by proposing a practical program of relatively mild state interventionism. This dual rôle of theoretical Socialist, and practical interventionist, Rodbertus shared with "Karl Marlo" (Karl Georg Winkelblech) (1810–1865) and Ferdinand Lassalle (1825–1864).[98] The latter, the more important of the two, is best known for his interest in producers' associations with capital to be provided by the state, and for his belief in the radical possibilities of political action.

We now come to the name of the most influential of all Socialists, Heinrich Karl Marx (1818–1883). Marx was a German Jew whose early revolutionary activities made him a bitter exile from the Continent of Europe to England. Here he spent his later years, devoting an almost scholastic dialectical skill to the weaving of a logically unified fabric of collectivist thought. In this project he had the devout aid of his *alter ego,* Friedrich Engels (1820–1895). The outcome was the appearance, in 1867, of the first volume of *Das Kapital.*[99] This work marked an epoch in socialist thought which now received its most exhaustive and systematic treatment. Marx himself considered the book the first "scientific" exposition of Socialism, contemptuously dismissing his predecessors as "utopians." Yet upon analysis, *Das Kapital* appears to be little more than an elaborate rationalization, in terms of economic theory, of socialist views which had been expressed twenty years earlier in the *Communist Manifesto.*

Marx's claim to be considered scientific was based upon the fact that he thought of history as being determined by materialistic forces —above all by changes in industrial technology. He also believed he could discern, in history, a series of conscious struggles between pairs of economic groups, usually between the rich and the poor. For instance, the *bourgeoisie* had but recently triumphed in such a struggle with the representatives of a once strong feudalism. In the conflict which Marx was observing, however, the *bourgeois* capitalists were opposed by a new class, the proletariat. A definite development was prophesied.

[98] Lassalle's ideas are best to be found in: *Das System der erworbenen Rechte,* Leipzig (1861); and *Herr Bastiat-Schulze von Delitzsch, der ökonomische Julian,* Berlin (1864).

[99] The book was published in Hamburg. The second and third volumes came out posthumously (Hamburg, 1885, 1894) under the editorship of Engels, always more collaborator than editor.—Marx's other works are also important. They include: *Misère de la philosophie,* Brussels and Paris (1847); *Zur Kritik der Politischen Oekonomie,* Berlin (1859); and, above all, the famous *Manifest der kommunistischen Partei* (with Engels), London (1848).—An extremely able study of Marx is to be found in T. B. Veblen, *The Place of Science in Modern Civilisation* (1919), 409 ff.

Because of the institution of private property, the capitalists are able to control the instruments of production, and thus to exploit the "wage-slaves" by exacting long hours of labor, etc. There results a double tendency: on the one hand for competition to ruin all but a few immensely wealthy men; on the other hand for the proletariat, into whose ranks members of the middle class must ultimately sink, to become increasingly poverty-stricken. The latter tendency is to a large extent due to the increasing displacement of men by machines; but it is true of agriculture as well as of manufacturing. The consequence of these tendencies will be a series of ever more violent crises, for the pauperized workers will be unable to consume the vast quantities of goods which the capitalists produce. Accompanying the crises there will be cruel unemployment: indeed, the rise of a "reserve army" of unemployed. Ultimately, the few remaining capitalists will be expropriated, not without violence perhaps, by the proletarian masses; the latter, through a collectivist state, will then take over the concentrated means of production. Marx believed that this day was not far off. Its arrival would mark the disappearance of all class lines and consequently of all social conflict.

In seeking an explanation of the existing conflict in terms of abstract economic theory, Marx utilized a labor theory of value [100] and of surplus value. He contended that the "real" value of anything self-evidently depends upon the amount of labor necessary to produce it. It follows that the value of labor itself will be expressed by wages which will provide but little more than a minimum of subsistence. However, laborers are capable of working for longer hours than are necessary to earn these minimum wages. Exploitation takes place when such surplus labor is required by the capitalists and the resultant surplus value appropriated by them. The capitalists are therefore held to obtain all their profits from their variable capital which they utilize as wages; no return upon constant capital in the form of machinery, raw materials, etc., is possible. The difficulties of this position are fairly obvious.

It seems hardly necessary to criticize Marx's views at any length. His more startling conclusions were invariably contained in the premises with which he started, and these, when critically examined, appear to be somewhat arbitrary assumptions. Many Socialists, as well as more conservative thinkers, have long since discarded his theories of value and profits. Moreover, the notion of the class struggle, although it has made a considerable appeal to militant wage-

[100] More akin to that of Smith than to that of Ricardo.—For general comment on labor theories, see above, n. 61.

earners, has suffered from the discrediting of the Hegelian metaphysics and Benthamite calculus which Marx had used as its basis. Finally, the Marxian system has been greatly weakened by the fact that history has utterly failed to bear out the Marxian prophecies, at least with anything like that rapidity which their author had confidently anticipated.

Ironically enough, the would-be founder of a "scientific" Socialism seems today to have been but the propagandist of yet another "utopia." It is as such that he receives the homage of most modern Socialists. To many, however, it now appears that Marx's permanent contribution to economics lies not at all in his conclusions, but in his somewhat original and dynamic attitude and method of attack upon economic problems. For Marx thought of political economy as an inductive science which studies the changing institutions of a concrete and evolving economic order, in an effort to obtain such knowledge as will make prophecy scientifically justifiable. His own work was impaired by his reliance upon a moribund theory of development, by his belief in the probability of rapid evolution, and by his failure to go behind the fact of technological change. But his general aim and method were to find influential and capable defenders later on, chiefly in the modern school of Institutionalists.

3. SOCIALISM AFTER MARX

During the later period of his life Marx was the dominating figure in European Socialism. He organized at London in 1864 the first International, the German wing of which rapidly became an important factor in the Social Democratic Party. In 1880 he saw Jules Guesde (1845–) weld French Marxism into a compact body of thought and disciples. He heard his ideas faithfully preached, not only by Guesde and Engels, but also by Wilhelm Liebknecht (1826–1900), Paul Lafargue (1842–1911), Henry Mayers Hyndman (1842–1921), and Karl Kautsky (1854–). By general agreement, avowed adherence to Marxism became the test of the orthodox Socialist.

Certain difficulties, however, soon arose. Not only did Marx's theory fail to sustain close examination, but socialistic thought found itself faced with new problems and new responsibilities. There have resulted certain changes which are important, and, however carefully disguised as "interpretation," real. For instance, Marx himself had declined to indulge in *a priori* plans for reconstruction: collectivism was coming—why waste time in speculation concerning its details?

But while his more faithful disciples have followed him in this, other Socialists [101] were unwilling, or unable, or found it impolitic, to refrain from ruminating upon the topic. Of course, their pondering did not result in complete agreement. The thoroughgoing collectivists insisted upon the more or less complete socialization of capital, the authoritarian organization of production, and the limitation of the distribution of product to laborers in proportion to their labor.[102] Other Socialists, like the idealist, Jean Jaurès (1859–1914), felt that such an order would be fatal to individual liberty and would provide no stimulus to progress. They accordingly proposed a decentralized collectivism, in which the state should delegate the administration of property to professional groups. But this was an obvious compromise with the Devil, and failed to eliminate the possibility of the leading socialist bugbear, unearned income.

The idealistic true State Socialists [103] proposed a third scheme: that the existing state take control of the production and circulation of goods, but gradually and with indemnification of the expropriated.

There has, then, developed a Socialism which, while avowedly Marxian, really represents a considerable development and departure. It is less interested in logical consistency than in actual accomplishment. Consequently, it has been marked by a policy of ready opportunism: coöperation with trade unions in their efforts to gain temporary advantages; patriotic support of existing national states rather than international loyalty to class; and, in France and Russia, modification of views in accordance with those of a property-worshipping peasant population. Such a Socialism cannot properly be described as revolutionary: peaceful propaganda is its respectable weapon. As might, perhaps, be expected, this new type of Socialism does not insist upon a separate socialist economics, but is quite satisfied to rely upon whatever theories seem to offer support to its program.

[101] Including Rodbertus, Wilhelm Christian Weitling (1808–1871), August Bebel (1840–1913), Edward Bellamy (1850–1898), Beatrice and Sidney Webb, Jaurès, and Wells. Non-Socialists such as Schäffle (*Die Quintessenz des Socialismus*, Gotha, 1875) and Maurice Bourguin (1856–1910) (*Les systèmes socialistes et l'évolution économique*, Paris, 1904) have also tried to envisage the socialist commonwealth.

[102] Distribution according to labor was often, however, considered only a temporary arrangement, absolutely equal distribution being the goal.

[103] As distinguished from the adherents of what is commonly called "State Socialism" but which is really interventionism and not Socialism at all. The latter is discussed below, pp. 380, 381. Rodbertus, Lassalle, and Marlo represent both schools: their theories are real State Socialism, but their practical programs are those of mere interventionists. Elements of true State Socialism,

This *socialisme de mouvement*, as it has been called,[101] has had a considerable success. As Revisionism it has been dominant in Germany since the turn of the century; there, its acknowledged leader has been Eduard Bernstein (1850–). In England the Fabian Society, which has included such influential intellectuals as George Bernard Shaw (1856–), Beatrice Potter Webb (1858–), Sidney Webb (1859–) and Herbert George Wells (1866–), was founded (1883) on an avowed policy of opportunism and "permeation." A quite similar attitude has been taken by the socialist leaders of the Labour Parties, notably Keir Hardie (1856–1915), John Burns (1858–), and James Ramsay Macdonald (1866–).[102] In France a moderate Socialism has at one time or another been defended by the high-minded Jaurès, by Alexandre Millerand (1859–) and Aristide Briand (1862–),[103] by Joseph Caillaux (1863–) and Édouard Herriot (1872–). Other noteworthy members of this school have been Émile Vandervelde (1866–) in Belgium, Filippo Turati (1857–) in Italy, Mikhail Ivanovich Tugan-Baranovskĭ (1865–) and Petr Berngardovich Struve (1870–) in Russia. The leaders of American socialistic thought have also usually represented the Revisionist viewpoint.

In canvassing the reasons for the success of *socialisme de mouvement*, weight must undoubtedly be assigned to the influence of certain special, but not exclusive, critical groups. Among these groups must be numbered the juridical Socialists who would use the law to effect social transformation and who are represented by Anton Menger (1841–1906); the anti-materialistic Christian Socialists led in England by Frederick Denison Maurice (1805–1872), Charles Kingsley (1819–1875), and Thomas Hughes (1822–1896), in Germany by Pastors Adolf Stöcker (1835–1909), Friedrich Naumann (1860–1919), and Paul Göhre (1864–); the mystics who, like Count Lev Nikolaevich Tolstoĭ (1828–1910), have found in Socialism a new religion; and, finally, the vague romantic idealists, like Thomas Carlyle (1795–1881) and John Ruskin (1819–1900), who have merely

which is rarely found in a pure state, may also be discerned in the writings of Benoît Malon (1841–1893), Anton Menger, and Paul Brousse (1844–).

[101] Gonnard, *op. cit.* This characterization seems to have been inspired by Bernstein's remark: "The movement is everything, the end is nothing."

[102] Macdonald's books: *The Socialist Movement*, London and New York (1911); and *Socialism: Critical and Constructive*, London (1921), should be consulted.

[103] Since becoming perennial members of the French government, Millerand and Briand have ceased to be recognizable Socialists.

thundered against the evils of the existing society. All of these have combined to swell the tide.[107]

As a result of its temperate and temporizing character, Revisionist Socialism has been able to develop a very considerable parliamentary strength in Europe. Since the War, moderate Socialists have attained the high positions of President and Chancellor of Germany, Prime Minister of England, and Premier of France. This is no mean accomplishment. Yet it is to be observed that when elevated to power modern Socialists have invariably tended to become ever more moderate in policy and action.

There remains one other special type of Socialism—the Agrarian—to be discussed. This has not been very successful. Kautsky has tried to apply Marx's theories to agriculture, and the Germans, Michael Flürscheim (1844–1912) and Franz Oppenheimer (1864–),[108] and the Italian, Achille Loria (1857–),[109] have emphasized in their Socialism the nationalization of land. But the response has been negligible in those countries where small landholders abound. In the Anglo-Saxon countries, on the other hand, Agrarian Socialism has aroused some enthusiasm. Its most conspicuous and influential advocate has been the scarcely socialistic American, Henry George (1839–1897). George's *Progress and Poverty* (San Francisco, 1879), which puts forward the Ricardian theory as justification of a demand that a single tax to absorb all rent be levied, has enjoyed widespread popularity.[110]

4. ANARCHISM

In connection with our discussion of Socialism, Anarchism must be briefly treated.[111] This doctrine, the *ultima Thule* of individualism,

[107] It has undoubtedly been recognized by the reader, but it will now be specifically stated, that no completely sharp classification of the various forms of Socialism is possible; no matter what types are distinguished, there must always be some overlapping.

[108] Flürscheim was the author of: *Der einzige Rettungsweg*, Dresden (1890). Oppenheimer has written: *Die Siedlungsgenossenschaft*, Berlin and Leipzig (1896).

[109] The author of: *Analisi della proprietà capitalista*, Turin (1889); and *La teoria economica della constituzione politica*, Turin (1886), 2nd edition under the title, *Les bases économiques de la constitution sociale*, Paris and Turin (1893).

[110] George was not the first, of course, to see a condemnation of rent in the Ricardian law. The attitude of the Mills, father and son, has already been referred to above, n. 63 and p. 362. Other orthodox economists, notably Walras, have taken a similar view.

[111] Here political Anarchism alone is discussed. However, the importance of literary and philosophical Anarchism as typified by "Max Stirner" (Johann Caspar Schmidt) (1806–1856) should not be ignored.

is really interested in the same end as Liberalism or modern Socialism. Moreover, like the latter and certain exaggerated forms of the former, it demands the abolition of private property.[112] It abhors, however, the authoritarianism which has always tended to creep into Socialism.

To Anarchists like Proudhon, Mikhail Aleksandrovich Bakunin (1814–1876), and Prince Petr Alekseevich Kropotkin (1842–1921),[113] liberty has seemed an end and ideal for every one. Every form of authority—be it expressed by the state, through private property, or in the family—is anathema, along with the institution which supports it. Yet society and the social character of man, as expressed in free associations by mutual aid, are accepted. Indeed the Anarchists have unlimited faith in the possibility of a peaceful, crimeless society in which no state or other authority shall exist, and in which Science shall order all things, producing with little effort goods in hitherto-unheard-of profusion. On the other hand, many of these reformers expect—and some even desire—that such a society shall be established by violent methods. It is this latter aspect of their thought which has most impressed more conservative minds.

5. COMMUNISM (BOLSHEVISM)

Since the War, the radicals of whom most has been heard have been the modern Communists. Their ideas are most authoritatively represented by the Russian Bolshevists, whose noted leader was "Nikolai Lenin" (Vladimir Il'ich Ul'ianov) (1870–1924).[114] Bolshevism looks forward to a day when there can exist such an earthly Paradise as that sought by Anarchism. But this state is not believed, as by the Anarchists, to be immediately obtainable. It is rather a dream for the far distant future, when men have become different from what they are today. For the present, then, a half-way step must suffice: collectivism. This collectivism, to be obtained by revolutionary class war, is to be marked by the dictatorship of the proletariat: the authority of the majority is to be substituted for that of the few. From such a state the worker need expect neither greater liberty nor much greater justice. If he be a proletarian he will have some voice in the selection of his new rulers, but they will require him to work as hard as ever, and will enforce that requirement by power of the Army, now in their control.

[112] Liberal condemnation of private property has always been restricted to private property in land. (See above, n. 110.)

[113] Bakunin's *God and the State*, Boston (1883); and Kropotkin's *Mutual Aid a Factor of Revolution*, New York and London (1902), may be mentioned.

[114] The author of *The State and Revolution*, London (1919).

For justification of such a scheme, the authority of Marx and his materialistic conception of history is invoked. But it seems highly improbable that Marx would have found much really in accordance with his expectations in the development of the Russian situation under Bolshevism. When the Revolution came, Russia was still an agricultural nation; by Marx, Socialism was only thought of as the outcome of a long period of capitalism. The communist doctrine has, indeed, even more than Revisionist Socialism, become a thing of practical politics, and not a theory of economics at all. It has given ground, here, there, in a dozen places; not in the interest of greater logical consistency, but in order to retain the support of individualistically-minded peasants, technical experts, and others. Its ultimate development is beyond prophecy.

V. SOME LEADING TRENDS IN MODERN ECONOMICS

1. THE REALISTS

A. Interventionism, and the National School

The changing conditions of European life had called forth Socialism in opposition to economic orthodoxy. But since both schools had, in general, represented an individualistic viewpoint and devotion to the abstract-deductive method of investigation, no very searching theoretical criticisms had resulted. These were to appear more strikingly in the writings of a second group of critical thinkers, men who have been called Realists.[115] These men have been marked by the inductive character of their thought, or at least by their attempts to center economic investigation about certain actually existing and explicitly recognized social units, such as the family, the profession, the church, the state, and even society itself. From this latter characteristic it is clear that they have been universalists. Moreover, they have generally tended to take positions favorable to the working-classes.

The most important branch of the Realists was that which interested itself in redefining the place of the state in the economic sphere. The Liberals had advised state passivity on the ground that the general interest will be most surely served when each member of society is most free to follow his own individual interest. This assumption had early been challenged by James Maitland, eighth Earl of Lauderdale (1759–

[115] Gonnard, *op. cit.*

1839), and John Rae (1796–1872), but the first really important attack upon it was that of Jean Charles Léonard Simonde de Sismondi (1773–1842).[116] The latter has sometimes been erroneously confused with the early Socialists, whose ethical revulsion from the Liberal economics and the free competitive order he shared. Sismondi refused to be reconciled to certain features of the existing society: the recurring crises caused, as he mistakenly believed, by general overproduction;[117] the exploitation of labor by the entrepreneur who, he thought, pockets that surplus product which is created by the efficiency of specialization; finally, the growing stratification of the population into the bloated "haves" and the miserable "have-nots," between whom any contest must be so unequal.[118] Economists, Sismondi believed, should be primarily concerned, not with the production of wealth, but with human welfare.[119] He himself had definite proposals for bettering the lot of man. For example, he recommended small-scale production (above all small-scale agriculture), the predominance of which would, he thought, make crises unlikely. But his great contribution was his vigorous defence of state interventionism. A reading of history, he declared, revealed no instance of a passive state such as the Liberal School had imagined to be "natural." Accordingly, he demanded that the real influence of the state be recognized and then deliberately made use of in the interest of the general well-being. He favored the assistance of those who, for any reason or at any time, are unable independently to make adequate provision for themselves.[120]

Sismondi's point of view was shared by Charles Brook Dupont-White (1807–1878) [121] who considered that interventionism would surely result in a higher level of general happiness. Dupont's state,

[116] Sismondi was the author of: *Nouveaux principes d'économie politique*, Paris (1810); and *Études sur l'économie politique*, Paris (1837–1838).

[117] Sismondi's theory of crises was to some extent utilized by both Rodbertus and Marx. In his own day it precipitated a lively quarrel over the possibility of general over-production, a notion which the orthodox theorists like Ricardo, McCulloch and Say considered absurd. While, from a long time point of view, they were undoubtedly right, there is more in Sismondi's theory as a short-time analysis than they realized.

[118] The anticipation of Marx is notable here.

[119] Sismondi thus became the forerunner of the modern Welfare Economists. (See below, p. 391.)

[120] The immediate influence of Sismondi's thought was not great. Antoine Eugène Buret (1810–1842) declared himself his disciple but went far beyond his master in the direction of Socialism. The vicomte Alban de Villeneuve-Bargemont (1784–1850) more clearly reflected Sismondi's views.

[121] The author of: *L'individu et l'état*, Paris (1857); and *La centralisation*, Paris (1860).

indeed, was highly idealized: he thought of it as representing human intelligence magnified and purged of all passion.

Both Sismondi and Dupont had made use of history to sustain their arguments, and they had taken a general view of history as well as of the state. Their method and attitude, however, were peculiarly fitted to the uses of men with special circumstances in mind, and they were soon being utilized by those who were interested in the welfare of particular nations. As we have seen, the Classical political economy had developed in England where it was inspired and shaped by peculiar local circumstances. Such circumstances did not exist everywhere, of course, and in certain other countries, notably in Germany and the United States, there slowly developed the suspicion that the "laws" of economics are not as universally applicable as the Manchester School had supposed.

By the German Romanticist, Adam Müller (1779–1829),[122] for instance, both the cosmopolitanism and the atomism of the English school were early rejected. He believed that each nation should shape its economic policy according to its own conditions, and that its action should be determined by a broad view of its own welfare, spiritual as well as material, future as well as present. Very similar was the position taken by the gifted American economist, Daniel Raymond (1786–1849),[123] who believed that for the United States a protective tariff was highly desirable, however well England might be suited by free trade. On this point, Carey, in other respects an Optimistic Liberal, agreed with him.

But by far the greatest of the National School was Friedrich List (1789–1846),[124] an ardent German patriot and vigorous propagandist. Observation, at home and in America,[125] had convinced List that the newly founded German *Zollverein* should adopt a policy of protection. To defend this view, in the face of Classical free-trade doctrine, he put forward a theory of the relativity of economic policy. History shows, he contended, that every nation which possesses certain potential moral and material resources may look forward to an evolution through definite "economic stages." In the early stages, and in the final agricultural-manufacturing-commercial stage, free trade is advantageous; but in the fourth, or agricultural-

[122] The author, among other works, of: *Elemente der Staatskunst*, Berlin (1809).

[123] The author of: *Thoughts on Political Economy*, Baltimore (1820).

[124] List's *magnum opus* was: *Das nationale System der politischen Oekonomie*, Stuttgart and Tübingen (1841).

[125] He had lived for several years in Philadelphia, then the hot-bed of American protectionism, and had probably known Raymond there.

manufacturing stage, progress demands the protection of manufacture, as well as other interventionist measures by the state. At that point the creation of immediate value is less important than the harmonious development of certain fundamental productive forces—certain indispensable institutions, social, political, moral, and intellectual, as well as economic. Political economy, then, should take account of these facts, focussing its attention upon the all-important nations, and seeking to aid them in their growth.[126] When every nation is "normal" and "fully developed," then and then only may perpetual peace and universal free trade be reasonably expected; then and then only will the cosmopolitan economics of Smith attain general validity.[127]

B. The German Historical Schools

List had a good deal to say about his reliance upon the "facts of history," damning conventional theory by calling it "philosophy." He did not, however, go so far as did those writers whom we must next consider, who made the historical point of view the very center of their thought and the historical method their chief instrument. These were Wilhelm Roscher (1817–1894), Bruno Hildebrand (1812–1878), and Karl Knies (1821–1898), the members of the Older German Historical School.[128] Like List, these men were creatures of their times; in their hearts was the spirit of the awakening German nation; in their minds the Hegelian glorification of the state. Their souls refused to be bound by the cosmopolitan perpetualism which had satisfied Englishmen.[129]

Roscher, vastly erudite, was the first. Reality, in the guise of economic institutions, presented itself to him as a constant flux, to be understood only in historical perspective, not by abstract theorizing.

[126] List believed that even war is to be welcomed, provided it aids in national growth. It is interesting, in this connection, to note that during the recent War his doctrines were considerably revived in Germany.

[127] List was really criticizing Rau, not Smith. The latter had been as greatly interested in national welfare as was List. But Rau, Smith's German popularizer, had represented the Smithian program as one of universal validity.

[128] The more important works of these writers were: Roscher, *Grundriss zu Vorlesungen über die Staatswirthschaft nach geschichtlicher Methode*, Göttingen (1843); *System der Volkswirthschaft*, Stuttgart (1854–1894); Hildebrand, *Die Nationalökonomie der Gegenwart und Zukunft*, Frankfort-on-the-Main (1848); Knies, *Die Politische Oekonomie vom Standpunkte der geschichtlichen Methode*, Brunswick (1853).

[129] It may be noted that the early Historians professed to have been inspired by the historico-jurisprudence of Savigny and the philological researches of the brothers Grimm. They do not, however, appear to have understood their models very well.

Yet in his own hands history was seldom more than a device for illustrating surprisingly orthodox doctrines, his greatest historical achievement being a limping adaptation of List's notion of economic stages. Hildebrand, more critical than his predecessor, actually accomplished little more. Although he questioned the existence of "natural economic laws," he nevertheless somehow found it possible to hope that historical study would yield up "the laws of the economic development of nations." Yet he himself never sought them. Moreover, while stressing the relativism of economic policies, he still showed signs of a deterministic absolutism.

Knies, the most thoroughgoing and able of the three, was a scholar of real distinction. His relativism was more radical, for it comprehended economic theory itself. Roscher and Hildebrand had already pointed out the subjectivity of value judgments and had sought to avoid them; Knies declared judgments of fact to be subjective, too—especially in a science where facts are items of human behavior. Hildebrand's "laws of development" he ruled out along with all "cosmopolitanism" and "perpetualism." National differences—of race, of environment, of tradition—these were to Knies the realities which must make the national economy of each people an individual thing. Only a few elements are common to every state: these, if empirically discoverable, will make possible that limited amount of prediction which may with reason be hoped for. Thus, with regard to theory, Knies, despite his obviously superior philosophical grasp, ended on a minor key. In practice, he made no greater progress in the application of historical method than had his predecessors.

The Older Historical School is, indeed, not so important in its own right as in its rôle of progenitor to the Younger Historical School. The latter developed, in the last quarter of the nineteenth century, about the dominating figure of Gustav von Schmoller (1838–1917)—brilliant, scholarly, egotistical, dogmatic, ruthless, and a prodigious patriot.[130] It included such notable writers as Georg Friedrich Knapp (1842–), Lujo Brentano (1844–), and Karl Bücher (1847–),[131] and attained a very great influence. Nor was that influence limited to Germany: in greater or lesser degree it extended in England to James Edwin Thorold Rogers (1823–1890), Thomas Edward Cliffe

[130] Schmoller's great work was his *Grundriss der allgemeinen Volkswirtschaftslehre*, Leipzig (1900–1904). See the admirable analysis of this work in T. B. Veblen, *The Place of Science in Modern Civilization*, 252–76.

[131] Among the works of these authors may be mentioned: Knapp, *Staatliche Theorie des Geldes*, Leipzig (1905); Brentano, *Die Arbeitergilden der Gegenwart*, Leipzig (1871–1872); Bücher, *Die Entstehung der Volkswirtschaft*, Tübingen (1893).

Leslie (1827?–1882), William Cunningham (1849–1919), and Sir William James Ashley (1860–); in Belgium to Baron Émile de Laveleye (1822–1892); in Italy to Luigi Cossa (1831–1896); and in America to the members of the Institutional School.[182] Above all has the German example of the writing of economic history been followed.

Methodologically, the Younger Historical School followed the Older in relativism and in stressing historical study, observation, and inductive reasoning. But it went far beyond the earlier writers in that it actually produced a large quantity of excellent descriptive economic monographs. Some of the newer School were willing to stop here, but Schmoller and the majority set a higher aim. Thoroughly understanding the superficiality of Roscher's "economic stages," and contending that much descriptive work, as well as an estimate of the economic importance of geographical, technological, ethnological, psychological, and other influences must come first, their ultimate purpose was yet the formulation of the empirical laws of economic causation. Only with such laws as premises, they thought, might deduction be allowed a place equal with that of induction.

Unfortunately, however, Schmoller's high scientific ideals never escaped from the confusing influence of his romantic passion for human betterment and the advancement of the German nation: he was not content merely to expose, he must always advise, admonish, and exhort. Like Mill, he found theoretical justification for hope of reform in a belief that distribution depends upon institutions which, like the important psychological factors controlling them, may be changed. The ethical and universalistic bias of their leader was largely shared by other members of the Younger Historical School, a fact which goes far in explaining their very frequent connection with the German variant of interventionism which has erroneously been called "State Socialism," or "Socialism of the Chair." This really non-socialistic program sought to solidify national feeling and to reduce social injustice by indirect and educative state action—by labor legislation, for instance—and also, to a limited extent, by direct intervention in industry. The ablest spokesmen of this movement,

[182] Of the works of the authors mentioned, the following may be cited: Rogers, *The Economic Interpretation of History*, London and New York (1888); Leslie, *Essays in Political and Moral Philosophy*, Dublin (1879); Cunningham, *Growth of English Industry and Commerce*, Cambridge (Eng.) (1882); Ashley, *An Introduction to English Economic History and Theory*, London and New York (1888–1893); Laveleye, *De la propriété et de ses formes primitives*, Paris (1874); Cossa, *Primi elementi di economia politica*, Milan (1875).

which dates from the Congress of Eisenach (1872), were Albert Eberhard Friedrich Schäffle (1831–1903) and Adolf Wagner (1835–1917).[183] Like Revisionism, however, with which it has frequently coöperated, "State Socialism" has produced far more action than theory. It gained great prestige from the shrewd partial support lent it by no less a personage than Prince Otto von Bismarck.

No one longer questions the usefulness of the Historians' criticism of the Classical economics which had long been stagnant. No doubt the earlier and greater exponents of orthodoxy were often misread and misinterpreted: it is not certain that they shared the more vulnerable traits of some of their followers. But in the works of such Liberals as the Manchesterians and Optimists, an abuse of abstraction and deduction, an easy assumption of the universality of economic doctrines, and an apparent satisfaction with a psychology rooted exclusively in self-interest were truly to be found. An attack upon such characteristics, even if exaggerated, was salutary. Moreover, to many who had found in orthodox theory insufficient light upon such modern problems as that of labor, the superior and invigorating realism of the Historians' monographs seemed to promise much. And no doubt a new and valuable instrument of research had been revealed. Yet it must be pointed out that List, for one, had been able to find in history only what he was looking for, and that for all their relativism, the Historians tended to be extremely dogmatic. Such considerations give one pause. History must necessarily be a historian's subjective selection of facts: despite all contrary seeming, laws drawn therefrom can scarcely be completely objective. Moreover, as Knies alone seems to have realized, causes in history are hardly ponderable, seldom if ever operate twice, and do not often bear a quantitative relation to their effects. Statistical analysis is by far the most promising method of treating historical data; and except by some of Schmoller's students, statistical analysis was not widely utilized by the Historical Schools.

C. Other Realists

The organization upon which the Realists thus far considered had insisted was the state; other social groupings did not, however, escape emphasis. To the school of Frédéric Le Play (1806–1882),[184]

[183] In addition to *Die Quintessenz des Socialismus*, Schäffle was the author of: *Bau und Leben des sozialen Körpers*, Tübingen (1875–1878).—Wagner's chief works were: *Grundlegung*, Leipzig and Heidelberg (1875–1876); and *Finanzwissenschaft*, Leipzig and Heidelberg (1877–1901).

[184] Of Le Play's works the following are most noted: *Les ouvriers européens*, Paris (1855); *La réforme sociale en France*, Paris (1864).

for instance, the solution of the social problem seemed to depend upon the rehabilitation of the family as a stable and cohesive institution. However, Le Play's exhaustive monographic studies of individual working-class families, while of some importance, unfortunately did little more than confirm their author in his reactionary prejudices.

The Social Catholics, led by the German bishop, Wilhelm Emmanuel Freiherr von Ketteler (1811–1877), and the French count, Albert de Mun (1841–1914),[135] also saw the importance of the family. But they were imbued with the spirit of the Middle Ages, and consequently put their major trust, so far as economic reform was concerned, in the development of joint associations of Catholic employers and workingmen, which should function as producers' coöperatives. They thought of these professional groups as comparable to the medieval gilds, and believed them to be as natural and inviolable as either state or family. Seeking, as they were, a Christian solution of the social question, the Social Catholics had much to say of the brotherhood and dignity of man, and of the necessity of individual spiritual rebirth. Justice and amelioration were their aims, and they envisaged a future society, hierarchically but amicably integrated, in which labor should have a weighty voice in the control of industry. Liberalism and Socialism were both denounced; interventionism, on the other hand, was to some extent accepted.

The theory of the social rôle of unions was most radically expounded by the revolutionary Syndicalists of France, upon whom many consider the cloak of Marx has descended. Syndicalism arose as a protest by radical and anti-Catholic trade unions against centralization and bureaucracy and the sterile Socialism of alleged renegade Socialists like Millerand and Briand. Militant, exclusively proletarian, rabidly class-conscious, and avowing an interest only in "producers," Syndicalism bestowed upon the political state an almost anarchistic distrust. For the present system it sought to substitute the political and economic control of a collection of federated communal trade societies. Its avowed method was to be class war by violent "direct action," which should ideally culminate in the "general strike."[136] Indubitably, the great strength of Syndicalism has

[135] Precursors of this group were the abbé Hugues Félicité Robert de Lamennais (1782–1854), Philippe Joseph Benjamin Buchez (1796–1865), and François Huet (1814–1869). Other important members were the canon Christoph Moufang (1817–1890) and the German Catholic theologian Franz Hitze (1851–).—The Social Catholics were greatly aided by numerous Encyclicals of Pope Leo XIII (1810–1903). See F. S. Nitti, *Catholic Socialism*, London and New York (1895).

[136] Sorel calls the general strike a "myth": its real purpose is to serve as an inspiration to action.

lain in its organic connection with French industrial unionism, represented by the *Confédération Générale du Travail* (founded, 1895), with which was combined in 1902 the *Fédération des Bourses du Travail* (founded, 1892). These organizations have provided the movement with a firm base of spontaneous professional groupings, powerfully cemented together by bonds of common interest.

Before the War, Syndicalism had become the most active of modern radical movements. It had spread to Italy, and in the United States was represented, in a somewhat modified form, by the Industrial Workers of the World. Its leading spokesmen were Fernand Pelloutier (1867–1901), Georges Sorel (1847–1922) and Arturo Labriola (? –).[137] Since the War French Syndicalism and the *C. G. T.* have split into two wings, the right seeking to maintain the pre-war position, the left looking to Soviet Russia for leadership.

Just as Syndicalism may be looked upon as a cross between Socialism and Anarchism, so English Gild Socialism, of which George Douglas Howard Cole (1889–)[138] has been the accepted leader, may be thought of as a blending of Socialism and Syndicalism. The Gildsmen's hopeful aim is a social organization which will be satisfactory to all elements: in the interest of the consumers, a democratic state; in the interest of the producers, an equally puissant federation of gilds.[139] In order to avoid authoritarianism each gild is to be granted as much autonomy as possible. The practical difficulties of any such scheme of divided sovereignty are obviously very great, and it is significant that the movement seems to be declining.

There remains but one further class of Realists to be considered, namely the Solidarists, a group of thinkers who have found in no body smaller than society itself a satisfactory key to the comprehension of the economic order. With the very notion of the division of labor, the idea of human interdependence had received expression, and we find a mechanistic theory of solidarity even in the work of that arch-Liberal, Bastiat. But it remained for certain sociologists, of whom August Comte (1798–1857)[140] was the first and Émile

[137] The following works of these writers are important: Pelloutier, *Histoire des bourses du travail*, Paris (1902); Sorel, *Introduction à l'économie moderne*, Paris (1903), and *Réflexions sur la violence*, Paris (1908); Labriola, *Economia, socialismo, sindicalismo*, Naples (1911).

[138] His *Social Theory*, London, New York (1920), and *Guild Socialism Restated*, London (1920) should be referred to.

[139] Recently Cole has decided that the state can only represent people as political units; he has accordingly proposed a third body as organ of the consumers.

[140] Comte had collaborated with St.-Simon, had influenced J. S. Mill, and had anticipated many of the views of the Older German Historical School.—

Durkheim (1858–1917) [141] the most influential, to elevate the doctrine to a position of real theoretical importance. Their moving insistence upon the growing cohesiveness of human society has found persuasive echo in the works of such practical politicians as Léon Bourgeois (1851–),[142] such highly competent economists as Charles Gide (1847–).[143]

In French politics, indeed, Solidarism has achieved a place similar to that occupied by "State Socialism" in Germany. Moreover, it has been connected with the coöperative movement which Gide has promoted, and which has sought the peaceful establishment of a new order by means of a system of integrated producing and distributing coöperatives under consumer control. Solidarism has, to be sure, been attacked as a confusion of description with aspiration, and as no more than a new disguise for "those who wish to enjoy the fruit of the labors of others." Yet it is really an important expression of that universalistic viewpoint which seems to dominate the thought of certain men. "Solidarity," in the words of M. Gide, "seeks to take the place of *do ut des;* to put 'each for all' in place of 'each for himself.'"[144]

2. THE REVIVAL OF ABSTRACTION

A. Its Need of Defense, and the Appearance of Hedonism

Under the bludgeonings of the various critical schools, the orthodox theory lost, after 1850, much of its former prestige. In Germany *Historismus* soon carried all before it. Even in England, individualism now had to look for competent defense to a cosmic philosopher and sociologist, Herbert Spencer (1820–1903).[145] Such an able, and in the main conservative, economist as Walter Bagehot (1826–1877) [146] showed a willingness to make terms with the historical method and with relativism.

Only in France, where the early followers of Say and Bastiat had

His great works were the *Cours de philosophie positive*, Paris (1830–1842), and *Système de politique positive*, Paris (1851–1854).

[141] The author of *De la division du travail social*, Paris (1893).

[142] The volume entitled *Essai d'une philosophie de la solidarité*, Paris (1902), and edited by Bourgeois should be consulted.

[143] Gide's most important work in this connection is: *La coopération*, Paris (1900).

[144] Gide et Rist, *op. cit.*, 726.

[145] This he had furnished in his *Social Statics*, London (1851); and in *The Man Versus the State*, London and Edinburgh (1884).

[146] The author of *Lombard Street*, London (1873); and *Economic Studies*, London (1880).

obtained an official monopoly of economic instruction, did Liberalism continue to find uncompromising expression, in the writings of Gustave de Molinari (1819–1912) and Yves Guyot (1843–),[147] and in the pages of the *Journal des économistes*. Even Pierre Émile Levasseur (1828–1911), Pierre Paul Leroy-Beaulieu (1843–1916), and Clément Colson (1853–),[148] while somewhat more realistic in their attitude, remained essentially true to the Liberal faith. Nevertheless, among the professors of law, who have been required since 1878 to offer courses in economics, unorthodox doctrines have found considerable sympathy. With such men as Gide, Charles Rist (1874–), René Gonnard (1874–),[149] and their followers, a new and more open-minded tradition is slowly growing up.

The most frequently reiterated criticism of the Classical theory had to do with the latter's reliance upon an abstract-deductive method of thought. Indeed, certain members of the Historical School were inclined to ignore deduction completely in practice. Shortly after 1870, however, a group of important books in which the older methodology was defended and employed came from the hands of an Englishman, William Stanley Jevons (1835–1882); a Frenchman, Léon Walras (1834–1910); an Austrian, Carl Menger (1840–1921); and later an American, John Bates Clark (1847–).[150] In a remarkable exhibition of similar ideas independently arrived at, these men entered the lists as champions of what may be called *pure* economic theory. Abstraction they declared to be thoroughly justified; and as a basis for abstraction, they seized upon the hedonistic principle that man always seeks pleasure and avoids pain.[151] This principle was not new. It went back to Epicurus; it had been elaborated into a "felicific calculus" by Bentham.[151] Now, for the first time, however,—and just as it was beginning to lose ground in psychological circles—it

[147] Among the works of these writers are: Molinari, *Les problèmes économiques du XX^e siècle*, Paris (1901), and *Ultima verba*, Paris (1911); Guyot, *La science économique*, Paris (1881).

[148] Among the works of these writers are: Levasseur, *Histoire des classes ouvrières en France*, Paris (1859); Leroy-Beaulieu, *Traité de la science des finances*, Paris (1877); Colson, *Cours d'économie politique*, Paris (1901–1905).

[149] The *Histoire des doctrines économiques* of Gide and Rist, and the work with the same title by Gonnard, have already been referred to; also Gide's volume dealing with Solidarism. In addition, the following may be mentioned: Gide, *Cours d'économie politique*, Paris (1909); and Gonnard, *L'émigration européene au XIX^e siècle*, Paris (1906).

[150] These books were: Jevons, *The Theory of Political Economy*, London and New York (1871); Walras, *Eléments d'économie politique pure*, Lausanne (1874–1877); Menger, *Grundsätze der Volkswirthschaftslehre*, Vienna (1871); Clark, *Distribution of Wealth*, New York (1899).

[151] See above, pp. 337 and 354.

was deliberately utilized by political economy. No other motive was considered important in the sphere of economic behavior.[152]

B. The Mathematical School

It has been customary to divide the Hedonists into two Schools, the Mathematical and the Psychological; and this division is useful if it is not considered as being absolutely exact. Certain Hedonists belong to both wings.

The Mathematical economists took the obvious position that if abstraction and deduction were to be employed, the most abstract and deductive of the sciences should be called upon for assistance. This idea had long since been propounded and put into effect by the brilliant Antoine Augustin Cournot (1801–1877) and the gifted Hermann Heinrich Gossen (1810–1858);[153] but there had been no response. Now, however, the example of Jevons and Walras was followed by such able thinkers as: Francis Ysidro Edgeworth (1845–), Adolphe Landry (1874–), Joseph Schumpeter (1883–), Vilfredo Pareto (1848–1923), Maffeo Pantaleoni (1857–1924) and, in the United States, Irving Fisher (1867–) and Henry Ludwell Moore (1869–).[154]

In order to get their data in the necessary equational form, the Mathematicians concentrated upon the phenomenon of exchange, in terms of which they believed all economic facts might be expressed. Their theory has consequently been catallactical.

The accomplishments of the Mathematical School have not been small. Drawing freely upon the resources of the higher mathematics and dealing with innumerable variables,—thus reducing the abstractness of their work—these economists have produced theory of great rigor and logical beauty. A new and more scientific notion of causation has brought, for instance, a sophisticated and highly valuable conception of demand and supply as functions, not causes, of each other and of price. A corollary has been the pregnant idea of

[152] This position should be compared with that of the Classical economists. (See above, pp. 351, 352, 358, 359, 361, and, especially, n. 78.)

[153] Cournot's chief work, in this connection, was *Recherches sur les principes mathématiques de la théorie des richesses*, Paris (1838); Gossen's, *Entwickelung der Gesetze des menschlichen Verkehrs*, Brunswick (1854).

[154] The following works of these writers may be mentioned in this connection: Edgeworth, *Mathematical Psychics*, London (1881); Landry, *L'intérêt du capital*, Paris (1904); Schumpeter, *Das Wesen und der Hauptinhalt der theoretischen Nationalökonomie*, Leipzig (1908); Pareto, *Cours d'économie politique*, Lausanne (1896–1897); Pantaleoni, *Principi di economia pura*, Florence (1889); Fisher, *The Purchasing Power of Money*, New York (1911); Moore, *Laws of Wages*, New York (1911), *Economic Cycles*, New York (1914).

the economic situation at any time as the result, not of simple cause and effect in the mechanical sense, but of a complexity of shifting forces in constant search of equilibrium. In this last connection, some very important notions concerning the combination of the factors in production, and the relation of cost of production to price, have been set forth. The theoretical consequence of the work of the Mathematicians has been, then, the valuable clarification of certain economic concepts; what its practical consequence has been is harder to see. The great weakness of the Mathematical School lies in the fact (self-recognized, let it be said) that its postulates—the hedonistic principle, free competition, and the like—are sometimes psychological concepts which do not readily yield to quantitative treatment, and are always assumptions. The annoying question of the empirical validity of these postulates cannot be avoided, and to this question the Mathematicians have no satisfactory reply. Yet from the point of view of anyone desiring to obtain a comprehension of economic reality, assurance of the inductive proof of economic premises must ever seem of very first importance. In final comment on the mathematical method it may be noted that even its most distinguished adherents now admit that its possibilities have probably been exhausted.

C. The Psychological School

The Psychological School has been so called because of its preoccupation with the phenomenon of demand, considered as a function of human wants. Such wants are explained hedonistically, utility being conceived of as varying with the capacity to give pleasure or protect from pain. The fact of the satiability of human wants then leads to the idea that the utility of a given increment of any good diminishes as more and more increments are added to the stock of such goods on hand. From this follows the distinguishing notion of marginal utility, i. e., the utility dependent upon the presence of any one unit in a stock. This is clearly an elaboration of the old idea of value in use, an idea expressed by both Aristotle and Smith, but developed by neither. Exchange value is explained by the Psychological School as being fixed at (sometimes "by"—but this is carelessness) the margin, where the relative marginal utility to the consumer of the last item of any good supplied is such as to call forth a price just sufficient to bring that item into the market. Competition will make the marginal the general price.

The marginal analysis has been made, by its adherents, to serve as a general key to the economic puzzle. In terms of margins, not only

value, but production, consumption, and even distribution have been explained. Clark, for example, in a noted productivity theory of distribution has sought to show that any distributive share is determined by the marginal bid for the productive factor in question, and that this will depend upon the specific productivity imputed by the entrepreneur to the marginal (last) dose of that factor.[155] It is, indeed, important to understand that the general marginal analysis and imputation theory are of greater value than the special theory of marginal utility.

The leaders of the Psychological School have been the Austrians: Carl Menger, Friedrich Freiherr von Wieser (1851–), and Eugen Böhm von Bawerk (1851–1914).[156] Indeed, the School has sometimes been called "the Austrian." But its basic idea may be found in the works of such earlier writers as Condillac, Galiani, and Jules Dupuit (1804–1866),[157] as well as in those of such Mathematical economists as Cournot, Gossen, Jevons, Walras, Schumpeter, and Fisher. Other European representatives to a certain extent have been Gide and the Dutchman, Nicolaas Gerard Pierson (1839–1909). The influence of the School in America has been very considerable, and elements of marginalism are to be found in the works of such representative writers, besides Clark and Fisher, as Herbert Joseph Davenport (1861–), Frank Albert Fetter (1863–), and others.[158]

The great service of the Psychological School was to draw new attention to the fact that economics is necessarily a science of human behavior. This fact, clearly comprehended, was able to exorcise many ancient errors. No longer might wealth be interpreted, as by the Physiocrats, in physical terms alone; no longer might the part played by scarcity in the creation of value be misunderstood; no longer, finally, need thinkers ponder over that ancient problem of how both parties to an exchange might somehow gain therefrom. Unfortunately, however, the psychology of the school was of more than doubtful validity. The Psychologists were, indeed, not psychologists at all; but the dialecticians of a principle (hedonism) which cannot today be considered capable of furnishing an understanding of individual and social behavior. Not only is it impossible to reduce pleasures

[155] A not dissimilar imputation theory had been held by Thünen.

[156] Wieser's *Die natürliche Wert*, Vienna (1889), and Böhm-Bawerk's *Kapital und Kapitalzins*, Innsbruck (1884–1889), should be mentioned.

[157] A French engineer, and the author of two illuminating memoirs in the *Annales des ponts et chaussées* (1844 and 1849).

[158] The leading works of these writers are: Davenport, *The Economics of Enterprise*, New York (1913); and Fetter, *The Principles of Economics*, New York (1904).

and pains to a common denominator; but even if it were, hedonism could never explain why actions are taken for the first time,—for in such cases there exists no rational basis for the anticipation either of pleasure or of pain. Likewise, hedonism and the felicific calculus ignore the importance of instinctive and habitual behavior, the domination of custom, and the influence of group psychology, to say nothing of the tenets and mechanisms of modern dynamic psychology. Certain adherents of marginalism, like Fisher, Fetter, and Davenport, have, to be sure, tried to escape from these criticisms by arguing that the motives of economic behavior are not of importance after all; that the objective fact of choice is sufficient to validate the theory. This does not, however, seem to be a completely satisfactory or tenable view. At any rate, it has not found favor in the eyes of such economists as Wesley Mitchell, Carleton Hubbell Parker (1879–1918), and other recent writers whose work has given evidence of a movement towards a realistic consideration of economic motives and behavior.[159]

It is of considerable significance, and well worth noting, that after all their efforts the Hedonists emerged with an economic theory which is in all essentials admittedly Classical. Certain notable developments did, of course, take place: the unsatisfactory separate Classical laws of distribution, for example, each naïvely assuming the prior establishment of the rest, were cleared away and replaced by a single and non-circular law. Again, utility, which the Ricardians, despite their intimacy with the Utilitarian philosophers had largely neglected, was now put forward as the *fons et origo* of economic science. Yet the net result was chiefly to put previously held individualistic theories upon a somewhat firmer foundation. Indeed, the Hedonists have themselves been among the first to point out that as a result of their labors the orthodox system has been corrected, extended, and elaborated, not destroyed, and not replaced.

D. The Eclectics

The development of hedonistic economics was marked by two instructive controversies. One, the famous but futile *Methodenstreit* in which Schmoller and Menger were the chief antagonists, had to do with the relative value of induction and deduction. Today, no economist would deny the importance of either. The second conflict was

[159] See Mitchell's stimulating article cited below, n. 170; Parker, *The Casual Laborer*, New York (1920); Z. C. Dickinson, *Economic Motives*, Cambridge (Mass.) (1922); O. Tead, *Instincts in Industry*, Boston (1917); L. D. Edie, *Principles of the New Economics*, New York (1922); and S. Eldridge, *Political Action*, Philadelphia and London (1924).

between those who clung to the Classical conception of cost of production as the determinant of value, and the newer theorists with their emphasis upon the influence of demand. Here, however, the eminent English economist, Alfred Marshall (1842–1924),[160] was able to show that these views, the apparent opposition of which had bothered students of economics from Aristotle down, were really quite reconcilable. From a short-time point of view, variations in demand must clearly dominate value; but in the long run, it was just as clear, value must be sufficient to repay the costs of the "representative firm." In this dispute, as in others, Marshall showed characteristic moderation. Standing squarely in the Classical current, he nevertheless found it possible to utilize what seemed best in Historical, Mathematical, and Psychological thought. Not without reason was Marshall known as an Eclectic. In America, his balance, generosity, and openmindedness have found a notable counterpart in the work of Frank William Taussig (1859–).[161] Taussig's concern with human welfare, however, has been much stronger than Marshall's. The same is true of Thomas Nixon Carver (1865–)[162] whose early work was marked by the development of an imputation theory, but who has recently exhibited a growing concern with the problems of social justice.

VI. THE PROSPECT OF ECONOMICS

At the present time the outlook for political economy seems particularly bright. The science has ever flourished under the stimulus of new and pressing problems, and of such the War has provided a plenty. Questions of population, immigration, and labor, of international trade and finance, above all, questions of money and public finance, insistently demand answers. In early response there has appeared the timely and striking work of Ralph George Hawtrey (1879–), John Maynard Keynes (1883–), and Gustav Cassel (1866–),[163] to mention but a few. Indubitably there is more to come. Nor is the appearance of numerous privately-endowed organi-

[160] Marshall's great *Principles of Economics* was first published in London in 1890.

[161] Of Taussig's numerous works, the following may be mentioned: *Principles of Economics*, New York (1911); *Inventors and Money-Makers*, New York (1915).

[162] The author, among other works, of: *The Distribution of Wealth*, New York and London (1904); and *Essays in Social Justice*, Cambridge (Mass.) (1915).

[163] The works referred to are: Hawtrey, *Currency and Credit*, London (1919); Keynes, *The Economic Consequences of the Peace*, London (1919); and *A Tract on Monetary Reform*, London (1923); Cassel, *Money and Foreign Exchange after 1914*, London and New York (1922).

zations such as the Harvard University Committee on Economic Research, the National Bureau of Economic Research Incorporated, the Institute of Economics, the Bureau of Industrial Research, the Pollak Foundation for Economic Research, and the Labor Bureau Incorporated, of merely slight significance. The probability of a notable development in the quantitative analysis of economic data by the latter institutions, utilizing the statistical methods evolved by such men as Arthur Lyon Bowley (1869–), Henry L. Moore, Wesley Mitchell, Allyn Abbott Young (1876–), Warren Milton Persons (1878–), and William Leonard Crum (1894–) [164] seems great. Finally, an application of new scientific and philosophical concepts may be expected. Already, a paper on Non-Euclidean Economics has appeared.[165]

There need not, however, be any expectation of general agreement as to scope and method. The essential unity of all science is today appreciated as never before. There is no divinely ordained field of economics, completely and immutably separated from all other fields. There are rather a thousand fields of economics: one for each observer. And while, for purposes of mutual understanding, it is doubtless necessary that we should have some general agreement as to where one science ends and another begins, nevertheless above all things should be avoided any tendency to require active and adventurous minds to keep strictly within conventional and arbitrary bounds. As Jevons clearly saw long ago,[166] subdivision of economics proper and cross-breeding with related sciences should be heartily welcomed. Similarly with method: deduction, induction, individualism, universalism—each has something of value to contribute.

We may thus view with satisfaction the development both of a formal pecuniary logic such as that of Davenport, and of a Welfare Economics such as that of John Atkinson Hobson (1858–), Arthur Cecil Pigou (1877–), Gustav Cassel [167] and others. We may even

[164] The only published works of these men which require mention here are Moore's *Laws of Wages*, New York (1911); and Persons' *Indices of General Business Conditions*, Cambridge (Mass.) (1919). Much work by these and other statisticians is to be found in the *Journal* of the American Statistical Association and in that of the Royal Statistical Society; also in the *Review of Economic Statistics*.

[165] John Maurice Clark, "Soundings in Non-Euclidean Economics," in the *American Economic Review*, XI (Supplement, 1921), 132–43.

[166] *Theory of Political Economy*, 3rd edition, 1876, pp. xv, xvi.

[167] Of the works of these authors, the following may be referred to: Hobson, *Work and Wealth*, London and New York (1914); Pigou, *The Economics of Welfare*, London (1920); and Cassel, *The Theory of Social Economy*, London and New York (1923). See also F. A. Fetter's paper, "Price Economics versus Welfare Economics," in the *American Economic Review*, X (1920), 467 ff., 719 ff.

observe without alarm the growth in the United States of a universalistic Genetic or Institutional School, led by Thorstein Bunde Veblen (1857–) and Wesley Clair Mitchell (1874–).[168] This school, indeed, which finds support in the scholarly and voluminous European work of the Webbs, John Lawrence Le Breton Hammond (1872–) and Mrs. Hammond (Barbara Bradby), and Werner Sombart (1863–),[169] seems likely to make a considerable appeal to young American economists. The Institutionalists seek to develop a new type of economic theory through the quantitative, inductive investigation of the evolution and operation of economic institutions. For to them economics is economic behavior, and economic behavior is to be comprehended not in terms of relatively changeless instincts or "propensities," but rather as the result of the influence of relatively plastic social habits.[170] These social habits or institutions—which more orthodox theorists are accused of having ignored—must, therefore, be understood, and understood in their dynamic aspects. Imbued, then, with the Darwinian notion of "cumulative change,"[171] the Institutionalists call upon modern psychology (especially behaviorism), history, technology, anthropology, and other branches of knowledge, to aid them in coming to a sound understanding of the development, "in its causal sequence," of modern economic society. Once comprehending this, they hope to be able to shape the future development more closely to the heart's desire of men who resent the wastes, stupidities, and injustices of the present order.

In a volume dealing with the social sciences as a group, Institutionalism or Institutional Economics would seem to merit special attention, for it is the most recent effort to bring economics into closer accord with related disciplines.

[168] Veblen's attitude is clearly indicated in *The Theory of Business Enterprise*, New York (1904) and in his many other influential volumes. Mitchell has recently stated his views in a contribution (entitled *The Prospects of Economics*) to *The Trend of Economics*, edited by R. G. Tugwell, New York (1924).—Mitchell also deserves notice for his admirable detailed quantitative studies, of which *Business Cycles*, Berkeley (Calif.) (1913) is an example.—Other American economists whose writings have shown the influence of the institutional viewpoint are: Leon Carroll Marshall, David Friday, Walton Hamilton, R. F. Hoxie, and a number of the younger economists who have contributed to *The Trend of Economics* just referred to.

[169] In this connection the Webbs' *History of Trade Unionism*, London (1894); the Hammonds' trilogy on the village, town, and skilled laborer, 1760–1832 (London and New York, 1911, 1917, and 1919); and Sombart's *Der moderne Kapitalismus*, Leipzig (1902) deserve mention. Of similar character are the studies by J. A. Hobson and R. H. Tawney of the economic and social results of the Industrial Revolution.

[170] See Mitchell, "Human Behavior and Economics," in the *Quarterly Journal of Economics*, XXIX (1914), 1–47.

[171] This phrase runs like a *leitmotiv* through the work of Veblen and has been adopted by Mitchell.

The enthusiasm with which the effort has been received in certain quarters may be illustrated by the following summary of its point of view, from the pen of a sociologist and historian, a recent sympathetic student of the movement:[172]

"Far the most synthetic, comprehensive and dynamic trend in recent economic theory has been that enrichment and expansion of the historical approach now generally known as institutional economics. This method of studying economic phenomena insists, in the first place, upon a complete understanding of the sociological background of economic processes. The interrelation of economic and other social institutions and activities must be thoroughly understood. Economic science is viewed as truly a branch of social science. Then the psychological elements in group attitudes and the original nature of man modified by the social setting and the evolution of culture must be clearly comprehended. We must further know the general conditions under which man puts forth the greatest energy in economic effort. The psychological and cultural effects of transitions in technology and the economic organization of society must be noted. On the other hand, there must be studied the relation between psychological alterations and economic changes—a field so fruitfully exploited by Max Weber. In every phase of study the genetic point of view must be maintained, for only in this way can one obtain the proper prospective and a competent understanding of the flow of economic life and the formation of economic institutions. The sociological, psychological and historical attitudes are cultivated with the end in view of making possible a more penetrating and acute analysis of contemporary economic phenomena, for whatever the interest of the institutional analysis in the economic systems of the past, its primary concern is with contemporary economic life. It is not abstractly and *a priori* opposed to economic theory and generalization in any sense, but contends that economic theory can only be developed after a thorough study of economic institutions, and that our knowledge of contemporary economic systems is too fragmentary as yet to warrant conclusive and convincing dogmatism in theory. Further, economic institutions are now changing too rapidly to allow much valid theory to be formulated with any hope or probability of more than the most ephemeral pertinence and relevancy. Economic theory that flees from the reality of economic and social facts in order to secure the basis for leisurely constructed dogmatism may be excellent metaphysics, but it is very unsatisfactory economics. The metaphysics of value and distribution must give way to the dynamics of processes and institutions. Marginalism and the value problem do not arouse any interest on the part of this group.

"But if man cannot hope to construct for the time being an impressive body of definitive economic theory, he can at least know what is going

[172] H. E. Barnes, "Economic Science and Dynamic History," in *Journal of Social Forces*, November, 1924, pp. 43–4. The quotation as reproduced here has been revised slightly by its author.

on in the economic world about us, the leading characteristics of the contemporary economic life, and where it is apparently leading us. This desire actually to *know the facts* of modern economic society inevitably inclines this school towards a wide use of the statistical technique. The sociological approach and this careful attention to the actual situations prevailing in the economic world of today also naturally make the institutional school unusually well equipped to offer pertinent and cogent advice and guidance to welfare economics and as well as upon the problems of living together efficiently in society.

As thus set forth, both the program and the goal of the Institutionalists seem certain to carry a strong appeal to young and ardent hearts. The attempt at their realization is surely to be welcomed. Yet to the dispassionate observer, serious difficulties will seem to be involved, difficulties already encountered by members of the Historical Schools and by other Realists whose similarity to the Institutionalists must be evident. For instance, just how objective a study of these institutions is, after all, possible? Again, can Knies's objections be squarely met?[178] And, finally, do not these Institutionalists tend to share Schmoller's confusion: deterministically excusing the economic order of the past as inevitable, while damning the order of the present for not being other than it is, and proposing to mold the order of the future in most undeterministic fashion? Such questions as these demand thoughtful consideration; they do not easily find answers that satisfy the sceptic.

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[178] See above, pp. 379 and 381.

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CHAPTER VIII

POLITICAL SCIENCE

By Walter James Shepard

I. ITS HISTORY[1]

1. THE NATURE OF POLITICAL THOUGHT

The term "Political Science" is one of various meanings and consequently of somewhat hazy content. Sometimes it is employed to describe the entire field of the social sciences, and this was indeed the earlier meaning of the term. The division of the social sciences into economics, sociology, jurisprudence, political science and perhaps others, represents a rather advanced stage in the development of thought relating to human social institutions. For the men of antiquity no such divisions existed and the early works in the field of politics were concerned with all aspects of society.

A science, or philosophy, of society, or of the state, becomes possible only when a people has advanced to a certain degree of social self-consciousness. The stage of social evolution in which men begin to inquire into the causes and to seek explanations for existing institutions must first have been attained. Among primitive peoples generally such social institutions as exist are accepted as a matter of course, like the great facts of nature, and little or no thought or speculation takes place concerning them. There is no evidence of this stage of civilization having been reached by any people prior to the Greeks of the fourth century B. C. The scattered ideas relating to social institutions which we can glean from the Hebrew Scriptures

[1] The best general survey of the history of political theory is W. A. Dunning, *A History of Political Theories*, in three volumes entitled respectively, "Ancient and Mediæval"; "From Luther to Montesquieu"; and "From Rousseau to Spencer." It is completed in a memorial volume by his students entitled, *A History of Political Theories: Recent Times*, and edited by C. E. Merriam and H. E. Barnes. An older, but still excellent work is Paul Janet, *Histoire de la science politique*, in two volumes. In very brief compass, Sir Frederick Pollock, *An Introduction to the History of Politics*, presents the more essential aspects of the subject. F. W. Coker, *Readings in Political Philosophy* contains extracts from the more important works in the field of political theory, with useful comments.

deserve more attention than they have as yet received.[2] Perhaps the literatures of India and China, when thoroughly studied, may reveal a more fully developed social philosophy than we now appreciate. Certainly we shall welcome any addition to our knowledge concerning the thought of primitive peoples generally in this field. But the fact remains that political science as it exists today finds its source in Plato and Aristotle.

The history of political thought is marked by two fundamental principles. First there has always been a constant reciprocal relation between political thought and political action. The event produces the idea and the idea in turn affects the event. The great writings in the field of Political Science have nearly always been *livres de circonstance;* very seldom have they been the product of the cloister, detached from the pulsating current of life. Political science has not developed *in vacuo.* Second, the course of political thought has been progressive. One can perceive a development in the ideas which men have held regarding the state, as one can perceive an evolution in the record of their social and political history. But this progress has throughout been affected by a process of action and re-action. The course has never been directly toward the goal. We ascend, as it were, a spiral staircase and at any particular moment it may appear that we are merely moving in a direction opposite to that previously pursued. But, though re-action may carry us to the same relative position, it is never the same absolute position. The pendulum may swing back and forth but at the same time the base of the pendulum is moving onward. Let us keep in mind that an understanding of political ideas is always conditioned by an application of their historical background, and that their history reveals throughout the process of progressive development.

2. GREEK AND ROMAN POLITICAL THOUGHT

To understand the political thought of the Greeks, we must appreciate the essential characteristics of the Greek city state,[3] divesting ourselves of all ideas of the state as expanded over a national area such as we are familiar with today. The city state of Greece was a

[2] On political thought among the Hebrews, cf. W. W. Willoughby, *The Political Theories of the Ancient World*, Ch. iii; J. O. Hertzler, *The History of Utopian Thought*, Ch. ii; and C. F. Kent, "The Birth of Democracy," in *Yale Review*, Vol. IX (1920), pp. 131–142.

[3] The best account of the Greek city state is A. E. Zimmern, *The Greek Commonwealth: Politics and Economics in Fifth Century Athens*. N. D. Fustel de Coulanges, *The Ancient City* is also valuable.

small but highly integrated community which had achieved a level of civilization and culture and a degree of social and political consciousness almost unique in the world's history. Freed from the necessity of productive effort through the institution of slavery, the citizens of Athens (to take the best typical case of a Greek city state) were able to devote themselves to the achievement of a rich and full self-realization. They perceived that the most perfect development of personality was possible only in society, and nowhere have social relationships been so untrammelled or flowered out so perfectly as in the golden age of Athenian democracy. Living in close association with one another, meeting daily in the market-place or in the theater, the citizens of Athens found the opportunity to achieve the best in life in and through their city. For them it was a truism that "man is a political animal." Whatever they undertook they undertook together. They never conceived of their city as standing off or apart from themselves, or of their possessing rights as against it. Incapable though they were of expanding the limits of their city state over a national area, the Greeks achieved within these narrow limits an almost perfect realization of social unity. It was out of this soil and induced by this environment that the great works of Plato and Aristotle grew.

The Greek city state passed through various forms of government. In the early periods it was monarchical; aristocracy or oligarchy generally ensued; at times despots seized control; but, during the epoch before the conquest by Macedon, democracy (restricted to citizens) appears to have been the prevailing form. These changing systems of government, and particularly the disillusionment which followed the fatal conflict of the Peloponnesian War, turned men's minds to speculation regarding the nature of the state.[4] The works of Plato and Aristotle were written after the period of Greece's greatest glory was passed. They were efforts made in the vain attempt to restore something which had gone forever, and they reveal, at its best, the result of Greek thought directed toward a solution of the universal problem of how men may live the good life.

Plato's *Republic* will always stand as the highest embodiment of political idealism as Aristotle's *Politics* will ever be a fountain head of scientific knowledge concerning the state. Though neither can be fully understood apart from an adequate knowledge of the city state

[4] On the political thought of the Greeks the student is referred to Dunning, Vol. I (*Ancient and Medieval*), Chs. i–iv. W. W. Willoughby, *The Political Theories of the Ancient World*; Ernest Barker, *The Political Thought of Plato and Aristotle*; and *Greek Political Theory: Plato and His Predecessors*.

of ancient Greece, the one contains an inspiration and an idealism, the other exemplifies a method of investigation and offers a body of solid wisdom which is good for all time. Plato's *Republic* has frequently been described as a utopia, but it is altogether different from the later utopias like those of Thomas More, Campanella and Harrington. A utopia is a construction of a hypothetical commonwealth in which the author includes various elements which he conceives to be desirable in existing social systems. The *Republic*, on the other hand, is an ideal commonwealth constructed on the basis of a fundamental idea, regardless of whether it was practicable or not in any particular community. There were certainly utopian elements in Plato's work, but the structure as a whole is not utopian but idealistic. As Janet says,[5] it is not utopian "to have conceived justice as the true end of society, and to have made justice consist in the concord and harmony of the citizens"; it is not utopian "to have asserted that the true strength of the state is virtue, and that the true principle of virtue is education"; it is not utopian to have perceived "that it was in a well-moderated and well-balanced constitution that the only guarantee of liberty resided"; it was not utopian to have recognized the supreme importance of wisdom and knowledge in the art of government, nor to have insisted that authority should be vested in the best and ablest men of the community. We may disregard Plato's notion of a rigid stratification of society into philosophers, defenders, and producers, though the middle ages seem to have exemplified this idea in its division of society into the three estates, as does also the German idea that society should consist of a *Lehrstand*, a *Wehrstand*, and a *Nährstand*. We may deprecate Plato's absorption of all other social institutions in the state, including his destruction of the family; though we must recognize the currency of similar notions in the philosophy of communism. No one today would accept Plato's curriculum as satisfactory, though even here there are fruitful suggestions for present-day educational reformers, and certainly the growing appreciation of the importance of education at the present time suggests the validity of Plato's emphasis on a definite course of education as the necessary training for citizenship. But after all detractions and exceptions have been made, Plato's work stands as an eternal source of inspiration for the student of politics.

If Plato voiced certain immortal ideals concerning the state, Aristotle's contribution was primarily in the scientific method which he developed and in the classification of facts which he made. This is not to say that Aristotle did not enunciate certain principles of gov-

[5] In J. J. Lalor, *Cyclopædia of Political Science*, article on "Political

ernment which have been of great importance throughout succeeding time. Both Plato and Aristotle conceived of politics as a normative science and not merely a descriptive one; both applied ethical principles to the solution of the problems of society; but Aristotle's significance lies in the fact that he first undertook a really inductive study of institutions in the world which he knew. Through his friendship with Alexander the Great, he possessed the opportunities for extensive scientific investigation, not merely in the field of the social sciences, but in those of the natural sciences as well. He was, in fact, the guiding and directing mind of a great research establishment which must have commanded the services of scores of scholars working in various fields. The *Politics* embodies the conclusions which he was able to draw from studies, made by his assistants, of the constitutions of a hundred and fifty Greek city states. During the middle ages, Aristotle became an authority. He was "the master of them who know" and his dicta were accepted without question or criticism in much the same way as were the words of Holy Writ. Such an attitude would, however, have been most repugnant to Aristotle himself whose critical mind was thoroughly modern and scientific.

It is, perhaps, not too much to say that the general framework of political science was established by Aristotle, and that succeeding generations have done little more than to fill in the details. Such fundamental ideas as the classification of forms of government into monarchy, aristocracy, and democracy; of natural law; of the organic nature of the state are at least implicit in his system. He was not, however, as we have suggested, a mere descriptive political scientist, but suffused his whole work with a lofty civic ideal,—the ideal of government by reason with the purpose and aim of securing the most perfect justice for every citizen by according to him the full opportunity of developing to the utmost his natural capacities. It is this ideal of the good life,—the ideal that the state exists not simply that men may live, but that they may live well and happily,—that is, perhaps, the most distinctive thought in the writings of the Sage of Stagira.

Plato and Aristotle may perhaps be placed in opposition to each other, though the elements of similarity ought never to be forgotten. In method they were certainly divergent. Plato's system is entirely deductive and *a priori*. To him reality consisted in ideas, and the facts of life had a meaning only as they illustrated the ideal conceptions in which alone he found truth. Aristotle, on the other hand, was in spirit and temper thoroughly inductive and scientific. Only

by a wide examination of all the concrete facts does he reach his conclusions. If the middle ages paid lip service to the memory of Aristotle, they were in reality under the spirit of Plato. The Renaissance represents a return to Aristotle, though the full swing of the pendulum was not achieved until our own time; it has only been within the last two generations that political science has become really scientific in spirit and method.

A third important influence of antiquity upon political science was Stoic philosophy. It is particularly in enunciating certain fundamental ideas that this system affects the development of political thought. These were, first, the universal brotherhood of man, implying the existence of a world state, an ideal empire of reason, controlled by love of humanity and actuated by the aim of universal justice; second, human equality, which struck at the root of slavery which both Plato and Aristotle had attempted to justify; and, third, the idea of natural law, which was conceived as embodying a universal principle of reason and which was discoverable by the use of man's reasoning faculties. To the Stoics, as Zeller says, the ideal state was one "without marriage, family, temples, courts, schools, and money. A state meets with no antagonism on the part of other states because all natural limits have been overcome by the brotherhood of man"; to the Stoics, as to Goethe, "above all nations is humanity." May it not be suggested that the solution of our present-day international problems can only be found by a broader dissemination of this lofty ideal of ancient stoicism?

The Roman people were not gifted as were the Greeks, with a natural proclivity toward speculation and philosophy. They were men of action, not men of thought, and their contribution to political science does not fall in the field of pure theory. It is through the marvelous creation of their systems of law, administration, and government that their influence is to be felt. The spirit of Rome was the spirit of universality, as von Ihering has so brilliantly shown.[6] The Roman spirit acted like an acid on everything with which it came into contact, assimilating differences and reducing all to a universal character. Thus the Roman law in its influence upon the legal systems of Europe acted as a solvent. The Roman idea of empire dominated medieval conceptions of government. The Roman influence is seen in the universal Catholic church. Not uniformity but contrast and difference is, however, the condition for science; and in consequence political science languished for more than a thousand years under the univer-

[6] Rudolf von Ihering, *Geist des römischen Rechts auf den verschiedenen Stufen seiner Entwickelung.*

salistic spirit of Rome. But the Roman law was later to prove a powerful factor in forwarding the theory and practice of secular absolutism.

3. MEDIEVAL POLITICAL THEORY

From the standpoint of political thought, the middle ages fall into two periods,[7] in the first of which very little concrete contribution was made. This was an age in which were brought together and fused the diverse elements of Greek philosophy; Roman law and government; Jewish and Christian religions; Gallo-Romanic politico-economic life; and the sturdy virtues and virile character of the Teutonic barbarian peoples.[8] The universalistic character of Rome dominated men's minds. Christendom was a unity,—a unity both politically and economically. No institutions comparable to the Greek city state of antiquity or to the modern national state existed or were conceived. The Roman Empire still cast its shadow over the thoughts of men and conditioned all speculation and philosophy. The fundamental human interest was religion. Life on this earth was conceived as merely preparatory to a life hereafter, and all philosophical or scientific effort was subordinated to the primary purpose and aim of salvation. Men accepted as sufficient the dicta of scriptures that "all powers that be are ordained of God," and attributed to the emperor, as well as to the pope, the character of divinely appointed vicegerents. From the sixth century onward a controversy developed between the pope and emperor for supremacy, which constituted the chief political incident of the middle ages. All discussion connected with this political feud starts from the dogma that there are two systems under which the world is governed, one temporal, the other spiritual; both are divine institutions, but which is superior was the issue. The arguments on both sides are drawn largely from Scripture, and take the form of an appeal to proof texts which were arrayed against each other by the opposing advocates, or to biblical passages to which a highly symbolical interpretation was given. In the field of politics, as in all else, the medieval mind was under the spell of authority, and the period is completely sterile of anything in the nature of original or independ-

[7] On the political thought of the middle ages, the most useful works are Dunning, Vol. I (*Ancient and Medieval*), Chs. v–xi; R. W. and A. J. Carlyle, *A History of Medieval Political Theory in the West*, in four volumes; and Otto Gierke, *Political Theories of the Middle Ages*.

[8] On the general character of medieval civilization, cf. H. O. Taylor, *The Medieval Mind*, in two volumes; and G. B. Adams, *Civilization during the Middle Ages*.

ent investigation. As Professor F. W. Maitland has pointed out,[9] feudalism was a regime under which there was no public law, but only private rights. In a strict sense there was no sovereign, and except in connection with the great church there was, and could be, no political theory. The middle ages, at least before the thirteenth century, were an unpolitical age.

With the thirteenth century a somewhat different spirit begins to pervade men's minds. The old controversy continues, but is soon modified by the emergence of other temporal authorities besides the emperor. The national state is in process of germination and, incarnated in its kings, is now asserting legal claims of independence and supremacy which were in conflict with those of both emperor and pope. The increase in the development of commerce and industry, resulting in the growth of cities with their middle class populations of artisans and merchants, introduces still another feature into the social and political situation. Within their own walls, these free cities were frequently inclined to insist that they would "have no king but the mayor," and at times were quite capable of making good their claim. We find them, in some cases, banding together into leagues, such as the Hanseatic League, which certainly possessed the actual powers of government. Within the state, the turbulent feudal nobility were often inclined to resist the pretensions of the king and to maintain for themselves, within their own baronies, the most complete rights of jurisdiction and governmental independence. Thus the universalism of the early middle ages was dissolved into a pluralism in which five conflicting elements are visible; emperor, pope, king, free city and feudal baron contend among themselves for supreme authority. It is a period in which authority is divided and jurisdiction chaotic. At times one, at times another, seems to gain momentary control, but general recognition of no one of these competing powers is for some generations achieved.

Such a period as this has always been fruitful of political theorizing and we find an increasing volume of speculation concerning the nature of authority and its location. We can perceive in the political discussions of the time, though at first dimly, the breaking of a new dawn. A number of notable writers on politics, with increasing independence and originality, discuss the fundamental problems of the state. Marsiglio of Padua,[10] in the middle of the fourteenth century,

[9] *The Constitutional History of England*, pp. 23, 24, 38, 143, 144.

[10] On Marsiglio, cf. E. Emerton, *Defensor Pacis of Marsiglio of Padua;* and James Sullivan, "Marsiglio of Padua and William of Ockam," in the *Amer. Hist. Rep.*, Vol. II. (1896-97), pp. 409-426, 593-610.

may be said to have been the first distinctly modern political scientist. His great work *Defensor Pacis,* though written in championship of the cause of the emperor in his age-old controversy with the pope, is almost purely secular in its point of view.) For the first time for more than a thousand years, Aristotle's discussions are used with real intelligence. Marsiglio's work is to a very large extent based on Aristotle's *Politics,* but it also gives evidence of a large degree of originality. As Riezler says[11] "on borrowed foundations he erected a new structure." Such modern ideas as that legislation is the sole affair of the state; that the source of law is found in the will of the community; majority rule; the separation of legislative, executive and judicial authority; the supremacy of the legislative over the other two powers; the right of the people to depose a prince who has overstepped his legal authority or disobeyed the law; and religious toleration are found either expressed or implicit in Marsiglio's work. Much the same ideas are to be found in the writings of William of Ockam, a contemporary English Franciscan. Some of these ideas find even more complete expression in the writings of Nicholas of Cues and Jean Gerson during the first half of the fifteenth century. This was the period of the Conciliar Movement[12] in which the attempt was made to establish constitutional restraints upon the absolutist power of the pope through great representative bodies of the church. The church was rent by a great schism and rival claimants for the papacy divided Christendom into opposing factions. The resulting effect was to undermine the position of the papacy itself and to encourage movements for a limited and constitutional government of the church. In the disputations and polemics which the Conciliar Movement occasioned, we find penetrating discussions of the problems already raised by Marsiglio and Ockam. The notion of representation is worked out; the idea of government by consent of the people more clearly stated; and if in some respects neither Nicholas nor Gerson went so far as Marsiglio, the fermentation of thought which the schismatic condition of the church engendered did much to clarify men's ideas in regard to the fundamental basis of authority and the nature of government.

4. EARLY MODERN POLITICAL THOUGHT

Political thought from the thirteenth to the fifteenth centuries was far from stagnant and, in some instances, the discussions were

11 Quoted by Sullivan, *Amer. Hist. Rev.,* Vol. II, p. 425.

12 On the Conciliar Movement, cf. W. A. Dunning, Vol. I (*Ancient and Mediæval*), Ch. x; J. N. Figgis, *Studies of Political Thought from Gerson to Grotius,* Lect. II; and A. LaFontaine, *Jehan Gerson.*

definitely raised to a secular level, but there was throughout an ecclesiastical connection. The circumstances and events which occasioned the writings which we have just considered had, in every case, an ecclesiastical, if not a religious basis. We come now, however, to a period in which consideration and speculation concerning the state is completely divorced from all religious attachments, and in the works of Machiavelli [13] we find the complete triumph of the secular spirit, as they were indeed inspired by conditions and events of a purely political character. It is, indeed, the Renaissance and the dawn has at last broken.

In Western Europe, as we have seen, the conflict of authority characteristic of the later middle ages was, by the sixteenth century, giving place to the recognized and effective rule of the absolute monarch who embodied in himself the principle of the national state. In Italy, however, chiefly because of the presence there of the temporal power of the pope, this result had not been achieved, and we find the peninsula divided among a number of petty principalities and free cities, independent of each other and of outside control. The need of a strong ruler to weld together these political fragments into a real national state and to establish throughout the country uniform conditions of law and order impressed Machiavelli with compelling force. As an official in the government of the city state of Florence, he had every opportunity to observe the distractions and confusions of the Italy of his day, and it is with passionate voice that he urges the necessity of a strong national state. His idea was not like that of Dante, a universal empire, but a smaller unity,—one, however, large enough to maintain itself against its dangerous enemies and to preserve for its people the conditions of peace and order on which alone prosperity is based. His best known work, *The Prince*, has until within recent times been much misunderstood; his very name has come to be a synonym for thoroughly unscrupulous and despotic statesmanship. This judgment ignores the circumstances which inspired his writing. Peering into the future, as no other man of his time, he envisaged Italian unification which was only achieved in the third quarter of the nineteenth century. Believing that unification was possible only through the agency of a strong and despotic ruler, he devotes himself to a discussion of the methods by which a prince can gain and hold power, and his approach to this problem is one divested entirely of ethical considerations. The ordinary rules of

[13] The student is referred on Machiavelli, to Dunning, Vol. I (*Ancient and Medieval*), Ch. xi; Janet, Vol. I. p. 491, *et seq*; Figgis, Lect. iii; and P. Villari, *Niccolo Machiavelli and His Times*, in two volumes.

morality do not obtain in the realm of state-craft. We should describe him rather as unmoral than immoral, since moral values simply do not exist for him in connection with his problem. The existence of a strong national state is the condition for all else, and to obtain or preserve supreme authority any act is justifiable. It is the Bismarckian doctrine of "iron and blood." In Machiavelli, for the first time, we distinguish clearly the strong note of nationalism which has been so dominant since the French Revolution. States owe, in his view, no duties to one another. Each is the enemy to the knife of all the others. The supreme and unlimited authority of the state which he identifies with the absolute monarch at its head is, perhaps, his cardinal idea. This notion of sovereignty he did not theoretically develop but it is, throughout, his key-note. Thoroughly realistic in his methods, and basing his conclusions upon a wide observance of existing political conditions, he was the first of modern writers, in a thoroughly scientific fashion, completely to isolate the problem of politics from all extraneous considerations. With him the method and spirit of Aristotle are revived.

If the Italian Renaissance produced in Machiavelli one of the great figures in the history of political science, the Protestant Reformation [14] was conducive to the development of political ideas through a number of writers; Luther, Melanchthon, Zwingli, Calvin, all dealt with political, as well as religious questions, but dealt with them in an entirely different spirit and by entirely different methods from the Catholic writers of the middle ages. Politics were no longer completely subordinated to religion. The Protestant Reformation itself was in some ways a movement in the direction of freedom, and thought regarding the state became more unshackled. On specific questions the ideas of the reformers varied greatly. Their disputations threw the entire subject of politics into a ferment. Two important results may be discerned as resulting from the Lutheran movement. The first was an increased emphasis on the modern national state and support of the principle of absolute monarchy; the alliance between Luther and the King of Saxony is typical of the general attitude of the Lutheran movement toward the rival claimants to supreme power. In the second place, the idea of popular freedom gained currency. Political liberty was in large degree a corollary of ecclesiastical independence. The form which the theories of political liberty took in this phase was individualistic. The leaders

[14] The political ideas of the Reformation are discussed by Dunning, Vol. II, (*From Luther to Montesquieu*), Ch. i; Janet, Vol. II. pp. 1–30; Figgis, Lect. iii; and J. K. Bluntschli, *Geschichte der Neueren Staatswissenschaft*, Kap. iii.

of the Protestant Reformation did not generally develop all the implications of their fundamental ideas. But others did, and made them really dynamic in the political contests of the period.

As regards the development of concrete political ideas, John Calvin's importance is even greater than Luther's. His *Institutes of Religion* contain a complete analysis of the principles of authority and law. His ideal government was, indeed, an ecclesiastical aristocracy and he thus represents a distinct variation, in his opposition to monarchy, from the Lutheran movement. In the constitution of Geneva, which he created, we find the practical exemplification of his system. Church and state, if not united, were at least to be in close association, and the function of government was broadened to include not merely the protection of life and property, but the punishment of offences against religion. Toleration had no place in his scheme. Fundamentally, he believed, that government springs from the people, but in effect it should be exercised by a narrow group who both for church and state stand at the top. Calvin's religious and political ideas acted as a leaven on the thought of his time, and we see, particularly in the Puritan commonwealths of New England, his influence in the practical operations of government.

(Toward the close of the sixteenth century, a group of writers appear who have generally been characterized as the Antimonarchists.[15] Approaching the problem of government from various standpoints, they are united in their attack upon monarchical absolutism which was becoming the outstanding political fact of the time. The most notable of these were François Hotman whose work, *Franco-Gallia*, appeared in 1573; the anonymous author of the *Vindiciae Contra Tyrranos*, which was published in 1566; the Scotchman, George Buchanan, whose work, *De jure Regni Apud Scotos*, was written to justify the deposition of Mary Stuart in 1580; and the Jesuit, *Mariana*, whose book, *De Rege et Regis Institutione*, appeared in 1599. It is significant that an attack upon the institution of absolute monarchy should have been made from such divergent quarters, and it indicates the wide interest which political questions are now commanding. All of these writers are inspired by the actual political circumstances of the time. All preach the doctrine of resistance to evil rulers on the basis of a more fundamental law. The idea of a governmental compact as the foundation of the state is worked out in

[15] Cf. on the antimonarchists Dunning, Vol. II (*From Luther to Montesquieu*), Ch. ii; Janet, Vol. II, pp. 30–50; Figgis, Lect. v; R. N. Treumann, *Die Monarchomachen* (a doctoral dissertation at the University of Leipzig); and E. Armstrong, "The Political Theories of the Huguenots," in *Eng. Hist. Rev.*, Vol. IV, pp. 13 *et seq.*

great detail, though in somewhat different forms, by these various controversialists. The doctrine of natural law is likewise elaborated and the theory of representation considered. If the ideas in these books appear to have been derived from Marsiglio, Ockam, and the writers of the Conciliar period, they are now considerably developed and their implications pointed out. The method is still far from scientific. Neither the protestant reformers nor the antimonarchists rise to the level of Machiavelli in his detachment and inductively scientific approach. But if they still use the tools of deductive logic and metaphysics, they are at least dealing with the concrete problems that face their world, and reaching conclusions that have a practical bearing on the stress and strain of the everyday political life of their times.

The religious wars of the second half of the sixteenth century, which were the principal occasion of the antimonarchist writings, were also the inciting cause of the works of Jean Bodin,[16] the most important of which was his *De la Republique*, published in 1576. Bodin was as secular in his point of view as Machiavelli, and as scientific in his method. He may be said to stand midway between the great Florentine and Montesquieu both in time and in historical sequence. A monarchist and an adherent of Henry IV of France, he devoted himself to the defense of monarchism. By a reasoned analysis of the basis and nature of authority he develops theoretically, as had never been done before, the nature and attributes of the state itself. His great contribution is in the exposition of the doctrine of sovereignty, which he defines as "supreme power over citizens unrestrained by law." Law, for him, has its source in the will of the sovereign, who is himself above all human law. The importance of this idea in connection with the emerging national state can scarcely be exaggerated, and its influence upon political thinking has been second to no other idea or concept in the entire field of political science. It remains to-day the corner-stone in the orthodox theory of the state and is an accepted premise for lawyers and laymen alike. We shall have occasion later to question the validity of this doctrine with respect to the state as it now exists, but there can be no doubt as to the important advance which Bodin's work represents in the clarification and formulation of the modern theory of the state. His work must be studied in connection with the history

[16] The writings and influence of Bodin are discussed in Dunning, Vol. II (*From Luther to Montesquieu*) Ch. iii; Janet, Vol. II, pp. 114–127; Bluntschli, pp. 26–56; Figgis, Lect. iv; and E. Haenke, *Bodin (Untersuchungen zur Deutschen Staats und Rechtsgeschichte, herausgegeben von Dr. Otto Gierke)*.

of his time. The century-long struggle for supremacy among the rival claimants of power was now being brought to a conclusion, and it was left to Bodin to justify by the most cogent arguments the claims of the state itself as against pope and emperor from the outside, free city and baron from within, to complete an unlimited supremacy. If his chief significance lies in the development of the idea of sovereignty, his work is also noteworthy in the clear and penetrating discussions which it embodies upon many other political problems, such as the origin of the state, its relation to lesser groups, citizenship, forms of government, governmental organization, the nature of law, the notion of constitutional law, the theory of revolutions, religious toleration, public finance and international treaties. Following Aristotle in his plan and method, he adapts his treatment to the needs of his own time. As Bluntschli has said, "in the study of the history of peoples, in the comparison of their institutions and laws and in the consideration of political development, he seeks the sane and solid basis for knowledge in the original spirit which displays itself therein." If, at times, he does not sufficiently differentiate between logic and historical growth, and is sometimes satisfied with unproved examples, or draws general conclusions from single facts, we must remember how thoroughly unscientific was the age in which he wrote, and recognize the remarkable advance which he represents over any previous writer since Aristotle.

One other important figure in the history of political science at the beginning of the seventeenth century requires our attention. Johannes Althusius,[17] born a German, but serving as professor of law and in official positions in the Netherlands, was rediscovered by Professor Otto Gierke something over a generation ago. The judgment of Professor Figgis that his work, *Politica Methodoce Digesta*, "is, with the exception of Bodin's treatise, the most important of all works for the scientific student" may be an over-statement. There is, however, no doubt of the significance of Althusius in emphasizing the fact that the state comes into existence through the gradual union of men previously existing in a non-political condition. It is built up out of other similar but less inclusive groups as a result of natural necessity. In opposition to prevailing theories of natural law which arrived at the state through a political contract, Althusius maintained that it was the product of a movement through transitional stages, and gives

[17] The most important work on Althusius is Otto Gierke, *Johannes Althusius und die Entwicklung der naturrechtlichen Staats-theorien.* Brief discussions will be found in Dunning, Vol. II (*From Luther to Montesquieu*), pp. 61–67; Figgis, Lect. vii; and Bluntschli, pp. 76–88.

much attention to these other forms of association. The family is the first and original social unit and its members bear a relation to it and to one another which can scarcely be explained in contractual terms. There is something organic in the nature of family relationships. Other groups, such as guilds and corporate organizations, may lack the basis of natural necessity but are called into existence for definite, useful, economic or occupational purposes. A contract usually constitutes the basis of association, but their essence consists in the fact that they are corporate bodies. This class of associations, Althusius calls *collegia*. The next higher class of corporate groups is what he calls the *universitas*, which is a public law community. In its simplest form, it is the town or hamlet, the village community, composed not of the individual inhabitants, but of families and *collegia*. Its constitution varies with the particular requirements of a specific situation. The most important of these local organizations is the city. Next above the local community is the district or province which is composed of several cities or local communities united together, and it is here that we find also a transverse division into the estates of the church, the gentry, the bourgoisie and the peasantry, each performing its function somewhat after the order of Plato's *Republic* in the general work of the community. Finally, the state is evolved from a union of provinces. The lower associations have all at least some private law relationships, and are thus subject to various limitations, but the state is a completely universal and wholly public law community embodying in itself a supreme legal personality. The state is not composed of individual citizens and subjects, but of provinces, territories and estates, i. e., public corporations which themselves possess a political character. It is this aspect of the state, as a corporation made up of subordinate corporate bodies, integrated by a certain universal and general purpose, that is the most significant idea of Althusius. From him springs the subsequent organismic theories of the state, as well as the recent doctrines which attribute to it the character of a juristic person and thus assimilate it to other corporate entities. As against Bodin's doctrine of monarchical sovereignty, he opposes most decisively the theory of popular sovereignty. This supreme power, however, is not arbitrary, but one limited by law. Even a majority of the citizens may not destroy the rights inherent in the members of the state. Not only individual citizens, but estates, provinces, cities and rural communities possess fundamental legal rights which the state may not encroach upon. Authority, furthermore, is not concentrated in a single prince, but shared by various agencies. Thus not only is the conception of a

balanced constitution clearly suggested, but many of the ideas of twentieth-century pluralism are plainly forecast.

A contemporary and fellow-countryman of Althusius, Hugo Grotius,[18] is much more widely known, as the founder of the modern science of international law. His significance to the student of political science lies in the use which he made of the theory of natural law which was current at the time. His great work, *De Jure Belli ac Pacis,* appearing in 1624, was called forth by the unrestrained methods of warfare practiced in the Thirty Years' War. His entire system is based upon the idea that there is a natural law which governs the conduct of nations, as well as that of individuals within the state, and that it is only necessary to apply right reason in order to discover its principles. No better example can be cited of the use of a political doctrine, now quite completely discredited, in the cause of reform. One may seriously question whether, without the potent influence of the idea of natural law, the ameliorating results in the field of international relationships which international law has produced could have been secured. Indeed, one wonders how, otherwise, international law could have in any way developed. It is not necessary for us to dwell upon the particular principles which Grotius lays down in his epoch-making work. These constitute the foundations of the modern specialized science of international law which is, perhaps, to be considered as an affiliate, rather than a branch of political science.

5. POLITICAL SPECULATION IN THE SEVENTEENTH AND EIGHTEENTH CENTURIES

The era of monarchical absolutism was a necessary stage in political evolution in Europe. Until the national state, through its king, had succeeded in establishing its complete independence of external control, whether papal or imperial, and its complete supremacy over all internal authorities, civic or feudal, no further progress toward modern constitutional government was possible. It was the function of absolute monarchy to establish the sovereignty of the state. In accomplishing this in England, the Tudors were not, as has often been thought, interrupting the orderly course of constitutional development; they were indeed performing a function essential to further

[18] On Grotius, cf. Dunning, Vol. II (*From Luther to Montesquieu*), Ch. v; Janet, Vol. II, pp. 227–284; Figgis, Lect. vii; Bluntschli, pp. 83–100; A. Franck, *Reformateurs et publicistes de l'Europe, dix-septième siècle*, pp. 263–332; and E. Nys, *Les origines du droit international.*

progress. By the beginning of the seventeenth century this work had, however, been accomplished, and this century is filled with the struggles incident to the transition to constitutional or parliamentary government. In time, the English development anticipates the French by more than a century, while central and southern Europe lag still farther behind. This explains why the seventeenth century is so rich in political ideas in England, and so barren upon the Continent. In the political controversies of the Stuart period, every known weapon is drawn by either side from the arsenal of fifteenth and sixteenth-century dogmas, and new weapons are forged which were destined to be continually employed throughout the succeeding two hundred years. The contests of the period in its earlier phase, it is true, were waged for the most part with the weapons of historical and legal precedent rather than with the arguments of political theory. Magna Charta, largely misapprehended, and the statute *de tallagio non concedendo* were marshalled to support the demands of the parliamentary party; the courts were invoked for decisions, such as that in the Bates case, in rebuttal.[19] But as the century proceeded deeper analyses were found necessary and abstract theory assumes dominant importance.

In his *True Law of Free Monarchy*, James I,[20] "the wisest fool in Christendom," refurbished the ancient doctrine of the divine right of kings and, if not using it with any great effect, at least formulated it more clearly and with more precision than it had ever been before. Originally directed against papal and ecclesiastical claims, it now is used in the contest against the growing movement for popular government. The cause of monarchical absolutism was championed with far more logic and much greater philosophical subtlety by Thomas Hobbes[21] in his *Leviathan* and *de Cive* which he wrote during the period of the Protectorate in the interest of the exiled Stuarts. His purpose is to prove that the revolution and dethronement of their king by the English people was fundamentally illegal and wrong. His method is purely deductive. Starting from certain assumed premises, he constructs his entire system by a process of *a apriori* reasoning, but in its systematic and comprehensive character it un-

[19] The legal aspect of this controversy can best be studied with the assistance of G. W. Prothero, *Select Statutes and other Constitutional Documents;* and S. R. Gardiner, *The Constitutional Documents of the Puritan Revolution.*

[20] On the theory of the divine right of kings, cf. J. N. Figgis, *The Theory of the Divine Right of Kings.* On the political theory of James I, see the edition of *The Political Works of James I*, edited by C. H. McIlwain.

[21] On Hobbes, cf. Dunning, Vol. II (*From Luther to Montesquieu*), Ch. viii; Janet, Vol. II, pp. 146–185; Franck, pp. 367–409; and William Graham, *English Political Philosophy from Hobbes to Maine*, pp. 1–47.

doubtedly transcends any previous attempt at a general philosophy of the state. Hobbes maintains that originally man lived in a state of nature which he depicts as a most unsatisfactory condition. Since the dominating motive of human conduct is selfishness, the character of human life in the pre-social period is one of perpetual strife, constant struggle, fierce and brutal competition. It is *bellum omnium contra omnes*. Animated by an inherent egoism and with a perpetual and restless desire for power and for the gratification of their appetites, men were, he says, "like famished wolves seeking to devour one another." In this condition natural right was simply natural might, "the liberty which each man hath to use his own power for the preservation of his own nature." There was, of course, no distinction between legal right and wrong, justice and injustice. To everyone belonged whatever he had the physical power of appropriating and keeping. Out of this state of nature, the state emerges through a social compact by the terms of which each individual surrenders absolutely and imprescriptibly his natural liberty into the hands of the sovereign, who might be a single individual or an assembly.

It is to be observed that the sovereign is not a party to this social compact, though he enjoys the supreme and unrestricted power which is its product. The covenant thus made is irrevocable, and for Hobbes there is an absolute duty of passive obedience on the part of the subjects. Law consists simply in the command of the sovereign duly promulgated and communicated. Hobbes thus fixes upon the "will" rather than the "reason" as the essential feature of law. Of forms of government, monarchy is the best, since one man can act more consistently than a body of men; but whether sovereignty is vested in one or in many, it is without limitation. Revolution, thus, is never justified. The functions of government, according to Hobbes, consist, first, in maintaining all the essential rights of sovereignty; second, in instructing the people regarding the grounds and reasons for these essential rights in order that they may not easily be seduced into rebellion or resistance against the authority of the state. Thus education, for Hobbes, has the definite and narrow purpose of inculcating the duty of obedience. Beyond these two primary functions, the duties of the sovereign are determined by the end for which government is created, namely, the preservation of law and order and the protection of the lives and property of the subjects. The state is thus merely a protective agency, its function of education being reduced to a means for preserving its power.

For a short period during the Commonwealth, ideas of the most extreme nature were widely discussed, particularly in army circles.

A party of extremists, known as "Levellers" sprang up.[22] The most notable figure in this movement was John Lilburne. These doctrinaires agitated for the creation, on the basis of natural law and through the application of pure reason, of a government which would fully embody the principles of popular sovereignty and natural rights. Some of them dreamed dreams of a communistic regime in which all private property would be destroyed, but the majority contented themselves with urging such reforms as universal manhood suffrage, the abolition of the House of Lords, annual parliaments, and complete religious toleration. Their significance does not lie so much in their program as in the nature of the arguments which they used in urging it. It was in their appeal to the fundamental principles of natural law, and in their repudiation of all existing laws and institutions which were opposed to their conception of natural law, that their interest consists.

In John Milton, and particularly in John Locke,[23] do we find a more moderate exposition of the political theory of the bourgeois or parliamentary party. In his *Two Treatises of Government*, written in 1690 as a defence of the revolution of the preceding year, Locke presents the arguments in behalf of constitutional government which were to serve the cause of liberals and constitutional reformers for a century and a half. Like Hobbes, with whose name his is often coupled, Locke builds his system on the premise of a pre-social state of nature and a social compact. His state of nature is not, however, the ruthless condition of war which Hobbes posits. It is, to be sure, an unsatisfactory state, because there exists no hindrance to the wrongdoing and corruption of a few degenerate men. Natural law obtains, but there is no impartial judge to determine it in case of dispute. The state is created for the purpose of enforcing natural law. It rests upon a dual contract, the first phase of which is social and the second governmental. By the social compact each individual agrees to surrender to the entire body such portion of his natural liberty as may be necessary to establish government. By the governmental compact, the people, thus constituted into a social group, contract with a sovereign for the performance of governmental functions.

[22] On the theories of the Levellers, cf. *The Clarke Papers* (Camden Society publications), edited by C. H. Firth; G. L. Scherger, *The Evolution of Liberty;* and T. Pease, *The Leveller Movement.*

[23] The theories of Locke are discussed in Dunning, Vol. II (*From Luther to Montesquieu*), Ch. x; Graham, pp. 50–87; G. P. Gooch, *The History of English Political Ideas in the Seventeenth Century*, Ch. x; H. J. Laski, *Political Thought from Locke to Bentham*, Ch. ii; and L. Stephen, *History of English Thought in the Eighteenth Century*, Vol. II, pp. 130–151.

The sovereign is thus, according to Locke's scheme, a party to a contract, and if he violates the terms of his agreement, the contract having been broken, he may be deposed and the people, in their character as the ultimate sovereign, may thereupon arrange a new governmental pact whereby a new ruler is set up. In forming the social compact, the individual does not surrender his natural rights, and thus Locke lays the basis for the idea which became so potent in the later eighteenth century, of a body of natural rights which the state itself might not encroach upon, and which the individual could, under all circumstances, maintain and assert. Among these rights are those of life, liberty and property. In Locke's view, as in Hobbes's, government is confined to the narrow limits of a protective agency, its law-making function being restricted to the protection of life, liberty and property. In his *Letters on Toleration* (1685–1692), Locke develops the lofty ideal of religious freedom. He attributes the unrest and wars of England, in large measure, to religious persecution. Control of men's religious faith, according to the fundamental principles of his theory of government, fall entirely outside the sphere of the state. His doctrine implies a complete separation of church and state, since the church is merely a voluntary group of individuals joined together in a common worship. He contends that no one should be excluded from participation in government because of his religious views. In an age in which Jews, Catholics and Dissenters suffered political disabilities, Locke urges the removal of all restrictions and insists that Christianity will be all the more secure for not resorting to such questionable means for enforcing its dominance. With John Locke the ferment of theoretical controversy of the seventeenth century ceases, as the actual political conflict is brought to a definitive conclusion by the Revolution of 1689. If Locke's political theory does not reveal the same profundity or logical consistency as does that of Hobbes, his influence upon the thought of subsequent times was far greater. The theoretical justification of the American Revolution, particularly as it is embodied in the Declaration of Independence, draws heavily upon Locke, and in England itself, Locke's ideas achieved an almost universal acceptance. One can say, without serious exaggeration, that the constitutional movement of the eighteenth and nineteenth centuries finds its theoretical basis in the works of John Locke to a far greater extent than in those of any other writer.

The transition from absolute monarchy to constitutional government in England during the seventeenth century makes the history of English political thought of the time of peculiar interest. The same

transition was effected in France toward the close of the eighteenth century, and the theoretical discussions there have a similar importance. We can only refer to the most significant writers in the age of illumination which preceded the French Revolution. Two stand out preëminent, Montesquieu and Rousseau. In their points of view, methods and results, they present the widest contrast and their influence is quite as divergent.

Montesquieu's great book,[24] *De l'Esprit des Lois*, was published in 1748. His underlying idea was that there are certain eternal principles in politics similar to the laws of physics. Law, in its special sense, is the expression of these principles as applied to the relationships of things. This is what he means by the title of his book. Behind the laws there are eternal and fundamental relationships. It is untrue to say that law consists only in the command or prohibition of positive enactment or court decision. It is in the deep soil of human, and indeed natural, relationships, that he seeks for an explanation of law; and this carries him into a discussion of climate, customs, traditions, religion, etc. Out of these influences there is produced a composite spirit for any people and for any age, not fortuitous but arising inevitably from these natural relationships. Where a mandate gives expression to this spirit it embodies real authority; otherwise its claim to obedience is fictitious. Montesquieu's endeavor at every point is, therefore, to relate laws and political institutions to the natural relationships out of which they spring. He reflects the influence of the advances which the physical sciences, and particularly mathematics, had made in the previous half century. Descartes had attempted to apply mathematical methods to general philosophy, and had given a mathematical and physical direction and character to thought which is seen in most of the writers of the eighteenth century. The discoveries of such natural scientists as Newton and Herschel were so significant; there seemed to be such a certainty about them, that men sought to achieve the same results in the fields of social phenomena. Montesquieu's conception of government is thoroughly Newtonian. There are various forces which must be balanced, and an equilibrium maintained. His most noteworthy contribution is his doctrine of the separation of executive, legislative and judicial powers, and of checks and balances. There is, he maintains, a logical and natural, triple division of governmental functions. The actual organization of any government must conform to this logical division if the liberty of the

[24] On Montesquieu, cf. Dunning, Vol. II (*From Luther to Montesquieu*), Ch. xii; Janet, Vol. II, pp. 332–399; A. Franck, *Reformateurs et Publicistes, dix-huitième siècle*, pp. 137–286; Bluntschli, pp. 298–316; and A. Sorel, *Montesquieu*.

individual is to be preserved, and despotism avoided. Each must check and balance the others. Montesquieu's ideas were doubtless essentially the result of a deductive and analytical method; but he undertook to demonstrate their truth by an extensive survey of the actual political institutions of his time. As has frequently been pointed out, he believed that the English government exemplified his doctrine of the separation of powers in its division into king, parliament, and courts. That he misinterpreted the real character of the British constitution in taking no account of the cabinet which was even then assuming shape and form, and in not foreseeing its future dominant position which is, as Gladstone says, that of "a hyphen which joins, a buckle which fastens the executive and legislature together," is scarcely to be wondered at. But it is remarkable that his misinterpretation should have been accepted, even in England, until another French political scientist, Benjamin Constant, well into the nineteenth century, re-examined the fundamental facts of English government.

Montesquieu's influence, both in the field of actual constructive politics and in that of political theory, is scarcely less important than that of John Locke. If his method was not altogether scientific, the emphasis which he gave to a broad knowledge of the facts of government greatly assisted in superseding the older *a priori* and speculative method. It was particularly, however, in his doctrine of the separation of powers, and of checks and balances, that he determined for later generations both the character of political institutions and the accepted theory regarding them. When the framers of the American state and federal constitutions undertook the task of constructing new governments, they were influenced very largely by Montesquieuan philosophy. They accepted as almost axiomatic the doctrine of the separation of powers and wrought it into the very fabric of the constitutions which they framed. Embodied as it is in fundamental written instruments of government in America, it has successfully withstood the tendency toward concentration of power so noticeable in the last two generations. It is this principle which fundamentally distinguishes the American system from the British. The classification of constitutional government into congressional and cabinet types (perhaps the most significant classification to which modern governments may be subjected) rests upon the fact of whether or not the principle of the separation of powers is followed. It is certainly an interesting fact that the American and the British governments, although springing from the same historical roots, stand to-day as the best examples of opposing types. This is undoubtedly due to the cir-

cumstance that Montesquieu's principle of the separation of powers was in America embodied in written constitutions in such a fashion as to secure its permanence; while the more elastic unwritten constitution of England permitted the tendency toward concentration of power, already at work when Montesquieu wrote, to proceed to its logical conclusion. If Montesquieu's influence is thus clearly evident in the actual development of government, it is likewise true that the doctrine itself has remained until our own time a cardinal principle of American political theory.

Jean Jacques Rousseau [25] represents an entirely different influence from Montesquieu in the field of political thought. Largely unaffected by the mathematical, and what we may call mechanistic, trend in philosophy of the early eighteenth century, he inaugurates the romantic movement which was to reach its culmination in the Catholic reaction and the idealistic school in the period following the Napoleonic wars. He used, it is true, the formal rationalistic method of the period, but in aim and purpose he was distinctly a romanticist. Taking over the seventeenth-century ideas of a pre-social state, of natural law, and of a social compact, he interprets them in such a way as to make the people in their collective character not merely the ultimate, but the efficient and continuing sovereign. His idea of popular sovereignty is based upon the idea that the people in their collective character display a general will (*volonté générale*) to be distinguished from the wills of the individual members. All government which is not directly the expression of the general will is illegal. This general will expresses itself only in the form of elections; Rousseau finds no place in his system for representative bodies. Such executives as are necessary are merely the agents of the sovereign people and can be limited or removed by them at any time and for any reason. If Montesquieu's chief contribution lies in his doctrine of the separation of powers, Rousseau's primary principle is that of popular sovereignty. It would be difficult, perhaps, to appraise the relative influence of these two dynamic ideas in the history of the last century and a half. It has been said that "there is not, properly speaking, a school of Rousseau; his school was in fact revolution." The inspiration and theoretical basis of the French Revolution is certainly to be found in Rousseau's writings to a far greater extent than in those of anyone else, though it must be remembered that most of Rousseau's theory of revolution was derived from Locke. Even yet

[25] On Rousseau, cf. Dunning, Vol. III (*From Rousseau to Spencer*), Ch. i; Janet, Vol. II, pp. 415–477; Franck, pp. 283–379; Bluntschli, Kap. xi; J. Morley, *Rousseau*, especially Vol. I, Ch. v. and Vol. II. Chs. iii, iv; and B. Bosanquet, *The Philosophical Theory of the State*, pp. 79–116.

his influence has far from spent its force; particularly has his concept of a general will played a most important rôle in recent political theory. Such institutions as the initiative, the referendum, and the recall appeal for their theoretical justification to the Rousseauic notion of popular sovereignty. The strength of Rousseau's influence does not lie in the logic or even the originality of his arguments, but rather in the form of their expression,—the appeal which they made to the emotions of men at a moment when nothing seemed incapable of achievement through the exercise of human intelligence. Rousseau was more of a poet, indeed a prophet, than a philosopher. He was certainly anything but a political scientist, if by that term we mean one who calmly and impartially observes the facts of government and attempts to establish from them alone fundamental principles. That his influence should have been so great for a century and more, not only in the France of the Revolution, but throughout the western world, is sufficient evidence of the backward state of political science.

The French Revolution discloses two distinct trends of political thought. The one is derived from Montesquieu and its principal leader is Mirabeau; the other follows the teachings of Rousseau and finds its principal exponents in the Abbe Siéyès and Robespierre.[26] During the early phase of the Revolution the party of Mirabeau was in the ascendency. He maintained that France already possessed a constitution which only required to be restored and improved, though it might be necessary to go back a century and a half to the period when the states-general was still an active part of the government. Such alterations in the political system as were required, he believed, should be conservatively adopted, and he looked to the British constitution as the model in accordance with which such changes should be made. His opponents, on the other hand, contended that France had no constitution and that it was necessary to give her one. In doing this, they insisted, they should proceed without reference to the previous history of their own country and without dependence upon English models. Their approach to their problem was distinctly *a priori*. On the basis of certain self-evident political axioms, they conceived it possible to construct a government by the application of logic and reason,—a government which would be entirely adequate for any people at any time. On the one hand, we have the expression of the principles of growth and evolution; on the other, the insistence that politics is a pure science and that its problems can be worked out

[26] On the opposing theories of the French Revolution, cf. Dunning, Vol. III (*From Rousseau to Spencer*), Ch. iii; G. L. Scherger, Chs. viii–xii. G. Koch, *Beiträge zur Geschichte der politischen Ideen und der Regierungspraxis, Zweiter* Theil, p. 209; and D. G. Ritchie, *Natural Rights*, pp. 4, 5.

by a method similar to that employed by geometry. Rousseau had provided the self-evident axioms. It was only necessary to construct a government conformable to these principles. Quite erroneously they believed that this was exactly what the American constitutional convention in Philadelphia had done. If the Americans could construct a government on the principles of the Declaration of Independence, why could not they do the same? It is significant that after a short period during which an attempt at constitutional monarchy was made, the party of Siéyès gained control and gave to the Revolution its radical and doctrinaire character.

A most noteworthy writer connected with the French Revolution was Thomas Paine,[27] an Englishman by birth who had spent a number of years in America and had participated actively in the American Revolution. He now became the leading defender of the French Revolution, and the chief exponent of its radical philosophy. In his *Rights of Man,* we find the ideas of Rousseau adapted to the needs of the moment and expressed with a passionate enthusiasm that gave them explosive force.

By far the most significant English publicist of the period is Edmund Burke[28] who had indeed much of the character of a radical himself, as is evidenced by his earlier speeches relating to the American Revolution and the condition of corruption in British politics. He was, however, absolutely opposed to the type of radicalism which had become dominant in France during the Revolution, and which had a certain following in England as well. It is difficult to characterize Burke's political philosophy because it lacks the definitely logical form and systematical character which we find in the writings of such men as Hobbes and Locke. If, however, Burke never reduced his ideas to the form of a systematic treatise on politics, he none the less had a very definite philosophy of the state. He was a reformer, but a reformer who did not believe in sudden organic change. Where anachronistic excresences were clearly visible, he believed they should be lopped off; but he was continually aware of the danger of destroying institutions which had required generations and centuries to produce. He had no sympathy with the view that politics was a pure science and that a constitution of government could be fabricated by logic divorced from experience. In one of his early speeches he had declared, "I do not enter into these metaphysical discussions; I hate the very sound of them," and again in his *Reflections on the French*

[27] Cf. Dunning, Vol. III (*From Rousseau to Spencer*), pp. 110–116.

[28] On Burke, cf. Dunning, Vol. III (*From Rousseau to Spencer*), pp. 176–184; Laski, Ch. vi; Graham, pp. 88–173; J. Morley, *Edmund Burke;* and J. MacCunn, *The Political Philosophy of Burke.*

Revolution he declared "one sure symptom of an ill-conducted state is the propensity of the people to resort to theories." On another occasion he asserted "it is always to be lamented when men are driven to search into the foundations of the commonwealth." Burke's works are a great storehouse of wisdom garnered from the thousand years of English history. Had he been able more logically to organize his material and to present it in a more systematic form, its value would have been far greater to subsequent political science. Burke must always stand, however, as one of the wisest and sanest of political thinkers in an epoch in which men's minds were being seduced by the fatuous glamour of doctrinaire ideologies.

6. THE RISE OF CONTEMPORARY POLITICAL SCIENCE

The political thought of the nineteenth century can best be described as a web of more or less contemporaneous movements. There is such a complexity of ideas in fermentation that it is difficult, if not impossible, to distinguish the particular ones which at any moment are predominant. Following the Napoleonic period a reaction in the field of political thought set in corresponding to the political reaction in the field of events. This movement was strong in France and is there closely connected with the Catholic church. Its principal leaders were Chateaubriand, de Maistre, Bonald and Lamennais.[29] With much of the spirit of Rousseau, they preached an entirely different doctrine. A return to the institutions and ideals of the middle ages was their goal; and while they were primarily devoted to the cause of ecclesiastical and papal supremacy, the immediate effect of their teachings was in the direction of a restoration of monarchical absolutism. Political liberty was a fatal error, the fallacy of which had been discovered by experience. Equality was likewise a dogma which the history of the period just passed had shown to be destructive of civilization. Denying all relativity of ideas, they insisted that the business of speculation was to search for absolute principles upon which society must always rest, and these they found, as did the men of the middle ages, in the doctrines of ecclesiastical and papal supremacy.

Contemporary with the Catholic reactionaries is the English school of utilitarians,[30] the founder of which was Jeremy Bentham. For at

[29] The best discussion of the Catholic reactionaries is found in H. J. Laski, *Studies in the Problem of Sovereignty*, Chs. iv, v; and *Authority in the Modern State*, Chs. ii, iii.

[30] On the Utilitarians cf. Dunning, Vol. III (*From Rousseau to Spencer*), Ch. vi; Graham, pp. 174–270; L. Stephen, *The English Utilitarians*, in three volumes; W. L. Davidson, *Political Thought from Bentham to J. S. Mill*; and A.

least two generations this school dominated English political thought and its ideas even yet remain influential, if not determining, in the conduct of politics both in England and the United States. Among Bentham's disciples are to be particularly mentioned James Mill, John Austin and John Stuart Mill. The fundamental idea in utilitarian philosophy is that men are actuated by the desire for pleasure. The aim and purpose of all social agencies should, therefore, be the achievement of the "greatest happiness of the greatest number." Since each individual is the best judge of what conduces to his own pleasure or happiness there should be the minimum of interference with his liberty. Only such restraints are justified as are necessary to protect each citizen from encroachments upon his rights by others. The logical implication of utilitarian philosophy is, therefore, a political policy of *laissez faire*. Utilitarianism is individualistic in its attitude toward government. Its great service in connection with the development of political science lies in the preciseness of its definitions, the clarity of its logic, and the keenness of its analysis of existing institutions. Its method is neither metaphysical nor inductively scientific, but analytical. Such concepts as law, for example, are subjected to the most searching analysis and, if it falls into serious error because of its failure widely to investigate the phenomena of its study, it at least does not indulge in those *a priori* and speculative constructions so characteristic of an earlier age. It is not necessary for us to dwell upon the really great service which the utilitarians have performed in securing an improvement in the various fields of legislation and administration. No other system of thought has ever influenced political action to the same degree.

In his lectures on jurisprudence, John Austin elaborated the theory of law which remained until recently almost unchallenged among English students of jurisprudence. In the wide range of his writings, John Stuart Mill, more than any other publicist of the nineteenth century, influenced the development of the social sciences. In his later writings, he departs to some extent from the strict doctrine of utilitarianism but throughout he applies its methods.

The trend of political thought in Germany in the nineteenth century was chiefly idealistic and connected throughout with the movement of general philosophy. Not by specialized political scientists, but by Kant, Fichte, Hegel and Schelling,[31] whose chief significance

V. Dicey, *Law and Public Opinion in England during the Nineteenth Century*, pp. 125–209.

[31] Cf. on the German Idealists Dunning, Vol. III (*From Rousseau to Spencer*), Ch. iv; Bluntschli, Kaps. xii, xiv, xviii; L. T. Hobhouse, *The Metaphysical Theory of the State*; and J. Dewey, *German Philosophy and Politics*.

lies in the fields of metaphysics and ethics, is the direction given to political theory. Their method is, of course, metaphysical. If they used the data of experience it was subconsciously if not surreptitiously. Their influence was, nevertheless, very great in certain respects. Perhaps their most signal contribution was in the dissemination (for they were not the actual originators) of the teleological idea of progressive development in human history. They saw a purpose, a goal, toward which the course of events tended. History is the fulfilment, the progressive achievement, of a transcendent, a divine, purpose. The connection between politics and ethics which had been ruptured by the rationalistic philosophy of the eighteenth century was re-established by Kant. For Hegel, the state was the highest incarnation of the will of God on earth. How easily these ideas could lead to notions of a "national mission," and a "manifest destiny" is obvious. In contrast to the negative and individualistic idea of liberty, as mere absence of restraint, a truly social doctrine of freedom was developed. Only in the state and in active participation in its larger life does the individual achieve his fullest self-realization. Toward the end of the century, this transcendental and idealistic German political philosophy was adapted to the modes of English thought by T. H. Greene [32] and B. Bosanquet.[33]

Coincident with the development of the idealistic school in Germany is the growing importance of the historical approach to the problems of government. The historical school [34] in the field of political science is an offshoot of the historical movement in jurisprudence, the founders of which were Savigny, Eichhorn and Niebuhr, whose activity falls in the period of the restoration after 1814. Like the Catholic reactionaries and the idealists, the historical school represents a reaction from the rationalism of the later eighteenth century. In some respects it bears a close resemblance to Burke, but its work is of a much more formal and positive character. Repudiating the abstractions of natural law, it emphasizes the connection between past and present, and that law and government are both the result of a long process of growth. Like language and custom, government is the expression of a nation's character. Reacting against the excessive emphasis which had been placed upon reason, this school brings

[32] *Lectures on the Principles of Political Obligation.* Cf. also Ernest Barker, *Political Thought in England from Spencer to the Present Day*, Ch. ii.

[33] *The Philosophical Theory of the State.* Cf. also Barker, Ch. iii.

[34] The most notable exponent of the historical school in England was probably Sir Henry Sumner Maine, whose important works include: *Ancient Law; Lectures on the Early History of Institutions; Village Communities in the East and West;* and *Popular Government.*

back to honor and respect the elements of instinct and feeling in the development of law and political institutions. The importance of this movement in encouraging intensive studies of the origins and actual character of government at the various stages in its evolution is particularly noteworthy. The methods employed are inductive and scientific. Facts, and a critical attitude toward them, are now accorded an importance which they had not previously received. It is perhaps not too much to say that political science in its present form rests primarily upon history. Freeman's statement that "history is past politics and politics is present history" represents the extreme viewpoint of the historical school. In its most recent phase this movement has sought its data, not merely in the past history of a people whose government it studies, but also in the contemporary facts of other governments. In this form it may perhaps be described as the "comparative" movement. This, however, is merely extending the principle of critical, historical induction into another dimension and does not represent a real departure from the method or point of view which has throughout characterized the historical school.

One further tendency in the field of political science during the later nineteenth century requires attention. Reacting against the eighteenth-century idea that government is an artificial and mechanical contrivance,—a product of conscious contract,—the notion that the state is an organism gained great prominence. Like all other modern ideas concerning the state, this organismic theory[35] finds its roots far back in the history of political thought. Suggestions that the state is an organism can be found in the writings of Plato and Aristotle and the notion repeatedly comes to the surface during the middle ages and early modern times, but a clearly definite statement of the doctrine is only to be found in the works of recent writers. This theory draws its material largely from history and thus relies upon the historical school for assistance, on the one hand; while the inspiration of the idealists gives it support, on the other. The newer developments of biological science, and particularly the Darwinian theory of evolution, has contributed substantially to the organismic doctrine. The most notable exponents of this view were Comte in France, Bluntschli in Germany, Schaeffle in Austria, Lilienfeld, a Russian writer, and Herbert Spencer in England. Varying widely in their interpretations of the doctrine and in the implications which they draw from it, they all proceed from the

[35] The best analysis of the organismic doctrines is F. W. Coker, *Organismic Theories of the State*. Cf. Also, J. W. Garner, *Introduction to Political Science*, pp. 56–65; and E. Towne, *Die Auffassung der Gesellschaft als Organismus*.

fundamental hypothesis that not only is the state something natural as distinguished from an artificial or mechanical construction, but that it is in fact an organism. The citizens in a state bear the same relation to the state that the cells in a living body bear to the organism of which they are parts. It would be interesting, if space permitted, to indicate how, in the hands of Herbert Spencer, this doctrine leads to an extreme individualism, while it serves, through a different interpretation, as the theoretical basis for many of the most advanced socialistic systems.

We must now turn our attention to the more important aspects of contemporary political science as it has developed out of this tangled web of oft-opposing and frequently inconsistent bodies of theory, and we must appraise the methods which have come into use and are now generally employed in furthering a knowledge of the state.

II. ITS PRESENT STATUS[86]

Certain characteristics mark the development of political science during the last generation and remain still dominant. First, the historical method has clearly won general acceptance. Metaphysical, deductive and analytical studies of the state have not entirely disappeared, but they have been definitely pushed into the background. An ever increasing volume of historical and comparative investigations have provided a vast mass of facts regarding both the structure and function of every political institution. Synthesis has not kept pace with the accumulation of data, but the gain in a concrete and factual basis for an understanding of politics is evident.

In the second place, a specialization of study has taken place in political science, as in all other fields. Not only has political science become clearly differentiated from economics, sociology and jurisprudence, but such branches of the science of politics, as constitutional law, administrative law, municipal government and administration, political parties, and colonial government and administration have received a high degree of special treatment at the hands of experts in these several fields. The general and theoretical consideration of the nature of the state has itself become a specialized branch of political science.

A third feature of political science in the last generation has been the shifting emphasis from structure to function. The way in which the institutions of government actually work in practice has com-

[86] Cf. an article by C. E. Merriam on "The Present State of the Study of Politics," in *Amer. Pol. Sci. Rev.*, Vol. XV (May, 1921), pp. 173–185.

manded more and more attention. This has carried the investigator beyond the study of written constitutions and laws into a field where exact data are far more difficult to obtain. Political parties;[37] the influence of public opinion as expressed through all its various organs,[38] but especially the newspaper; the sinister and corrupting forces which affect political life;[39] the influence and operation of economic forces upon government have received increasing emphasis.

We may mention, as a fourth aspect of the recent development of our science, the increasing interest in the problems of international relationships. If political science has, to a considerable extent, detached itself from economics, sociology, and jurisprudence, it may almost be said to have annexed international law. It is coming to be recognized that the state cannot be adequately investigated or understood as standing in isolation, but only as a member of the family of nations.

A fifth development in this recent period has been the clear recognition of the evolutional and dynamic character of politics. The eighteenth-century conception of government as the product of mechanical contrivance, of artifice and rational design, has largely given place to an appreciation of its fundamentally instinctive character, and its constantly changing, growing and developing nature. The state must be studied as a vital and dynamic, not as a static phenomenon.

And finally, one other advance within our own time in the field of political science is especially noteworthy. There has always been a close relationship between political thought and political action. We have observed how the treatises on political science have usually been called forth by the events and circumstances of the day, and how they have influenced the course of political development; but it has remained for our own time to establish a more concrete and definite connection between the science and art of politics, between the scholar and the man of action. This connection is found particularly in the increasing number of institutes and bureaus of research.[40] It is found also in the employment of specialists and experts in political science in the various departments of government.

[37] R. Michels, *Political Parties;* M. Ostrogorski, *Democracy and the Organization of Political Parties,* in two volumes; and C. E. Merriam, *The American Party System.*

[38] A. L. Lowell, *Public Opinion and Popular Government;* and *Public Opinion in War and Peace;* and W. Lippmann, *Public Opinion.*

[39] R. C. Brooks, *Corruption in American Politics and Life.*

[40] A good review of the work of bureaus of research will be found in the "Progress Report of the Committee on Political Research," in the *Amer. Pol. Sc. Rev.,* Vol. XVII (May, 1923), pp. 295–308.

The practical character of these agencies is their outstanding feature. They are engaged upon concrete and definite problems which confront the various divisions of government. Using, so far as it is available, the data of political science, they are undertaking the solution of the pressing problems of politics and administration Their work can be decribed as that of applied political science. Just as the engineer applies the data of physics and of chemistry to the solution of the concrete problems of industry, so the bureaus of research are undertaking a similar application of the results of pure political science to the practical problems of state-craft. Three types of bureaus of research exist in the United States. Some are voluntary organizations maintained by private endowment. Others have been established by the government itself and constitute official departments. A third class are those which exist in state universities, enjoying the independence which an academic connection affords, both from the governments which they serve and from any business or capitalistic interests which private endowment might imply. Some of these bureaus specialize in the problems of particular cities; others concern themselves with administrative and legislative problems of an entire state; and at least one, the *Institute for Government Research,* is doing valuable work in connection with the problems of administration of the federal government. Altogether these institutions constitute one of the most important and interesting developments in the field of political science at the present time.

These features of contemporary political science mark it as having made distinct progress toward a really scientific character. The question is frequently discussed as to whether political science may properly be called a science. There is no doubt that it lacks many of the criteria of the natural sciences. So far from having achieved the exactitude and precision which the physical sciences clearly display, it must be conceded that it has not even advanced to the position which biology or even psychology has attained. But the progress made in the last generation or two constitutes substantial ground for anticipating a perfection in method and in results which will perhaps, in the course of the next half century, entitle it to the dignity of a true science. The scientific method can be resolved into three processes. The first is the accumulation of facts; the second, the linking of these facts together in causal sequences; the third, the generalization from such causal sequences of fundamental principles or laws. As yet political science has not progressed beyond the second stage. If there are any assured principles of politics they are exceedingly few and of the most general sort.

The difficulties which surround the development of political science as compared with the natural sciences are serious. Our science suffers from the lack of a technical terminology.[41] Its vocabulary is a popular one. Like the pebbles on the bed of a stream, the terms which it employs have been worn smooth by constant usage and have lost, if they indeed ever possessed, the sharply defined meanings which must attach to the vocabulary of any science if its discussions and conclusions are to be free from ambiguity. Such terms as "state," "government," "people," "sovereignty," "law," "administration," "public opinion," have such a wide current usage, and are employed with such varying meanings, that they frequently occasion loose thinking and inaccurate conclusions, even when used by the most careful political scientists.

Another limitation under which political science labors is that its phenomena are not capable of control. This indeed is likewise true of some of the natural sciences, particularly of astronomy; but there the handicap has been overcome to a large extent by observations made through long periods of time, and by the mathematical exactness of the results which are possible. Astronomical phenomena occur, moreover, *in vacuo,* unaffected by extraneous influences. The institutions of government cannot be subjected to laboratory tests. The investigator must content himself with observing them in their historical development, subject to an infinite number of modifying and distracting factors. He cannot, for example, subject the initiative and referendum to the conditions of a controlled experiment or isolate them from interfering influences. But if *experimenta lucifera* are impossible in the field of politics, *experimenta fructifera* are constantly being observed. The initiative and referendum as it is actually being operated in Switzerland constitutes for the political scientist a valuable experiment from which he may, with due caution, and taking full account of the special and peculiar circumstances there obtaining, derive results which approach the character of scientific conclusions.

Still another serious difficulty in the path of progress for political science is its dependence upon auxiliary sciences which themselves have not yet been fully developed.[42] To understand the state in its

[41] *Ibid.* pp. 287–289 contains a discussion of the difficulties under which political science labors. Cf. also G. C. Lewis, *Remarks on the Use and Abuse of some Political Terms.*

[42] The relation of political science to related sciences is discussed briefly in Garner, pp. 30–37. For discussions of the relation of Political Science to related sciences in particular, cf. H. E. Barnes, *Sociology and Political Theory;* J. W. Burgess, "Political Science and History," *in Report of the Amer.*

variegated structure and constantly changing functions requires a knowledge of history, economics, sociology, law and psychology not yet possessed. If history has made marvelous advances in revealing the facts of the past, there still remain vast areas unexplored. The influence of economic motives and forces in the field of politics are as yet only dimly perceived. The principles which underlie social organization and activity remain as yet largely unestablished. The nature of law and the principles by which it has evolved are as yet, for the most part, little understood. It is perhaps upon psychology, however, that political science is to-day most conscious of its dependence. Until the psychologists have taught us more about the way in which men think and act, and particularly the way they think and act in groups, progress in political science must be slow. It is evident, therefore, that advance must be made along the entire front of the social sciences. They are so interdependent that no one can progress far in advance of the others. Indeed, we are beginning to realize that the dividing lines between these various fields are after all highly artificial, and that the specialist in each is distinguished from those in the others rather by his point of view than by his different field of view. The same phenomena demand attention from the economist, the sociologist, the historian, the jurist, and the social psychologist, as well as the political scientist. If they approach their problems from somewhat different angles, this ought not to obscure the fundamental unity of their work.

One further obstacle to the advancement of political science requires attention. Though the distinctive feature of recent progress has perhaps been in the direction of reducing political science largely to the character of a descriptive science, eliminating the speculative element with which it was earlier embarrassed, the fact remains that unlike the natural sciences, political science can never become purely descriptive. It must always embody a normative element. As we have seen, both Plato and Aristotle recognized the essentially normative character of politics. Political science can never be content to speak merely in terms of *sein;* it must always also speak in terms of *sein sollen.* This ethical aspect of politics is essential. It signifies that there must always be, not merely a political science, but a polit-

Hist. Assoc., Vol. I (1896), pp. 201–219; J. W. Garner, "Political Science and Ethics," in *Internat. Jour. of Ethics*, Vol. XVII (Jan. 1907), pp. 194–204; Munroe Smith, "The Domain of Political Science," in *Political Science Quarterly* Vol. I (March, 1886), pp. 1–8; W. H. R. Rivers, *Psychology and Politics*, Ch. i; and A. T. Hadley, "Relation of Politics and Economics," in *Pubs. of the Amer. Econ. Assoc.*, 1899.

ical philosophy;[48] and if emphasis during the recent past has been chiefly upon the scientific side, we can be assured that the pendulum will swing again in the direction of philosophy. It is obvious that this connection of political science with philosophy constitutes a further serious impediment, for however exhaustive may be our analysis of the facts, and however successfully we may reduce them to principles and generalizations, there will always remain the broader question of their normative significance in a world of men. Behind the data as to forms of government and methods of administration there must always remain the larger question as to the purpose, the object, the aim of the state itself, and this question is one which can be resolved, if at all, not by the methods of science, but by those of philosophy.

While the recent development of political science has been in the direction of the accumulation of a large volume of facts regarding the structure and function of government and thus has emphasized the descriptive aspects of the subject, there are certain tendencies in the field of theory which are noteworthy. These are, indeed, of a negative character. There has certainly, until the last decade, been very little of a really constructive nature accomplished, and even yet one can say that comparatively little attention is being given to the broader problems of the nature of the state, and its objects and aims. Political science finds itself confronted by a number of theories and doctrines which are the heritage of previous periods. No reconciliation of these often conflicting ideas has been achieved. Writers who discuss the theoretical aspects of politics indulge in a rather free eclecticism, frequently selecting notions which are incompatible and contradictory with a surprising lack of criticism. Time-honored dogmas are cherished, though their failure to coincide with reality is all too obvious. The current, and what may be called orthodox, political theory is dogmatic to a large degree. In this respect political science may be compared with the status of economics until the beginning of the twentieth century. But economics has, within the past two decades, to a large extent thrown off the bondage of classical authority and is endeavoring frankly and candidly to understand the facts that underlie contemporary institutions. This attitude has not, however, yet been achieved in political science. The classical doctrines still hold sway, in spite of the accumulated evidence as to their inadequacy.

The first step toward a realistic and adequate theory of the state is the demolition of outworn doctrines which incumber and embarrass

[48] Cf. W. W. Willoughby, "Political Philosophy," in *South Atlantic Quarterly*, Vol. V (April, 1906), pp. 161–175.

our thinking. A beginning in this direction in political science has, indeed, been made, but only a beginning. We may say that the eighteenth-century ideas of natural law and social compact have now been generally discarded,[44] though they linger still in the popular mind and occasionally find expression in official utterances and the decisions of our courts. "The law of nature," says Oppenheim,[45] "supplied the crutches with whose help history has taught mankind to walk out of the institutions of the middle ages into those of modern times." But these crutches are no longer necessary and should be entirely thrown aside. The Declaration of Independence is still cited as approved authority on occasion, though its doctrines of human equality (if the term be given any political signification), inalienable rights, and government by consent are decisively belied by the evidence of current events. One of the tasks of the political scientist is to rid men's minds of outworn theories. He is often looked upon as a closet philosopher who spends his time in spinning useless, abstract doctrines. But it is the man on the street and the public official who really are devotees of ancient dogmas. A more vigorous effort toward the eradication of such ideas as those just mentioned,—a strenuous educational campaign toward the clarification of the popular mind,—is one of the urgent duties of political science.

Another eighteenth-century dogma which has been seriously undermined by recent scientific investigations, but which still commands the adherence of the layman, is the doctrine of the separation of powers and its correlative principle of checks and balances.[46] Receiving its definite formulation at the hands of Montesquieu, this idea that

[44] The best history and criticism of the doctrine of natural law and of natural rights is D. G. Ritchie, *Natural Rights*. The author in his preface (written in 1894) says:

"When I began, some three years ago, to write a paper on 'Natural Rights,' which has grown by degrees into the present volume, I had a certain fear that in criticising that famous theory I might be occupied in slaying the already slain. Recent experience has, however, convinced me that the theory is still, in a sense, alive, or at least capable of mischief. Though disclaimed by almost all our more careful writers on politics and ethics, it yet remains a commonplace of the newspaper and the platform, not only in the United States of America, where the theory may be said to form part of the national creed, but in this country, where it was assailed a century ago by both Burke and Bentham."

[45] L. Oppenheim, *International Law* (3d ed.), Vol. I, p. 102.

[46] Recent criticisms of the doctrine of the separation of powers and of checks and balances will be found in F. J. Goodnow, *Politics and Administration*, Ch. i; L. Duguit, *La Separation des Pouvoirs*, especially Book I. Ch. i; Bondy, *Separation of Governmental Power;* T. R. Powell, "Separation of Powers," in the *Pol. Sc. Quar.*, Vol. XXVII (June, 1912), pp. 193–214, Vol. XXVIII (March, 1913), pp. 34–48; and J. A. Fairlie, "The Separation of Powers," in the *Mich. Law Rev.*, Vol. XXI (Feb., 1923), pp. 1–44.

the activity of government is logically divisable into executive, legislative and judicial functions and that each of these should be performed by a separate and distinct agency, has dominated both the science and the practice of constitutional government until our own time. In spite of the fact that the English parliamentary system is founded upon the union of executive and legislative work in the cabinet, and that in all other governments modelled upon the British pattern there is in fact no such division as the theory requires, it has remained well-nigh unchallenged until within the last two decades. Even yet political scientists are reluctant to abandon it. But the increasing evidence of its discrepancy with existing fact is gradually bringing it into discredit. The cumbersome and unwieldy character of municipal government organized according to the principle of this triple separation of powers eventually compelled reform in America. The commission and city manager types of municipal government were adopted, not as a result of a general disillusionment with regard to this outworn dogma, but as practical expedients. Their success has, however, more than any other factor demonstrated to students of politics its inadequacy. But as yet no impression has been made upon the popular mind, and attempts by progressive political scientists to dispel the influence of this doctrine have thus far been unavailing. Here again the duty of sweeping the obsolete figments of political dogma from the minds of men lies clearly at the door of political science.

As we have already observed no other single theoretical principle was so important in connection with the emergence and development of the modern state, as that of sovereignty.[47] It contributed, indeed, the doctrinal foundation for the national state as, under absolute monarchy, the state established its independence of external control and its supremacy with regard to internal affairs. If it is difficult to conceive how international law could have developed in the age of Grotius without the assistance of the doctrine of natural law, it is equally difficult to conceive of a theoretical explanation and justification of the national state in other terms than those of the doctrine of sovereignty. This idea became in the course of the seventeenth

[47] Among the more important criticisms of the current theory of sovereignty are H. Krabbe, *The Modern Idea of the State;* H. J. Laski, *Studies in the Problem of Sovereignty; Authority in the Modern State;* and *The Foundations of Sovereignty;* G. H. Sabine, "Pluralism a Point of View," in *Amer. Pol. Sc. Rev.*, Vol. XVII (Feb., 1923), pp. 34–50; and "The State as Power," in *Philos. Rev.*, Vol. XXIX (July, 1920), pp. 301–318; J. N. Figgis, *Churches in the Modern State;* A. D. Lindsay, "The State in Recent Political Theory," in *The Political Quarterly*, No. 1 (February, 1914), pp. 128–145; and L. Duguit, *Law in the Modern State.*

century an accepted principle of political science. It subsequently received various interpretations to meet the needs of opposing parties and to explain the divergent course of political events in different countries. The Revolution of 1689 in England involved a modification of the doctrine through the attribution of sovereignty to parliament instead of the king; and the popular movement in France in the eighteenth century was based upon the premise that sovereignty resides in the people. During the nineteenth century, when an elaboration of constitutional government in various countries presented a multiplicity of aspects of authority, still further modifications of the theory were necessary. In the United States a federal scheme of government offered special difficulties in the location of the sovereign power. Is sovereignty an attribute of the federal government or of the states? Or, must we conceive it to have been divided between the two? If an attribute of the federal government alone, in what organ is it to be found? Obviously not in Congress, nor in the President, nor in the Supreme Court since all of these, so far from being *legibus solutus*, derive their powers, always limited, directly from the law. Nor is it other than the veriest fiction to speak of sovereignty as inherent in the amending process, involving as it does the coöperative action of seventy-four different legislative chambers. "State organ" theories, which attempt to identify the elusive sovereign with some particular branch, or agency, of government, under the complicated systems of modern constitutionalism are obviously fictitious.

Nor is the attempt to attribute the sovereign character to the state as a whole in its corporate capacity, which is the most recent form the doctrine has taken,[48] fraught with much less difficulty. Confronted with the actuality of contemporary international law and international organization, how can the contention be sustained that the state is legally supreme? An increasing body of international obligations imposed upon all members of the family of nations attest the existence of a higher law than that which may be conceived as the product of their several wills. Certainly the creation of the League of Nations, and its auxiliary agencies, leaves little actual basis for the doctrine of state sovereignty. But it is coming to be equally apparent that this theory is likewise opposed to reality with respect to internal relationships. The rights by which associations of individuals, such as churches, exist and pursue their ends and purposes

[48] This form of the doctrine of sovereignty has been developed chiefly by German writers. Cf. G. Jellinek, *Allgemeine Staatslehre* (2d ed.), Kaps. vi, xiv. But see also Woodrow Wilson's essay on "Sovereignty," in *An Old Master and other Essays*, pp. 61–96; and W. W. Willoughby, *An Examination of the Nature of the State*, Chs. ix–xi.

are not derived from the state, and we recognize the wrongfulness of state encroachment upon their proper spheres of activity. The same is true of economic groups, such as trade unions. The fiction that all such group-units exist by virtue of state authority or state permission, and derive such powers as they legitimately exercise from a central source in the state's will, though still adhered to, not only by lawyers and laymen, but even by the majority of political scientists to-day, cannot be successfully maintained. These group-units, as Maitland has so clearly shown,[48] are in their nature the same as the state itself. The state is merely one species of the genus, corporation, and all such corporate bodies derive their right to exist and to function from a law antecedent to and not flowing from the state.

One phase of the doctrine of sovereignty deserves special attention, namely, that of popular sovereignty. The idea that supreme power resides in the people is a cardinal principle of modern political thought. Upon it rests the entire theoretical superstructure of democracy. The practical implications which have been drawn from it include the principles of universal suffrage, territorial representation, the initiative and referendum, and the plebiscite. Indeed, no idea appears more fundamental in the modern constitutional state than that all power emanates from the people. The history of this notion can be traced back through Rousseau in France and Locke in England, the antimonarchical writers of the sixteenth century, and the champions of the popular cause in the Conciliar period to Marsiglio of Padua; and suggestions of it can indeed be found in early medieval and ancient political philosophy. It is only in our own day, however, that critical examination of this postulate has been seriously undertaken. Like so many of the terms employed in political science, the "people" is one of various meanings and ambiguous signification. At times it is used as if it meant the entire mass of the population of a state who in their unorganized and amorphous character generate a public opinion which dominates and controls the action of government. At other times, the term is given a much narrower and more definite meaning, and is used to describe the organized electorate which, through votes cast at the polls, is presumed to exercise the determining authority in the state. It is obvious, however, that if the term is used in the former sense we have to do with an influence which, however potent in government, is extra-legal both in composition and in effect. The essence of sovereignty is by definition legal authority, and to attribute to the mass of the population the character of sovereign, is to disregard this

[48] In his Introduction to O. Gierke, *Political Theories of the Middle Ages*, p. ix.

essential quality of sovereignty. On the other hand, the electorate whose organization rests upon law, and whose action is definitely prescribed by law, is clearly not the sovereign power, since it is in no sense *legibus solutus*. The logical fallacy involved in the double meaning of the term "people" is clearly evident in the discussion of sovereignty by so learned an authority as Professor A. V. Dicey[50] of England, who, recognizing the fact that the English parliament to which he attributes legal sovereignty, is itself responsible for its action, sets up a second sovereign in the people. But as to whether by the people he means the entire mass of the population or the electorate is not clear. If it is the former, the responsibility of parliament is merely to a general outside public opinion which is certainly in no sense a legal relationship and would, therefore, in no way involve a limitation of parliamentary sovereignty. But if he means the electorate, it is clear that, though legally defined, this body cannot be described in any sense as sovereign since both its composition and function rest entirely upon parliamentary statute.

The difficulties in the application of the doctrine of sovereignty and its incompatibility with the actual facts of present-day politics have become sufficiently apparent to arouse a widespread suspicion in the minds of political scientists that this too may be another outworn and obsolete shibboleth, the elimination of which from political theory is necessary for future progress. Harold J. Laski in England, Léon Duguit in France, H. Krabbe in Holland may be mentioned as among the leading critics of the orthodox doctrine; a number of lesser writers have participated in the debate. Indeed, no other question in the entire field of political science has aroused so much interest or been subjected to so keen a discussion in recent years.

III. ITS FUTURE

In forecasting the progress of political science during the next generation, we must take account, not only of its present development and of those tendencies within the science itself which are already visible, but also of the present character of government and of tendencies which already promise its transformation. Political science and government have always evolved hand in hand. If we can clearly envisage changes in the organization and function of government, we can be sure that the science of politics will experience a corresponding development.

[50] *Introduction to the Study of the Law of the Constitution* (7th ed.), pp. 68 *et seq.*, 424 *et seq.* Cf. also D. G. Ritchie, "The Conception of Sovereignty," in *Ann. Amer. Acad.*, Vol. I (Jan. 1891), pp. 385 *et seq.*

For four centuries the state has been the dominant and indeed well-nigh exclusive political institution, overshadowing church, guild, and trade union, until it has come to represent to our minds the sum total of political authority. We must remember, however, that during the middle ages this was not the case; that in that period the church and empire, the free city and the feudal baron competed with the state for men's allegiance. And what has once been true may come to pass again. The accumulating evidence of the decay of the modern national state portends a new era in which other human associations, other corporate group-units, may challenge successfully the state's claim to supreme and all-embracing power. It is particularly in the field of industrial relationships that we can mark most definitely this tendency. The full effect of the industrial revolution in the development of a complex and highly articulated economic organization is only now coming to be appreciated. If the political scientist is fully to understand the import and meaning of the influences which are so potent in the civilization of our day, he must familiarize himself with the fundamental facts of economics and their real significance.

In the simple and uniform social organization of the early nineteenth century, the structure of government was reared upon the foundations of geographical constituencies. A fairly homogeneous system of industry, predominantly agricultural, constituted a satisfactory basis for a representative system which embodied the essential principle of constitutional government. But with the urbanization of population and the highly diversified character which industry has now assumed, there is a visible and growing failure of our representative institutions. A legislature or a parliament, chosen according to the principle of territorial representation, no longer can speak with authority as the mouthpiece of the innumerable and often-conflicting interests of society. No single tendency is more general or significant than the decline in the influence and prestige of representative assemblies. The British House of Commons, itself the mother of parliaments, has suffered irreparably. The American Congress has ceased to command the respect which once was its recognized due. And our state legislatures have well-nigh become a by-word and a reproach on account of their ineptitude, weakness, and frequent corruption. The various interests concerned in legislation have found it necessary to develop extra-legal means by which to direct and control the course of law-making. We are no longer startled when we discover that the lobby of the Manufacturers' Association is exercising a determining influence in connection with the enactment of the tariff; or that the American Federation of Labor

has placed an effective veto upon bills inimical to labor's interest; or that the railway brotherhoods, by the threat of a strike, can force through Congress a measure, such as the Adamson law, against the will of a large majority of its members; or that the American Legion can command the support of a majority of the members of Congress for the soldiers' bonus; or that the agricultural block can dictate governmental policies affecting the American farmers. Is it not clear that the processes by which laws are made and governments administered are undergoing transformation? And is it too much to expect that these powerful economic forces which to-day, in unofficial guise, are really controlling the nation's destiny will ere long assume a more definitely regular and legalized position in the state? The *de facto* tends always to become the *de jure*.

Political science must seriously consider a remodelling of our representative institutions in such a way as to make them really functional. Representation of interests instead of geographical constituencies, in some form or other, can clearly be previsioned. If the experiments with the soviets in Russia do not offer promise of a solution of this problem; if the creation of a system of economic councils and a national economic conference in Germany is too recent to afford a basis for judgment; if the proposals of guild socialism [51] in England appear fantastic and impracticable, at least these phenomena indicate the trend which political evolution is taking. Men are coming to be much more interested in their economic than in their purely political relationships. If democracy is to endure it must be transformed from a purely political into an economic democracy, and this transformation involves the legal recognition of the increasingly powerful bodies which to-day command the allegiance and coöperative action of the individual. Is it certain that in the contest between the state, resting its claims to allegiance upon the outworn dogmas of sovereignty, and these vital functional group-units, allegiance to which springs from definite economic interest, the state will always have the victory? Authority there must always be, but that it shall always emanate from a hypothetical central source which we describe as the state is not so evident. The pendulum of political evolution which swung from the monistic universalism of the early middle ages to the pluralism of the period of the "estates," and then swung back to the monism of the epoch of the national state, appears now about to swing

[51] On the theory of guild socialism, Cf. G. D. H. Cole, *Self-Government and Industry*; and *Social Theory*; N. Carpenter, *Guild Socialism*; S. G. Hobson, *Guild Principles in War and Peace*. An excellent review and criticism of the guild theories is F. W. Coker, "The Technique of the Pluralistic State," in *Amer. Pol. Sc. Rev.*, Vol. XV (May, 1921), pp. 186–213.

again in a pluralistic direction. We may not be able to clearly envisage the detailed political arrangements of the new order. John Locke and his fellow-reformers of the seventeenth century could not foresee the particular features of the cabinet system of government. But to us, as to them, the imminence of an impending change of the first magnitude ought to be beyond question. To anticipate this transformation and to facilitate its accomplishment is the obvious opportunity of political science. Revolutions are the result of pent-up forces which break at last through the barriers of ancient and outworn law, and carry destruction before them. The highest statesmanship consists in understanding the direction and force of the current and in removing in time the obstacles which impede the inevitable flow of events. A blind resistance to the relentless surge of economic social forces, to the compelling course of progress, can only bring disaster.

The next generation will also witness a serious attack by political science on the problem of the nature of law and its relationship to government.[52] We have, particularly in England and America, been too long under the influence of Austinian jurisprudence. Here again a dogma conditions and determines our thinking. Law is conceived as the mandate of the sovereign state; its essential element is *will*. Only those rules of conduct which embody the state's will are considered law. But already the development of international law is seriously undermining this *a priori* legal philosophy. International law cannot be resolved into the expressions of the will of individual states without the employment of the most transparent fictions. It springs from a world-wide public opinion or sense of right; it is sanctioned by the same universal sense of right; it imposes obligations upon states against their wills; and it is coming to be more and more recognized and obeyed.

But even within the state, we are beginning to see that law does not emanate from the sovereign will of the state. It is indeed strange that it should ever have been thought to do so. The relation between custom and law has always been recognized, but this relationship has been clouded and partly obscured by the dogmas, first, of natural law, and then of sovereignty. Law, in fact, is a native growth in all human societies. Like language, it springs spontaneously from the deep soil of human relationships. Recent anthropological and sociological researches leave no excuse for misunderstanding regarding its real origin or nature. Wherever we find an association of

[52] Cf. H. Krabbe, *The Modern Idea of the State;* L. Duguit, *The State as Law;* and H. Kelsen, *Der Sozialogische und juristische Staatsbegriff.*

men, there we find law governing their relationships. We live today under many different laws, yet all are essentially one in origin and character. There is the law of the church, the law of the trade union, the law of the fraternal society, the law of the social club, the law of a university student body, the law of the political party, as well as the law of the municipality, of the commonwealth, of the nation, and of the world. Law inter-penetrates and controls our lives at every point. Whatever the relationship that exists between us and any of our fellows, it is regulated by law. Moreover, the relations between groups and associations of individuals are controlled by law. May we not define law broadly as those rules of conduct, prescribing what is right and forbidding what is wrong, in regard to the relationships of individual or corporate members of any society, originating in and sanctioned by the general sense of right of the society?

The implications of this conception of law are of the highest significance to political science. The law of the state is merely one kind of law among many. Its origin and nature is the same as that of all other kinds of law. So far from being an expression of the sovereign will, the law of the state is merely the body of rules regulating the relations of members of a particular society, or group-unit. So far from any of the organs or agents of this group unit being *legibus solutus*, they are bound and controlled by law at every turn. Nor is the state itself above the law. Rather is it limited and obligated at every turn. It is subject to international law in its relations to other states. It is legally restricted in relation to the church and to the latter's members. It must not encroach upon their freedom of worship. In its contact with individuals it must not invade that sphere of liberty of the spoken and written word, of free movement, and of freedom in engaging in private business, which is the hard-won legal fruit of centuries of struggle. We are beginning to recognize that such other group-units as trade unions have a legal status and legal rights which the state may not impair. And if it be asserted that these individual and corporate rights may undergo transformation in the future as they have been transformed in the past, this merely means that the law is dynamic and not static; that the law itself is subject to change; not that the arbitrary expression of the state's will is law. This view of law involves a change in emphasis from the mandatory to the normative element. The content of the rule, rather than its expression of will, attracts attention; not who prescribes it, but whether the prescription adequately adjusts conflicting interests, becomes important.

We may expect in the period upon which we are entering that much more attention will be given by political scientists to the aims and purposes of the state than has been the case in the past. Studies of governmental structure and function will continue to be made, but the emphasis will doubtless shift in large degree to the problem of the purpose for which the state itself exists.[53] The old controversy between socialism and individualism, argued to a large extent upon *a priori* grounds, will give place to a more scientific analysis of the accomplishments of which the state is capable, and this analysis will certainly reveal the fact that no single formula can demark the profitable limits of state action. It will be discovered that the state is better adapted to perform certain functions than any other agency, while with regard to many other ends, society can be better served by non-political organizations.

But in addition to the attainment to a more thoroughly scientific analysis of the limits and competence of state action, is it too much to hope that a broader and more vivifying, a clearer and more inspiring, civic ideal will give shape and character to our conception of the state and of its purpose and significance in the process of progressive social evolution? The age in which we live is one of disillusionment. Science has shattered our old-time faith. Perhaps the best of which we are capable for the moment is a pragmatism which looks only to the next immediate step, and views with scepticism all attempts at teleological explanations. But the human mind is incapable of permanently denying itself the satisfaction of an ultimate ideal. What form political philosophy will take in the future, we cannot guess, but that there will be a political philosophy, as well as a political science,—a philosophy which will seek to understand the deeper meaning of the state's purpose and end,—may be confidently expected.

The period upon which we are entering will witness a much greater utilization by politics of the results of auxiliary sciences. We are already beginning to appreciate the necessity of studies in human behavior as a means of determining the limits of efficient political action. Such studies as those of Graham Wallas[54] and Walter Lippman[55] have decisively directed our attention to the importance of social psychology in the solution of many of the more

[53] An excellent example of this changing emphasis is A. N. Holcombe, *Foundations of the Modern Commonwealth.*

[54] *Human Nature in Politics; The Great Society;* and *Our Social Heritage.*

[55] *A Preface to Politics;* and *Public Opinion.*

evasive problems of political science.[56] The employment of expert psychologists, using relatively objective methods, in connection with the work of classifying and standardizing American federal administrative personnel is a first step which we may expect to be followed by many others of the same kind. The trend of political science will also involve a greater utilization than heretofore of the data of economics, simply because modern life is so highly industrialized as compared with previous epochs. The question of whether important social problems are capable of solution through governmental action, and, if so, by what means, will involve a deeper penetration by political scientists into the facts and principles of sociology. We may also expect the student of political science to find it necessary to study more carefully and thoroughly the history, the underlying principles, and the voluminous product of jurisprudence. More than ever before the political scientist must understand the law. We can therefore anticipate a reaction against the highly specialized form which political science has taken, and the development of a more synthetic approach to social problems in which the various social sciences will all make their due contribution.

The methodology of political science[57] in the future will be more objective even than it is in our own time. History will continue to be, perhaps, the principle auxiliary, and the historical approach will continue to be fundamental, but other objective methods will be employed. Comparative studies of institutions, as now, will be made, but with far greater accuracy of detail and precision in analysis. Statistics will be drawn upon more heavily than in the past and we may even expect to see the development of a special discipline of political statistics such as has already taken form for economics. The survey,[58] now used to a considerable degree by sociologists and economists, will find its place in studies of government and we may expect it to achieve a higher perfection than hitherto. We cannot foresee a time certainly when political science will be reduced to the definiteness of a natural science, but we can anticipate marked progress in that direction.

We have every reason to expect that in the next generation the

[56] A good review of the literature on this interesting subject is H. F. Gosnell, "Some Practical Applications of Psychology in Government," in *Amer. Jour. of Sociology*, Vol. XXVIII (May, 1923), pp. 735–43.

[57] Cf. The "Progress Report of the Committee on Political Research" cited above.

[58] A good example of the use of the survey in connection with a political problem is the Cleveland Foundation's *Report of the Survey of the Administration of Criminal Justice in Cleveland Ohio.*

contact between political science and the actual operation of government will be much closer than it is to-day. We have seen during the last generation a growing appreciation on the part of business men of the work which economists are doing. There is every reason to expect a similar increase in the influence of political science in the actual work of government. What we have called applied political science may be expected to attain markedly greater proportions than it has hitherto. Bureaus of research will be much more generally used and their influence much more definitely felt. The expert will supersede the amateur. The well-trained student of politics will find a ready place in the administrative and legislative branches of government, as we already recognize his importance in the judiciary.

These changes do not mean a new heaven and a new earth, but they imply progress on that long road which humanity is pursuing and, though the goal may be as distant and obscure as ever, the devoted student can feel an unquestioned confidence in the value of the work he is doing in discovering and clarifying the principles upon which a government must rest if it is to serve the needs of its day and generation. Will there emerge from these various lines of investigation, from the accumulation of fact and the establishment of factual correlations, a new, a more adequate, a more realistic, comprehensive, and constructive theory of the state? Certainly this should be our goal. Finality we may recognize as beyond our reach; but a synthesis which shall, in scientific spirit and method, interpret for our age the innumerable and complex phenomena of politics, which shall illumine the entire field of government and law, may be indeed within the compass of our powers.

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CHAPTER IX

JURISPRUDENCE

By Roscoe Pound

I. HISTORY OF JURISPRUDENCE

1. GREEK PHILOSOPHY

In common with other sciences, the science of law has its roots in Greek philosophy. In Greek thinking law in the lawyer's sense is not clearly differentiated from other agencies of social control. The Greek word which we translate as "law" is used to mean ethical custom, religious rites, law in general, a rule of law, and social control as a whole. The Greek city-state was a politically organized society. But it was very close to and in many aspects in transition from a kin organized society. Social and political contests between the kindreds and the kinless took form in competition between a traditional tribal law and the politically enacted law of the city-state. This competition attracted the notice of Greek philosophers. At the same time their notice was drawn to the great diversity of ethical customs and laws both as between Greeks and barbarians and as between Greek cities themselves. Wide commercial intercourse with all peoples showed that no two were alike in these respects, and experience taught that the same Greek city often had different bodies of legal precepts at different times. This circumstance suggested that the legal order was a mere matter of enactment or convention subject to the arbitrary control of those who wielded political power for the time being. But there was obvious menace to the general security in such a conception, especially in view of the contests of oligarchy and democracy for political supremacy which were the staple of life in the classical Greek city. Hence the philosophers sought to find some assured basis of social control other than tradition and habit of obedience, on the one hand, or the will of the politically supreme for the moment, on the other hand. They found this basis in the analogy of the constant and universal phenomena of physical nature. To them the end of law was an orderly maintenance of an idealized

social *status quo*. The legal order was an ordering of men to keep each in his appointed place in the politically organized society of an ideal Greek city. Right and law had their basis in a harmony or fitness involved in the nature of things. They were independent of human will and had universal validity.[1]

2. ROMAN LAW

Roman legal genius gave practical effect to Greek philosophical ideas as to the basis of law. The Institutes of Justinian define justice as the set and constant purpose of giving to every one his own. In other words, the social order has defined certain things as belonging to each. Justice consists in rendering him these things and in not interfering with his having and using them within the defined limits. What to the Greek philosophers was natural right, the right or the just by nature, in the hands of Roman jurists became natural law—a speculative body of universal ideal principles, involved in the nature of things, and serving as the basis of lawmaking, of juristic development of legal materials, and of criticism. The attempt to make the actual law conform so far as possible to this ideal standard led to the classical period of Roman law. It substituted a scientific philosophical-juristic technique for the traditional art of the lawyers of the Republic.[2]

3. THE BEGINNING OF THE SCIENCE OF LAW IN THE MODERN WORLD

Modern legal science begins with the teaching of Roman law in the Italian universities in the twelfth century. Behind this was the academic juristic theory of the continuity of the empire; the assumption that the medieval empire was the empire of Augustus and Constantine and Justinian. The text of the Corpus Juris was taken to be authoritative legislation binding upon "the empire" and hence upon all Christendom. The *Glossators* (XII and XIII centuries) took up the text title by title and section by section, and interpreted

[1] Aristotle, *Nicomachæan Ethics*, bk. v, bk. viii, 7, 2–4; Aristotle, *Politics*, i, 1, 9, i, 13, iii, 1, iii, 4–5, iv, 12; Plato, *Republic*, ii, 368, iii, 397–398. See F. Berolzheimer, *The World's Legal Philosophies*, pp. 46–77. On Greek law see P. Vinogradoff, *Historical Jurisprudence*, Vol. II.

[2] Cicero, *De Officiis*, ii, 12; Cicero, *De Republica*, i, 32; F. Berolzheimer, *World's Legal Philosophies*, pp. 78–92; K. Hildenbrand, *Geschichte und System der Rechts und Staatsphilosophie*, §§ 131–135, 143–147; M. Voigt, *Das Ius Naturale, aequum et bonum, und Ius Gentium der Römer*, I, §§ 16, 35–41, 44–64, 86–96. See also W. W. Buckland, *Text Book of Roman Law*, pp. 52–55; F. Pollock, *History of the Law of Nature, Essays in the Law*, pp. 31–79.

or explained it, distinguishing cases and putting their distinctions in the form of rules or maxims. This is the first type of juristic activity. In the middle of the thirteenth century the glosses, or interpretations of the several glossators, were brought together and edited under what is known as *The Gloss*. By this time the possibilities of analytical interpretation of the text, section by section, were exhausted.

A new method was developed by the *Commentators* or *Post Glossators* (latter part of XIII century to latter part of XV century). They made the simple method of the Glossators into a highly complicated one based upon formal logic and the scholastic philosophy. Where the Glossators had put system into particular texts, they began to put system into subjects and departments of the law.

At the end of the fifteenth century the revival of learning, the influence of philosophical thinking, and humanist study gave rise to scientific ideas that led to a new school of jurists. The *Humanists* were pioneers in the scientific study of law as a whole, as distinguished from study of texts and titles of the Corpus Juris. *Cujas* (1522–1590) is the pioneer of legal history. *Donellus* (1527–1591) began systematic exposition of the law as a whole so that the analytical system of Roman law, as it was studied in the nineteenth century, runs back to him.

In the Middle Ages the primitive idea of the end of law as a mere keeping of the peace came back for a time with Germanic law. Study of the Roman texts brought in the Roman version of the Greek conception of law as an orderly maintenance of the social *status quo*. But where the Greeks thought of a stationary society, corrected from time to time with reference to its ideal, the Middle Ages thought of a stationary society resting upon authority and determined by custom. Law was a system of precepts imposed by authority or by custom to maintain this stationary society as it was. In the thirteenth century philosophers had begun to consider the philosophical-theological bases of right and of the binding force of law. Philosophical jurisprudence became an important branch of theology. Thus philosophy, historical study of Roman law, and systematic study were preparing the way when two events of capital importance established a new science of law.[8]

[8] On the Glossators, see F. C. von Savigny, *Geschichte des romischen Rechts im Mittelalter*, V, pp. 222–240; R. Stintzing, *Geschichte der deutschen Rechtswissenschaft*, I, pp. 102–105; J. Brissaud, *Histoire générale du droit Français*, I, p. 210; G. Salvioli, *Storia del diritto Italiano*, 8 ed., pp. 108–113.

On the Commentators: Calisse in Continental Legal History Series, *General Survey*, pp. 142–147; F. C. von Savigny, *Geschichte des römischen Rechts im*

4. THE MODERN SCIENCE OF LAW

A. The Law-of-Nature School

At the Reformation the authoritative theological foundation of legal theory broke down. Jurisprudence was emancipated from theology. In the fore part of the seventeenth century the academic doctrine of the continuity of the empire and consequent binding force of the Roman law books broke down also. Law was emancipated from the text of Justinian. As a result, the science of law and the authority of legal precepts were rested upon reason and upon reason only. This movement culminated in the eighteenth-century law-of-nature school, whose influence is still felt in jurisprudence. Jurists of this school held that a complete and perfect system of law might be constructed upon principles of natural law to be discovered by reason in the nature of the abstract man. The practical result was to identify law with what the particular writer thought ought to be law, influenced by prepossessions derived from the existing social and legal order. But the attempt to make legal precepts conform to what each writer thought on ethical grounds they should be, had a liberalizing influence and gave the impetus to an era of creative lawmaking that is classical for the modern world. The schools of jurists which obtain today keep up lines of cleavage involved in different aspects of eighteenth-century philosophical jurisprudence.[4]

Mittelalter, V, pp. 353–366, VI, pp. 1–25; R. Stintzing, *Geschichte der deutschen Rechtswissenschaft*, I, pp. 106–133; J. Brissaud, *Histoire générale du droit Français*, I, pp. 213 ff.

On the Humanists: Continental Legal History Series, *General Survey*, pp. 252–259; R. Stintzing, *Geschichte der deutschen Rechtswissenschaft*, I, pp. 133–154; G. Salvioli, *Storia del diritto Italiano*, 8 ed., §§ 124–131.

[4] On the emancipation of jurisprudence from theology, the decisive books are: N. Hemmingsen (Hemmingius), *De lege naturæ apodictica methodus* (1562); H. Grotius, *De iure belli ac pacis* (1625). Read the preface to Hemmingsen (to be found conveniently in C. von Kaltenborn, *Die Vorlaufer des Hugo Grotius*, II. p. 31), and Grotius' Prolegomena, § 11 (convenient transl. by Whewell).

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On the Law-of-Nature School: H. Grotius, *De iure belli ac pacis* (1625) I, 1, 3–6, 8–11, II, 1, 1, II, 1, 11, II 10, 13, II, 17, 2 § 1; S. Pufendorf, *De iure naturæ et gentium* (1672) I, c. 7, §§ 6–17, IV, 4; J. J. Burlamaqui, *Principles of Natural and Politic Law* (1747) pt. I, c. 5, § 10, and c. 10, §§ 1–7 (use Nugent's transl.); E. Vattel, *Law of Nations* (1758) bk. I, c. 2, §§ 15–17 (there are many English versions); W. Blackstone, *Commentaries on the Laws of England* (1765) I, pp. 38–43; T. Rutherforth, *Institutes of Natural Law* (1754–1756), bk. II, c. 5, §§ 1–3.

B. The Nineteenth-Century Schools.[5]

(1) The Historical School

In order of time the first of the nineteenth-century schools is the Historical School, whose founder and leading exponent was *F. C. von Savigny* (1779–1861). The immediate influence that led to this school was the philosophy of Kant which undermined the method of the eighteenth century and formulated the idea of legal justice which was accepted in jurisprudence throughout the nineteenth century. Two forms of this school may be distinguished: the *German Historical School*, whose method is philosophical and historical, and the *English Historical School* (founded by *Sir Henry Maine*, 1822–1888) whose method is comparative and historical. In one form or another the Historical School was dominant in Continental Europe and in America in the latter part of the nineteenth century.

Historical jurists consider all social control; they do not confine their conception of law to that part of social control which is achieved through politically organized society. They regard law as something that is not and in the long run cannot be made consciously. They see chiefly the social pressure behind legal precepts, and look behind the sanction of the state to habits of obedience, displeasure of one's fellow-men, public opinion, and social standards of justice. To them the type of law is custom. As a rule their philosophical position has been Hegelian. Hence, along with historical method, they always give us some form of idealistic interpretation of legal history—either an ethical idealistic interpretation, regarding legal history as a record of the realizing or unfolding of the idea of right, or a political idealistic interpretation, regarding it as a realizing or unfolding of the idea of freedom. Maine's famous generalization, that the history of law is the record of a progress from status to contract, is an example of the latter.[6]

See F. Berolzheimer, *The World's Legal Philosophies*, pp. 115–134, 141–156; D. G. Ritchie, Natural Rights, Chap. 3.

On the Law of Nature in America, see C. G. Haines, "The Law of Nature in State and Federal Decisions," 25 *Yale Law Journ.* 617 (1916).

[5] On methods of jurisprudence and schools of jurists, see F. Berolzheimer, *The World's Legal Philosophies*, Chaps. v, vii; F. Pollock, *Oxford Lectures*, 1–36; F. Pollock, *Essays in Jurisprudence and Ethics*, 1–30; J. Bryce, *Studies in History and Jurisprudence*, Essay 12; P. Vinogradoff, *Historical Jurisprudence*, I, pp. 103–160; R. Pound, "The Scope and Purpose of Sociological Jurisprudence," 24 *Harvard Law Rev.*, 591.

[6] F. C. von Savigny, *Vom Beruf unserer Zeit für Gesetzgebung und Rechtswissenschaft* (1814), Chaps. i–ii (use 3 ed. 1840 or Hayward's transl.); A. W.

(2) The Metaphysical School

Philosophical jurisprudence was carried on by a *Metaphysical School* which in Continental Europe divided the field with the Historical School, although in the last quarter of the nineteenth century the Historical School prevailed wholly except in Italy and in Scotland. The Metaphysical School sought to work out an ideal body of principles which were to serve as a basis for systematizing the law, and for criticism of legal institutions, legal doctrines and legal precepts. It deduced these principles from a fundamental idea of right or some single fundamental formula of justice. Jurists of this school are concerned immediately with the element of the law which is made up of traditional or current ideas as to the end of law, and as to what legal precepts should be in view thereof. Thinking primarily of the ideal element in the law, they agree with historical jurists that law is not made but is found. They look at the ethical and moral bases of legal precepts rather than at their sanctions. English and American jurists of the past generation affected to ignore the metaphysical jurists. But it is a mistake to suppose that their speculations were wholly in the air and without practical result. On the contrary, they gave the Historical School its idea of right, and so fixed the lines of its ethical interpretation of legal history. Also they gave content to the idea of freedom which historical jurists assumed was realizing in the development of law. Thus they fixed the lines of the political interpretation. Through the Historical School they affected profoundly the actual course of decision and of law writing.[7]

Small, "The Thibaut-Savigny Controversy," 28 *Am. Journ. Sociology*, 711; H. S. Maine, *Ancient Law*, Chap. 5; H. S. Maine, *Early History of Institutions*, lect. 13. For critiques see, F. Berolzheimer, *The World's Legal Philosophies*, p. 204; N. M. Korkunov, *General Theory of Law*, (Hastings' transl.) pp. 116–122; R. Stammler, *Ueber die Methode der geschichtlichen Rechtstheorie* (1888); E. Lambert, *Études de droit commun législatif*, I, pp. 127–141; R. Saleilles, "L'école historique et droit naturel," *Revue trimestrielle de droit civil*, I, p. 80 (1902); R. Pound, *Interpretations of Legal History*, lect. I (1923).

As to the ethical and political idealistic interpretations, see R. Pound, *Interpretations of Legal History*, lects. II, III.

[7] G. F. W. Hegel, *Grundlinien der Philosophie des Rechts* (1821) ed. by Gans, 1840, new ed. by Lasson, 1911, transl. by Dyde as *Hegel's Philosophy of Right*, 1896; H. Ahrens, *Cours de droit naturel* (1837) 8 ed. 1892 (24 editions in 7 languages); A. Boistel, *Cours de philosophie du droit* (1870) new ed. 1899; J. Lorimer, *Institutes of Law* (1872), 2 ed., 1880; A. Lasson, *Lehrbuch der Rechtsphilosophie*, (1882); W. G. Miller, *Lectures on the Philosophy of Law*, (1884); W. R. Herkless, *Lectures on Jurisprudence* (1901); T. H. Green, *Principles of Political Obligation*, reprinted 1911.

For critiques of metaphysical jurisprudence, see J. C. Gray, *Nature and Sources of the Law*, §§ 7–9; J. Bryce, *Studies in History and Jurisprudence*,

(3) The Analytical-School

On the Continent the breaking up of the law-of-nature school led to a historical and to a metaphysical school. In England revolt from eighteenth-century jurisprudence, in the form in which it had been set forth by Blackstone, gave rise to the *English Analytical School.* Its founder, *John Austin* (1790–1859) was a zealous utilitarian. But this school broke wholly with philosophy. It sought to take developed systems of law exactly as they are, to analyze the legal institutions and legal precepts and legal conceptions that actually obtain, and in this way to find the materials for a universal science of law. Jurists of this school consider only developed systems of law, that is, on the Continent, the Roman law and its derivatives and the Germanic law; in English-speaking countries, the Roman law and its derivatives and the Anglo-American common law. They regard law as something made consciously by lawmakers, whether legislative or judicial. They conceive that legal precepts derive their authority from the force and constraint behind them; they take the crucial point to be enforcement by the judicial organs of the state. To them nothing is law unless it can vouch that enforcing agency. They take a statute to be the typical law, as the type of a legal precept deliberately imposed by the state.[8]

C. The Transition to the Twentieth-Century Schools

Each of the nineteenth-century methods sought to construct a science of law solely in terms and on the basis of the law itself. This was true especially of the Analytical School and the Historical School, which set up a critique of the law of the time and place in terms of

631–634; F. Pollock, *Essays in Jurisprudence and Ethics*, pp. 28–30; N. M. Korkunov, *General Theory of Law* (transl. by Hastings) § 4; K. Bergbohm, *Jurisprudenz und Rechtsphilosophie*, §§ 6–15; R. Pound, *Introduction to the Philosophy of Law*, lect. 1.

[8] The great work of this school is J. Austin, *Jurisprudence* (1832) 5 ed. 1911. See also T. E. Holland, *Elements of Jurisprudence* (1880) 13 ed. 1924; J. W. Salmond *Jurisprudence* (1902) 7 ed. 1924; W. Markby, *Elements of Law* (1871) 6 ed. 1905; W. J. Brown, *The Austinian Theory of Law* (1906); F. Pollock, *First Book of Jurisprudence* (1896) 4 ed. 1918; J. C. Gray, *The Nature and Sources of the Law* (1909) 2 ed. 1921; K. Binding, *Die Normen und ihre Uebertretung*, I (1872) 2 ed. 1890; E. R. Bierling, *Kritik der Juristischen Grundbegriffe* (1877–1883); E. R. Bierling, *Juristische Prinzipienlehre* (1894–1911); F. Somlo, *Juristische Grundlehre* (1917); E. Roguin, *La Science Juridique Pure* (1923). For critiques of analytical jurisprudence, see H. S. Maine, *Early History of Institutions*, lect. 13; F. Berolzheimer, *World's Legal Philosophies*, p. 211; K. Bergbohm, *Jurisprudenz und Rechtsphilosophie*, pp. 12–20.

that law. Philosophical jurisprudence purported to develop a critique from the outside, but did little more than organize a critique of law by itself. From the sociological standpoint, the analytical method, when made the sole method of jurisprudence, has had two ill consequences. It has led to what Jhering called a "jurisprudence of conceptions," in which new situations are always to be met by deduction from fixed traditional conceptions, and criticism of the premises and of the results with reference to the ends of law is neglected.[9] Also the imperative theory of law has tended to lead legislators and courts to overlook the need of squaring the rules prescribed in the statute books or declared in the reports with the demands of reason, the exigencies of human conduct, and the demands of social progress.[10] The historical method, when made the sole method of legal science, is open to two similar objections. In the first place, it has led historical jurists to take the leading conceptions of the traditional law, as discovered by historical study, for necessary fundamental conceptions of all law. Hence they have opposed all improvements that do not run along idealized traditional lines.[11] More specifically, it has led them continually to take accidents of legal history for necessary principles or necessary categories of universal law.[12] Likewise the method of the Metaphysical School was used in so abstract and mechanical a fashion as to bring philosophy of law into disrepute in the second half of the last century. Often it was used simply to work out specious reasons for traditional doctrines rather than to criticize them. Thus it helped to intrench them where a critical inquiry into their ethical foundations would have shaken them.[13]

Accordingly toward the end of the last century it came to be felt that none of the three methods of the time was wholly self-sufficient. In Continental Europe it became usual to regard the historical method and the metaphysical method as complementary. Also an analytical method developed, and a "general theory of law," comparable to

[9] On the jurisprudence of conceptions see, R. von Jhering, *Scherz und Ernst in der Jurisprudenz*, 10 ed., pp. 245 ff.; O. W. Holmes, *Collected Papers*, pp. 231 ff.; R. Pound, "Mechanical Jurisprudence," 8 *Columbia Law Rev.* 605; R. Pound, *Interpretations of Legal History*, pp. 119–124.

[10] See A. B. Parker, "The Congestion of Law," 29 *Rep. Am. Bar Assn.*, 383; H. Schofield, *Essays in Constitutional Law and Equity*, I, pp. 42–43; R. Pound, "Liberty of Contract," 18 *Yale Law Journ.* 454.

[11] See, e.g., the opposition of American law teachers to improvements in commercial law demanded by modern business. F. M. Burdick, "A Revival of Codification," 10 *Columbia Law Rev.* 118.

[12] See some examples in R. Pound, "The Scope and Purpose of Sociological Jurisprudence," 24 *Harvard Law Rev.* 592, 601–604.

[13] For examples see Id. 609–611.

English analytical jurisprudence, took its place alongside of philosophy of law and historical jurisprudence. In England the historical and the analytical jurists began to make concessions to each other and came to an understanding. Meanwhile movements had begun that led to the two types of jurists characteristic of the twentieth century. In one of these movements the determining direction was philosophical, giving rise to a revived philosophy of law and a social philosophical jurisprudence. In the other the determining direction was sociological, giving rise to a functional study of legal institutions in the light of all the social sciences, and leading to a consideration of the legal order as a social institution rather than exclusive consideration of the legal materials with which tribunals work in upholding that order. This movement marks the rising influence of sociology and gives us a sociological jurisprudence.[14]

D. The Social Philosophical Schools

(1) The Social Utilitarians

Eighteenth-century science of law sought to deduce all things from the nature of the abstract man. Nineteenth-century science of law referred all things to the abstract individual will. At present abstract individualist philosophy of law has been superseded by some form of social philosophy. By the end of the last century three types of the social philosophical school had developed in Continental Europe. The first type in chronological order is called social utilitarian. On the philosophical side it is derived from English utilitarianism, which has developed in a new direction. On the juristic side it is connected with the analytical school. But it is also a movement out of and away from the historical-metaphysical jurisprudence of the last quarter of the nineteenth century. The method of the social utilitarians is analytical and social philosophical. They analyze the law that obtains in the time and place in order to reach principles and general conceptions, but they try those principles and conceptions with reference to the end of law. *Rudolf von Jhering*[15] (1818–1892),

[14] On this transition see W. Schuppe, "Rechtswissenschaft und Rechtsphilosophie," *Jahrbuch der internationalen Vereinigung für vergleichende Rechtswissenschaft*, I, 215; J. Kohler, *Rechtsphilosophie und Universalrechtsgeschichte*, § 8; R. Pound, "The Scope and Purpose of Sociological Jurisprudence," 24 *Harvard Law Rev.* 592, 611–610.

[15] Jhering's works which are of importance in the present connection are: *Der Zweck im Recht*, (1877–1883) 4 ed. 1904 (the first volume is translated by Husik as "Law as a Means to an End," 1913); *Scherz und Ernst in der Jurisprudenz* (1884) 9 ed. 1904.

the leader of this group, has had a far-reaching influence upon the science of law in all directions. Three specially important features of the juristic thought of today may be attributed to his school: (1) rejection of the jurisprudence of conceptions as the one method of developing legal materials into grounds of decision and the one method of applying legal precepts; (2) insistence upon the interests which the legal system secures rather than upon the formal legal rights by which it secures them; (3) a theory of the administrative element in law. The historical and the analytical jurists ignored this element or even sought to exclude it. Today it has continually increasing importance. The second achievement is especially significant. When Jhering turned attention from the nature of law to the purpose of law, he set on foot a radical change in jurisprudence. This involved insistence upon the interests which the legal system secures rather than upon the conceptual apparatus by which it secures them. Interests, i. e., claims or demands or wants of human beings, are ends which the legal order seeks to satisfy or to secure. Rights, in the sense of analytical jurisprudence, are a means by which it does this work of securing interests.[16]

(2) The Neo-Kantians

Rudolf Stammler[17] (1856–) is the founder and leader of the Neo-Kantian school of jurists. As Jhering carries forward the analytical side of the legal science of the last century, Stammler carries forward its philosophical side through a Neo-Kantian social philosophy. In a large sense his method is philosophical and sociological. Four achievements of the Neo-Kantians are important in the legal science of today: (1) They have directed attention to the relation of ethics to the administration of justice through legal precepts instead of the relation of ethics to particular abstract precepts; (2) they have sought to formulate the social ideal of the time, and thus have directed attention and given clear outline to a controlling element in law which was ignored in nineteenth-century theory; (3) they have added a theory of the just decision of causes to the theory

[16] See N. M. Korkunov, *General Theory of Law* (transl. by Hastings) §§ 13–14; R. von Jhering, *Law as a Means to an End* (transl. by Husik) appendix I and II; R. Pound, "The Scope and Purpose of Sociological Jurisprudence," 25 *Harvard Law Rev.*, 140–147; F. Berolzheimer, *World's Legal Philosophies*, pp. 337–351; R. Stammler, *Wirthschaft und Recht*, 2 ed., pp. 578–584.

[17] Stammler's chief writings are: *Ueber die Methode der Geschichtlichen Rechtstheorie* (1888); *Wirthschaft und Recht* (1896) 4 ed. 1921; *Lehre von dem richtigen Rechte* (1902); *Theorie der Rechtswissenschaft* (1911) 2 ed. 1923; *Lehrbuch der Rechtsphilosophie* (1922) 2 ed. 1923.

of making just rules; (4) they have given us a theory of the application of legal precepts. This last is of much moment when we perceive that application of law involves much more than formal logic; that it is not simply the mechanical drawing out of what is contained logically in the formula. Stammler brought back into jurisprudence what the French call juridical idealism, i. e., the search for ideals to which law ought to conform, the attempt to give definite outline to the picture of the legal order and of the end of law by which men are governed in finding and developing and applying legal precepts. He did a service to the philosophy of law comparable to that of Kant in the theory of knowledge. Kant stated the problem and showed us what it was. So Stammler has shown us that our question is not one of the abstract justice of abstract rules. The nineteenth century held that if rules were abstractly just, results in particular cases were negligible. Stammler has taught us to seek just results in cases through legal precepts that conform to and are administered in the light of social ideals.[18]

(3) The Neo-Hegelians

In chronological order the third type of social philosophical jurisprudence is Neo-Hegelian. The leading representative of this type is *Josef Kohler*[19] (1849–1919). The method of the Neo-Hegelians is historical and social philosophical. They carry forward the historical jurisprudence of the nineteenth century. Four points are significant in connection with this school. (1) They conceive of law as a product of the civilization of a people in the past, and of attempts to adjust this result of past civilization to the civilization of the present. Kohler connects with the historical school in recognizing the limitations on the efficacy of effort involved in our having to shape the legal materials that have come down to us so as to meet the requirements of

[18] A Neo-Kantian exposition in English is G. Del Vecchio, *The Formal Bases of Law* (transl. by Lisle) (1914). For accounts and critiques of the Neo-Kantians, see P. Vinogradoff, *Common Sense in Law*, chap. xix; R. Pound, "The Scope and Purpose of Sociological Jurisprudence," 25 *Harvard Law Rev.* 140, 147–154; F. Berolzheimer, *The World's Legal Philosophies* (transl. by Szold), pp. 398–422; B. Croce, *Historical Materialism and the Economics of Karl Marx*, chap. ii; H. Kantorowicz, *Zur Lehre vom richtigen Recht;* F. Geny, *Science et technique en droit privé positif*, II, pp. 127–130.

[19] Kohler's chief writings for the present purpose are: *Rechtsphilosophie und Universalrechtsgeschichte*, in Holtzendorff, *Enzyklopädie der Rechtswissenschaft*, I, 6 ed. 1904, 7 ed. 1913 (not in prior editions); *Lehrbuch der Rechtsphilosophie* (1908) 3 ed. 1922, the first edition translated by Albrecht as *Kohler's Philosophy of Law*, (1914); *Moderne Rechtsprobleme* (1907) 2 ed. 1913; *Einführung in die Rechtswissenschaft* (1901) 5 ed. 1919.

the civilization of the present. Thus we are limited by the materials with which we must work. Historical continuity is a condition of what we do. But he recognizes that law cannot stand still. The adjustment must be made with reference to a continually changing civilization. We must shape the legal materials that have come down to us so as to make them further, not retard, civilization. (2) Kohlers' teaching calls for an understanding of the social history of a people, and the relation of this social history to its law, whereas in the past we looked rather to political history and to the relation of political history to legal systems. (3) Kohler has worked out a notable theory of sociological interpretation and application of legal precepts. The theory of "ascertaining the will of the lawmaker," when applied to development of grounds of decision from a century-old code involves a fiction. The French Civil Code of 1804, or the Austrian Code of 1811, or an American eighteenth-century Bill of Rights, are permanent monuments of legislation giving premises for judicial reasoning, not mere aggregates of fixed rules. Hence they are to be interpreted sociologically as products of society. (4) Kohler's most important contribution is his method of formulating the jural postulates of the civilization of the time and place. Certain principles of right are assumed by or expressed by a given civilization. It is the task of the jurist to discover and to formulate these jural postulates, and thereby to construct a critique and set up ideals to which lawmakers may conform and by which the materials of the law may be developed and applied in juristic writing and in judicial decision. This is the most successful attempt thus far to devise a method for giving definiteness and clear outline to the picture of the legal order which is so large an element in the actual development and application of legal precepts.[20]

(4) Revived Natural Law in France

After the Civil Code (1804) French legal science was for a time chiefly analytical. Natural law remained the orthodox academic teaching, but came to have little more than a formal place. Gradually metaphysical jurisprudence affected or replaced the traditional natural law, but in the meantime the historical school became dom-

[20] See F. Berolzheimer, *The World's Legal Philosophies*, (transl. by Szold) pp. 422–431; R. Pound, "The Scope and Purpose of Sociological Jurisprudence," 25 *Harvard Law Rev.* 140, 154–158; R. Pound, *Interpretations of Legal History*, pp. 141–151; F. Geny, *Science et technique en droit privé positif*, II, pp. 111–126.

inant. In the present century there has been a revival of philosophy of law and social philosophical jurisprudence has come to take a leading part. This movement is called the revival of natural law.[21] It takes three forms: (1) An adaptation and broadening of Neo-Kantian juridical idealism; (2) a neo-scholastic philosophy of law; (3) a positivist-sociological philosophy of law philosophically akin to the mechanical sociology. The leader of the second type is *François Geny* (1861–). Thomas Aquinas went on the basis of the individual as a moral entity. Geny goes on social life as a moral phenomenon. On this revived scholastic basis he seeks to give us a firmer grasp on that element of law which consists of traditional views as to the end of law and traditional pictures of the legal and social order.[22] The leader of the third type is *Léon Duguit* (1859–). Duguit sets up a positivist natural law by deriving a system from a principle of social interdependence, taken to be an "observed and verified fact." From this he deduces an ideal system just as Herbert Spencer deduced one from his "law of equal freedom." This social interdependence Duguit holds is (a) social interdependence through similarity of interest, in that we are all human beings, and (b) social interdependence through division of labor, the basic fact in an industrial society. These two forms of social interdependence are observed and verified facts. The law holds us to conform to them and so the fundamental principle of law is to do what has a social value and not to do what is anti-social. His ideal picture of the legal and social order is an idealization of a modern manufacturing city and the country dependent upon it, in which all turns upon efficient production in the greatest possible quantity.[23]

[21] J. Charmont, *La renaissance du droit naturel* (1910); R. *Demogue, Notions fondamentales du droit privé* (1911); *Modern French Legal Philosophy* (Modern Legal Philosophy Series, vol. 7) chaps. v–xii; R. Pound, "The Scope and Purpose of Sociological Jurisprudence," 25 *Harvard Law Rev.* 140, 159–162.

[22] Geny's chief books are: *Méthode d'interprétation et sources en droit privé positif* (1899) 2 ed. 1919; *Science et technique en droit privé positif* (1913–1924).

[23] Duguit's chief writings for our purposes are *L'état, le droit objectif et la loi positive* (1901); *Le droit social, le droit individuel, et la transformation de l'état* (1908) 3 ed. 1921; *Les transformations générales du droit privé* (1912) (transl. in Continental Legal History Series, vol. II, chap. iii); *L'état, les gouvernants et les agents* (1903); *Les transformations du droit public* (1913) (transl. by Laski as "Law and the Modern State"). See W. J. Brown, "The Jurisprudence of M. Duguit," 32 *Law Quarterly Rev.*, 168; H. J. Laski, *The Problem of Sovereignty* (1917) chap. i; L. Duguit, "The Law and the State," 31 *Harvard Law Rev.* 1; L. Duguit, "The Concept of Public Service," 32 *Yale Law Journ.*, 425.

E. The Economic Interpretation

A movement parallel with the rise of social-philosophical and sociological jurisprudence played a large part in juristic thinking in the generation after 1890 and its echoes are still heard, although it did not give rise to a permanent school of jurists. The historical school looked on materials of legal history as a record of the unfolding and realizing of an idea. In other words, its interpretation of history was idealistic. If the idea was regarded from an ethical standpoint, as an idea of right, there was an *ethical interpretation.* If it was regarded from a political standpoint, there was a *political interpretation.* Later positivist ideas gave rise to *ethnological* and *biological interpretations,* which were much in vogue near the end of the nineteenth century. The last phase of these attempts to understand the history of law in terms of a single simple idea was the *economic interpretation.* It began with Marx in 1859, but attracted little notice till 1890. It became popular on the Continent in the last decade of the nineteenth century, when it passed over into jurisprudence. It got into American juristic thinking in the era of Rooseveltian progressivism (1900–1912) and is still a force to be reckoned with in this country. There are three types of economic interpretation of legal history: (1) An idealistic type; (2) a mechanical positivist type, and (3) a realist type. The *idealistic economic interpretation* is urged by a type of Hegelian who regards the history of law as the unfolding of an economic principle. To him law is the logical unfolding of a principle of satisfying the economic wants of mankind. The *mechanical positivist economic interpretation* has been urged in Continental Europe by the mechanical sociologists. To this type of jurist all law results from the inevitable workings of certain inflexible economic laws, which are the laws of social development. A combination of this with analytical jurisprudence has been urged in America. According to this interpretation, all law is made consciously by men who make legal precepts to suit the ends of the dominant social class. Thus ultimately all law is the product of economic causes. The *realist economic interpretation* conceives that we have to do with the ends of groups which are in power for the time being. These ends are determined by economic exigencies. Right and law are simply power. Questions of law are simply questions of power. Those in power generalize their ends and put them in universal terms and thus give us doctrines and principles of law. From the sociological standpoint this interpretation in all its forms is subject to the objections

that apply to the legal science of the last century. A much more iron-bound jurisprudence results than results from the conception of a finally determined natural law, or from the extreme of Savigny's theory. No one doubts that economic conditions help to determine the ideals of the time and place. Economic considerations influence powerfully our formulations of these ideals. We must reckon with these considerations when we formulate the jural postulates of a given civilization. Thus the influence of the economic situation upon the traditional element of the law is clear enough. Nevertheless this influence is indirect and often remote. The traditional element in the law is, however, the most important part thereof.[24]

F. The Sociological School[25]

Sociological jurists look to the working of the law rather than to its abstract content; they regard law as a social institution involving both finding by experience and conscious making—an institution which may be improved by conscious human effort; they lay stress upon the social ends which law subserves rather than upon sanctions; they look on legal precepts and doctrines and institutions functionally and regard the form of legal precepts as a means only. Philosophically they are chiefly positivists or neo-realists. They employ a pragmatist method which is consistent with different metaphysical starting points.

Sociological jurisprudence is still formative. It has gone through three stages, some of which are still represented in current juristic thinking, and has entered upon a fourth stage.

(1) The Mechanical Stage

In the first half of the nineteenth century the central point in scientific thinking was the mechanism of the physical universe. The tendency was to take a mathematico-physical view of everything. Men sought mechanical laws according to which things came into being and by which the course of their existence was governed. This was

[24] Statements of the doctrine may be found in *Centralization and the Law*, lects. I and II (1906) (Brooks Adams); B. Adams, "The Modern Concept of Animus," 19 *Green Bag*, 12 (1907). It is discussed at length in R. Pound, *Interpretations of Legal History*, lect. 5; R. Pound, *Introduction to the Philosophy of Law*, pp. 183 ff.; B. Croce, *Historical Materialism and the Economics of Karl Marx*.

[25] R. Pound, "The Scope and Purpose of Sociological Jurisprudence," 25 *Harvard Law Rev.* 489; E. Ehrlich, "Montesquieu and Sociological Jurisprudence," 29 *Harvard Law Rev.* 582.

the type of thought of the first positivist philosophies of law and so of the first stage of sociological jurisprudence. But it came later in jurisprudence than in sociology. Also it held on longer in jurisprudence than elsewhere, because of the influence of the historical school. The ideas of the mechanical sociologists seemed to confirm the doctrines of the historical jurists. Both looked at law in its evolution. The historical jurists found metaphysical laws behind the succession of changes; the mechanical sociologists substituted physical laws. The result was the same; each eliminated all juristic or legislative initiative. The achievements of the mechanical sociologists in jurisprudence were negative only. They helped clear away. But they built little or nothing.[26]

(2) The Biological Stage

After Darwin, evolution became the central idea in scientific thought, and biological analogies were uppermost. This change affected jurisprudence somewhat later. The attempts to work out a physical science of the state and of law were followed by a biological science of politics and a biological science of law. To no small extent the two stages overlap. The older mechanical sociology of law merely acquired a biological vocabulary. Three types of this stage may be distinguished. In the mechanical type the ideas are those of the mechanical stage, but the terminology is biological. Jurists of this type used the idea of a struggle for existence as a starting point from which to confirm the doctrines of nineteenth-century metaphysical and historical jurisprudence. They brought us by a new path to the same position to which the historical school and the mechanical sociologists had led us before. As they put it, the end of law is to give play in an orderly and regulated manner to the elimination of the unfit; it is to further natural selection by a well ordered social struggle for existence.

In the ethnological type there is a further development of biological analogies. For a time primitive legal institutions were taken to be the key to jurisprudence. As it were, the embryology of law was to tell us everything. Study of the social and legal institutions of prim-

[26] H. Spencer, *Justice* (1891); B. Brugi, *Introduzione enciclopedica alle scienze giuridiche e sociali* (1890) 4 ed. 1907; F. Cosentini, *Filosofia del diritto e sociologia* (1905); R. Vander Eycken, *Méthode positive de l'interprétation juridique* (1907). For critiques, see F. Berolzheimer, *The World's Legal Philosophies* (transl. by Szold) pp. 351–374; N. M. Korkunov, *General Theory of Law* (transl. by Hastings) 265–266; J. Charmont in *Modern French Legal Philosophy*, pp. 65–73.

itive peoples was to reveal the fundamental laws of legal development.[27]

A third type of the biological stage may be called the philosophical type. Jurists of this type sought to work out a complete system from some biological principle, such as a struggle between the social and the anti-social, or class conflict, interpreted biologically as a struggle, for existence.[28] The theory of law as a product of class struggle, which was the most significant feature of the biological sociological jurisprudence, had one important result. It drew attention to the unequal operation of legal doctrines derived by the nineteenth-century method of abstraction, upon the basis of an assumed natural equality, when applied to a society in which industrial progress had resulted in well defined classes. Study of modern codes functionally from this standpoint has been fruitful.[29]

(3) The Psychological Stage

Three successive influences turned the attention of sociological jurists toward psychology, namely, (1) study of group psychology, leading to a psychological movement in jurisprudence and in politics; (2) a complete change of front in the social sciences generally whereby psychic forces came to be held as real and natural as physical forces; and (3) Tarde's working out of the psychological or sociological laws of imitation, and demonstration of the extent to which imitation is a factor in the development of legal institutions. The first of these influences is associated with the great work of Gierke upon the law of associations and the nature of legal personality.[30] Among other important results, it gave a social-psychological turn

[27] A. H. Post, *Der Ursprung des Rechts* (1876); A. H. Post, *Bausteine für einen allgemeinen Rechtswissenschaft* (1880); A. H. Post, *Grundlagen des Rechts* (1884); A. H. Post, *Ethnologische Jurisprudenz* (1894–1895); L. Kuhlenbeck, *Natürliche Grundlagen des Rechts* (1905).

The best critiques of this method may be found in P. de Tourtoulon, *Philosophy in the Development of Law* (1922) (transl. by Read) pp. 75–133, French ed. pp. 80–173.

[28] G. Richard, *Origines de l'idée de droit* (1892); M. A. Vaccaro, *Le Basi del diritto e dello stato* (1893), French transl. as *Les bases sociologiques de droit et de l'état* (1898).

[29] A. Menger, *Das burgerliche Recht und die besitzlosen Volksklassen* (1889) 4 ed. 1908; A. Menger, *Ueber die sozialen Aufgaben des Rechts* (1895) 3 ed. 1910; G. Salvioli, *I difetti sociali del codice civile in relazione alle classi non abbienti ed operaie* (1906).

[30] O. Gierke, *Deutsche Genossenschaftsrecht*, I, p. 1; *Das Wesen der menschlichen Verbände*, pp. 33–34; "Die Grundbegriffe des Staatsrechts und die neuesten Staatstheorien," *Zeitschrift für die gesammte Staatsrechtswissenschaft*, XXX, p. 304.

to theories of legal obligation, and led to social-psychological theories of sanction.[31] The second influence is connected with the work of Lester F. Ward, which began to attract the notice of jurists in the first decade of the present century. As Tarde was primarily a lawyer, his influence upon jurisprudence was direct and immediate.[32] Today social psychology occupies a chief place in the doctrine of all schools and the purely psychological movement is still strong in sociological jurisprudence. Study of the world view of judges and of doctrinal writers and of the psychology of judicial and juristic thinking has come to be among the chief activities of jurists.[33] In Continental Europe a whole literature has sprung up on this subject. Unhappily little has been done along this line by lawyers either in England or in America.

(4) The Stage of Unification

A new stage in sociological jurisprudence begins about 1900. In a general way it has two phases: an earlier phase, the unification of sociological methods, and a later phase, the unification of the social sciences. At the end of the nineteenth century it had become apparent that no one of the solving ideas or self-sufficient methods theretofore worked out could be made to do the whole work of a science of law. It is now well recognized that each of the directions which sociological jurisprudence has taken has something for the science as a whole, and that no one of them may be pursued exclusively. Somewhat later it came to be seen that the science of law could not stand entirely alone if it was to achieve adequate results. It is now recognized that the complete separation of jurisprudence from the other social sciences, which was urged in the nineteenth century, was a mistake. In the hard and fast scheme of the social sciences in the last century, jurisprudence was left to itself and its problems were ignored in related sciences. On the other hand, the jurist was convinced of the self-sufficiency of jurisprudence and ignored the problems and the results of related sciences. This led constantly to a narrow and partial view of legal problems themselves. In large part the backwardness of the law in meeting social ends, the tardiness

[31] G. Jellinek, *Allgemeine Staatslehre*, 2 ed., pp. 89 ff., 324 ff.

[32] G. Tarde, *Les Transformations du droit* (1894) 6 ed. 1909. Cf. I. Vanni, *Lezioni di filosofia del diritto* (1901–1902) 4 ed. 1920; R. de la Grasserie, *Principes sociologiques du droit civil* (1906).

[33] A. Bozi, *Die Weltanschauung der Jurisprudenz* (1911); K. G. Wurzel, *Das juristische Denken* (1904) (transl. in part in *The Science of Legal Method*, Modern Legal Philosophy Series, vol. 9, pp. 421–428); E. Ehrlich, *Die juristische Logik* (1918).

of lawyers in admitting or even perceiving such ends, and the gulf between legal thought and popular thought, so marked in the first decade of the present century, were due to this seclusion of jurisprudence.

Perhaps the first movement toward a better relation between jurisprudence and the other social sciences was connected with the political interpretation of legal history, which was urged by the historical school. As a result jurisprudence and politics were brought into co-operation. Somewhat later the economic interpretation, and still later the civilization interpretation, urged by the Neo-Hegelians, led to a closer relation between jurisprudence and economics. At present sociological jurists insist upon the impossibility of a wholly detached, self-centered, self-sufficing science of law. They insist that the legal order is a phase of social control, and that it cannot be understood unless it is taken in its whole setting among social phenomena. But much remains to be done in this direction everywhere, and in America we have hardly made a beginning. It is still good form for lawyers to assume that our eighteenth-century Bills of Rights, as filled with a historical common-law content by judicial decision, are authoritative text books of ethics and economics.[34]

(5) The Program of Sociological Jurisprudence

Sociological jurists are now urging some or all of the following points:

1. Study of the actual social effects of legal institutions and legal doctrines. Ehrlich (1862–1922) was the pioneer in this, and his studies in the living law of Bukowina are the best examples of what may be done.
2. Sociological study in preparation for lawmaking.
3. Study of the means of making legal precepts effective in action.[35]

[34] E. Ehrlich, *Sociologie und Jurisprudenz* (1903); H. Kantorowicz, *Rechtswissenschaft und Soziologie* (1911); R. Brugeilles, *Le droit et la sociologie* (1910); H. Rolin, *Prolégomènes à la science du droit* (1911); E. Ehrlich, *Grundlegung der Soziologie des Rechts* (1913); F Cosentini, *Filosofia del diritto* (1914); I. Kornfeld, *Allgemeine Rechtslehre und Jurisprudenz* (1920); B. N. Cardozo, *The Nature of the Judicial Process* (1921); B. N. Cardozo, The Growth of the Law (1924).

[35] See R. Pound, "The Need of a Sociological Jurisprudence," 31 *Rep. Am. Bar Assn.* (1911), 19 *Green Bag*, 607; E. A. Parry, *The Law and the Poor*, (1914) 248–249; R. H. Smith, *Justice and the Poor* (1919); R. Pound, "The Administration of Justice in the Modern City," 26 *Harvard Law Rev.* 302.

4. Study of juridical method.[86]

5. A sociological legal history; study of the social background and social effects of legal precepts, legal doctrines and legal institutions in the past, and of how these effects have been brought about.

6. Recognition of the importance of individualized application of legal precepts.

7. In English-speaking countries, a ministry of justice.

II. CHARACTERISTICS OF RECENT LEGAL SCIENCE

1. THE FUNCTIONAL ATTITUDE

Perhaps the most significant advance in the modern science of law is the change from the analytical to the functional standpoint. The world over, the jurist of today seeks to discover and to appraise the social effects of legal institutions and legal doctrines in action. As it were, he studies the law in action as well as the law in books, and he inquires how and why the two differ. Instead of merely comparing the abstract content of legal precepts, he seeks to study their social operation and the effects which they produce in action and to compare them in their concrete applications. Instead of regarding law as something which will work itself out in the slow unfolding and realization of an idea in human experience, he regards it as something that may be improved by intelligent human effort and holds it his duty to discover the best means of furthering and directing such effort. This movement has gone along with and is a part of the pragmatist or instrumentalist movement in modern thought. The jurist of today does not seek to foreclose change by rigid postulates from which all details are to be inevitable logical deductions.

An important feature of the functional attitude is recognition of the difference between the law in the books and the law in action. Nineteenth-century jurists agreed in ignoring questions of enforcement. The analytical school, regarding law as an aggregate of commands of the sovereign, conceived that enforcement was no concern of the jurist. If legal precepts were not enforced, it meant simply that the executive machinery was at fault, and that machinery was not his province. The historical school, thinking of law as

[86] See B. N. Cardozo, *The Nature of the Judicial Process* (1921); F. Geny, *Méthode d'interprétation*, 2 ed., I, § 7; *Science of Legal Method* (Modern Legal Philosophy Series, vol. 9); *Les Méthodes juridiques* (lectures by French jurists) (1911); A. Hellwig, *Zur Psychologie der richterlichen Urteilefindung* (1914); N. Isaacs, "How Lawyers Think," 23 *Columbia Law Rev.* 555.

an expression of the experience of a people in administering justice or as an unfolding in that experience of a metaphysical principle of justice, likewise held all questions of enforcement to be irrelevant. To the historical jurist the very existence of a rule of the common law showed that it was efficacious, and as to legislation, he conceived that it attempted to make what could only be found, and was futile in any event. To the philosophical school there was but one question, namely, was the legal precept under consideration abstractly just? If so, the philosophical jurist conceived it had a sufficient basis in its inherent justice, and that the appeal to the conscience made by its accord with abstract and ideal justice must insure its efficacy in practice. Thus for a time jurisprudence was purely a science of law in books, and such a method, persisting into a period of legal expansion and of copious lawmaking, has had much to do with the divergence between the law in the books and the law in action which is often so marked in America today.

But the contrast between law in books and law in action goes much deeper than questions of enforcement, important as the latter undoubtedly are. One of the striking phenomena of legal history is the way in which legal formulas acquire new meanings, legal terms change their definitions, abstract legal propositions lose one content and get a new one, while the books make it appear that the law has been stable and unchanged. A legal science that looks only at what may be found in law books misses much of what gives form and significance and vitality to the content of those books.[37]

2. THEORIES OF THE RELATION OF LAWS TO MORALS

In the nineteenth century jurists debated as to the nature of law, as to the relation of law to morals, and as to the interpretation of legal history. Today discussion of the nature of law is largely replaced by consideration of the end or purpose of law. Also discussion as to the relation of law to morals is coming to be merged in a broader consideration of the place of law in the whole process of social control. Likewise interpretation of legal history is now regarded as a problem of the history of civilization. The relation of

[37] See E. Ehrlich, "Erforschung des lebenden Rechts," Schmoller's *Jahrbuch für Gesetzgebung*, XXXV, 129, (1911); E. Ehrlich, *Das lebende Recht der Völker von Bukowina* (1913); W. H. Page, Professor Ehrlich's "Czernowitz Seminar of Living Law," *Proceedings of Fourteenth Annual Meeting of Association of American Law Schools*, 46 (1914); R. Pound, "The Enforcement of Law," 20 *Green Bag*, 401; R. Pound, "Law in Books and Law in Action," 44 *American Law Rev.* 12; S. C. Wiel, "Public policy in Western Water Decisions," 1 *California Law Rev.* 11.

law and morals has been one of the battle-grounds of jurisprudence, and deserves special notice.

Law and morals were identified by the classical theory of natural law which came to America as the orthodox theory of our public law. Blackstone speaks of "ethics or natural law" as synonymous, and of natural law as the ultimate measure of obligation by which all legal precepts must be tried and from which they derive their whole force and authority. Wilson's lectures on law, delivered in 1790–1791 by one of the framers of the Constitution and a justice of the Supreme Court, begin with an elaborate exposition of the moral basis of legal obligation and of the law of nature or body of universal moral principles of which law is but declaratory. By way of reaction from the law-of-nature school, nineteenth-century jurists opposed or contrasted law and morals and excluded legislation and ethical criticism from the domain of jurisprudence.

Analytical jurists sought to analyze actually existing legal precepts and legal institutions and thereby to construct a universal science of law. But in practice they, too, set up ideal patterns. Only the patterns were no longer ethical. The ideal of the analytical jurist was a logically interdependent, logically consistent body of precepts completely covering the whole field of possible controversy as to human relations, made at one stroke, upon a logical plan to which it conformed in every detail. In truth this was quite as far from the facts as was the eighteenth-century conception of a rational body of precepts covering completely the field of morals and coinciding wholly with morals in their details. In fact, the ethical element was never excluded from the actual administration of justice. Our analytical science of law did no more than cover up the actual process with dogmatic fictions, so as to blind us to what was doing and lead us to make unhappy attempts to reduce to rule things that did not admit of rule.

In historical jurisprudence "custom" took the place which morals had held in the juristic thinking of the seventeenth and eighteenth centuries. Customs grew; they were not made to order. Therefore law also grew, it was not made. Behind promulgations or restatements of legal precepts was the real law, evolving spontaneously through the inherent power of the idea. Thus history replaced ethical philosophy as the explanation of the universal element to which positive legal precepts were approximating and by which they were to be judged. The moral, as such, was quite out of the domain of the jurist.

Likewise in the last century philosophical jurists, instead of con-

ceiving of legal precepts as declaring and promulgating moral principles, sought to set apart and to contrast the legal and the moral. More recently a further movement has begun. Today a tendency to subordinate jurisprudence to ethics appears in all types of the social philosophical school. Thus according to the social utilitarians, the immediate end of law is to secure interests. Hence we must choose which we shall recognize, must fix the limits within which we shall recognize them, and must weigh or evaluate conflicting or overlapping interests. In making this choice and in weighing or evaluating interests, in legislation or in judicial decision or in juristic writing, we must turn to ethics for principles. Morals is an evaluation of interests; law seeks to be a delimitation in accordance therewith. As the Neo-Kantians put it, we seek justice through law. But to attain justice through law we must formulate the ideals of the epoch. Thus we may at least have a natural law with a growing content. These ideals, however, are developed outside of the law. They are moral ideals. Jurisprudence is subordinated to ethics in that ethics determines the goals while jurisprudence has to do with the means of attaining them. The Neo-Hegelians subordinate both jurisprudence and ethics to a universal history of civilization. But the result in practice is to make jurisprudence in large part depend upon a science which a modern type of ethical philosopher would claim as theirs. In short, the modern tendency is to hold that jurisprudence and legislation may not be separated by any hard and fast line, and that each presupposes political and social ethics.[38]

3. THE MOVEMENT FOR PREVENTIVE JUSTICE

Development of preventive justice has only begun. Our historical common law has little in the way of preventive machinery, and there is a historical prejudice against preventive remedies. Recently there has been a strong movement for the extension of preventive remedies through legislation providing for declaratory judgments. Also there has been a marked judicial extension of the use and scope of injunctions. Moreover, with the setting up of modern municipal courts in our larger cities, we have begun to devise bureaus of justice to which the citizen may resort to know his rights, instead of leaving him to

[38] See R. Pound, *Law and Morals* (1924); J. Austin, *Jurisprudence*, lect. 5; J. Bentham, *Theory of Legislation, Principles of Legislation*, chap. xii; J. C. Gray, *Nature and Sources of the Law*, §§ 642–657; J. C. Carter, *Law, Its Origin, Growth and Function*, lect. 6; S. Amos, *Science of Law*, chap. iii; T. H. Green, *Principles of Political Obligation*, §§ 11–31; N. M. Korkunov, *General Theory of Law* (transl. by Hastings) §§ 5–7; J. Kohler, *Philosophy of Law* (transl. by Albrecht) pp. 58–60.

guess at them at his peril and then judging his conduct after the event. But this cautious development of preventive justice on the civil side of the law, significant as it is of the direction of legal development for the future, is but a small part of the matter. More than anywhere else preventive justice may achieve great things in the domain of the criminal law. Here juvenile courts have done much by way of preventive activity directed to the ultimate causes of delinquency. Also administrative agencies of probation and parol, struggling with many adverse conditions, and laboring in most jurisdictions under a burden of deficient organization and insufficient equipment, have done much. But thus far, for the most part, what is done by way of preventive justice in the criminal law is done by means of extra-legal agencies. The study of preventive justice by jurists with a view of directing creative energy to the devising of new methods, new precepts and new machinery, is one of the most promising aspects of the legal science of today.[39]

4. THE MOVEMENT FOR INDIVIDUALIZATION

Whereas the legal science of the last century ignored the administrative element in justice, and sought to exclude everything but mechanical logical application of rigidly defined precepts, the legal science of today recognizes the administrative element and insists that in many fields of the legal order individualization in the application of legal precepts is no less important than the precepts themselves. The crowded urban society of today, with its complex economic organization, demands legislation to make clear what may be done and what may not and administration to guide men away from trouble and controversy, in preference to elaborate investigation and exact reparation after injury. Legislation does for conduct in many fields what the lines in the middle of the road and the lines upon the street crossings do for the driver of the automobile. Administration does for an increasing number of activities what the traffic officer at the corner does both for automobile driver and for pedestrian. Moreover, the efficacy of the work of the traffic officer is in the individualized nature of his directions, as compared with generalized legal precepts. For the society of today demands an individualization in the handling of many things which was not needed in the simpler, rural, agricultural society of the past. When the

[39] R. Pound, "Preventive Justice and Social Work," *Proceedings of the National Conference of Social Work* (1923) 151; E. R. Sunderland, "A Modern Evolution in Remedial Rights," 16 *Michigan Law Rev.* 69; E. M. Borchard, "The Declaratory Judgment," 27 *Yale Law Journ.* 1.

points of contact between men are relatively few, the general lines and rough compromises expressed in rules of law suffice for the exigencies of justice. When the points of contact are enormously multiplied, as in the metropolitan city of today, and individual claims conflict and overlap on all sides, it is necessary to have fine lines and delicate discriminations, which are not easily made by means of rules of law. A voluminous literature on this subject has sprung up in all countries in recent decades.[40]

5. THE MOVEMENT FOR TEAM WORK WITH THE OTHER SOCIAL SCIENCES

Along with a creative spirit, a belief in the importance of inventive activity, and a functional attitude toward law, goes a demand for what might be called team play between the social sciences This is a marked feature of the stage of unification in sociological jurisprudence. But it may be seen on all sides today. It is recognized that except for convenience of exposition there are no such rigid analytical lines between the social sciences as those we drew so persistently a generation ago. If the different organized bodies of knowledge that treat of different aspects of social life are distinct at the core, they shade out into one another at the periphery. When we look at the core, or chiefly at the core, the analytical distinctions are sound enough. But we shall not understand even that core, and much less the debatable ground beyond, unless we are prepared to make continual deep incursions from each into each of the others. All the social sciences must be co-workers, and emphatically all must be co-workers with jurisprudence. When we set off a bit of social control and define its bounds by analytical criteria, and essay to study it by its own light and with its own materials and its own methods exclusively, our results, however logical in appearance, are arbitrary and futile for any but theoretical purposes.

III. THE PROBLEMS OF JURISPRUDENCE TODAY

1. THE VALUING OF INTERESTS

In order to secure interests by means of legal precepts, we must first generalize and classify the claims or demands that press for

[40] F. Geny, *Méthode d'interprétation en droit privé positif*, 2 ed., 1919; R. Pound, *Courts and Legislation, Science of Legal Method* (Modern Legal Philosophy Series, vol. 9) 202–228; *Science of Legal Method*, chaps. i–v; J. H. Wigmore, *Problems of Law*, 65–101; G. Ransson, *Essai sur l'art de juger* (1912); H. Kantorowicz, *Die Kampf um die Rechtswissenschaft* (1906); L. Brütt, *Die Kunst der Rechtsanwendung* (1907); R. Saleilles, *Individualization of Punishment* (transl. by Mrs. Jastrow) chap. ix; R. Pound, "Administrative Application of Legal Standards," 44 *Rep. Am. Bar Assn.* 445.

satisfaction. We have to recognize interests in generalized forms admitting of treatment by general formulas fixing the limits of their legal recognition. Then we must weigh them and value them, as generalized, taking care that our generalizations do not sacrifice to the social interests that call for rule and formula too much of other interests and thus defeat the end of law Our generalizations ought to be reached from observed facts of actual claims and demands. And we are in a position to take a census of such claims because the reported judicial experience of all modern civilized countries and the results of the judicial and juristic experience of the ancient world are at hand in our law books. These books tell us what claims have been made, and how they have been secured, and also show us what further claims remain unsecured and even unrecognized, which are pressing upon tribunals for satisfaction. Having taken such a census of interests, we have to generalize them and classify them. Next we must weigh or value them. As a result we shall be able to select those which are to be recognized, to fix the limits within which they are to be recognized and secured, and to proceed to the devising of means of securing them.

In the past, the prevailing method has been to deduce a system of "natural rights," not to catalogue interests and build our system by classification and generalization from the actual phenomena. In the nineteenth century the idea was to deduce absolute rights, so defined that neither in themselves nor in their implications could they conflict or overlap. This method has been used much in decisions with respect to labor and trade disputes and has resulted in an *impasse* more than once. The sweeping claims of either party to such disputes may be put as inflexible rights. Often it is because each party sees his claims in this light that adjustment is all but impossible. All the methods of jurisprudence in the nineteenth century led by one path or another to schemes of absolute rights in which certain generalized claims were exalted as beyond the reach of compromise, although in one form or another they were continually adjusted and compromised with each other in practice.

Since Jhering, deduction of absolute rights has more and more been given up and a method of weighing claims or demands with reference to the end of the law has more and more gained ground. The social philosophical jurists have developed such a method in many forms, four of which call for particular notice.

To the social utilitarians, social ends have determined the course of legal development; the adjustments and compromises that make up a body of law have derived their content and their form from a

shaping of traditional legal materials with reference to these ends. The weighing or valuing of claims or demands is a weighing or valuing with respect to social ends, put as ends of the law. Dogmatic social utilitarianism requires correction by psychology and by sociology. But it has made a permanent contribution to jurisprudence in calling on us to do consciously and intelligently what we had been doing unconsciously and blunderingly, and in setting us to thinking upon the ends of law and the extent to which they are furthered by legal precepts in action. When the social utilitarians tell us to weigh the several interests in terms of the ends of law, they raise the question whether we have any end which we may pronounce to be given us absolutely.

According to the Neo-Kantians, we are to weigh or value interests by the social ideal of the time and place. Thus we get a natural law with a changing or growing content. We are to subsume questions of law under the social ideal and its fundamental principles. Stammler holds that the social ideal may be expressed in a conception of bringing about a harmony of individual ends in a community of free-willing men, so that all possible ends of those who are bound legally shall be comprehended. Individual claims or demands are to be tried by the extent to which securing them will promote this harmony in which all ends of those who are subject to law are included.

By the Neo-Hegelian method we are to weigh or value claims or interests by the extent to which they maintain or further civilization; that is, by the extent to which they maintain human conquest of nature, both human nature and external nature, and further the development of human powers to their highest possible unfolding. To put the method in more detail, claims are to be referred to the jural postulates of the civilization of the time and place and are to be generalized in terms thereof. The generalized claims or interests are to be tried ultimately by the idea of civilization. We are to ask whether and how far they promote civilization, where the philosophical jurisprudence of the last century asked whether and how far they promoted abstract liberty. It will be noted that the Neo-Hegelian method is much more inclusive.

Another method of weighing or valuing interests is proposed by Duguit. As he puts it, claims as such are not to be regarded. We are to think of duties, which are to be generalized in terms of social functions, and are to be weighed ultimately in terms of social interdependence. In effect they are to be weighed in terms of social interdependence through division of labor. The paramount duties are those that maintain this division of labor and enable it to function as the

basis of social interdependence. He pictures an idealized industrial society of today and holds that the maximum of productive efficiency in such a society is the end of law. Claims are to be generalized from the standpoint of group claims to the maintaining and furthering of the social group, and are to be valued with reference to their relation thereto. There is no such thing as my claim to liberty; there is only the social claim, that I and every one else shall not be hindered in our productive activities and the activities incidental to them or postulated by them. Duguit makes no great advance upon the method of Spencer's Justice. In Spencer's scheme of natural rights, claims are valued by the extent to which they maintain and further the exploitation of the natural resources of society and the development of industrial activities through free individual initiative. Duguit's scheme of natural duties speaks from a time when the industrial régime has reached maturity. He finds the end of law in a maintaining and furthering of the most characteristic feature of that régime, namely, productive efficiency; and he tries all things with reference to that end.

Two criticisms of the social utilitarian method may be suggested. In the first place, it confuses interest in the sense of claim or demand with interest in the sense of advantage. In general, those who assert claims, assert them as advantages to which they are entitled. Those who deny them will challenge the advantage and conceive that the claim is thus put out of the way. Secondly, the social utilitarian method assumes social advantage as something given, as something known, or something which legislator, judge, or jurist may apprehend, as it were, intuitively. One has only to read American decisions on due process of law to see how mischievous such an idea may be in practice. It leads lawmakers and judges alike to assume that their unconscious ways of thinking about social advantage, derived from their bringing up, or their associations or their economic relations, may be taken as fixed data for legislative action or for legal reasoning. It leads judges to assume that their conscious personal views of social advantage are something upon the basis of which they may pronounce dogmatically that legislators with different views have acted unreasonably and unconstitutionally.

There is need of a method which will comport with different philosophical starting points. Jurisprudence cannot wait for a method until all are agreed upon one philosophy or one doctrine of social advantage. In the eighteenth century there was one creative method, but there were many types of philosopher; in the nineteenth century there was at bottom one organizing, systematizing method, but jurists came to this method from the most diverse philosophical

positions. In the actual practice of courts and jurists, after stating claims or demands in general terms as social interests, attempt is made, more or less consciously, to secure as much as possible of the whole scheme of social interests with the least sacrifice. This is the pragmatist ethical principle stated by William James. How far it is a sound ethical criterion we need not inquire. It is a practical juristic and legal criterion, and is in truth the measure by which, under the surface and covered by many theoretical disguises, courts and jurists have in fact weighed and valued conflicting claims. The task of the jurist is to make us conscious of the method that actually obtains and to give it more precision. He should aim at all times, and in all the compromises and adjustments and reconcilings involved in the legal order, to give effect to as much of the whole body of social interests as possible. Obviously the details must be worked out empirically. The compromises and adjustments that will achieve the largest securing of social interests with the least sacrifice, must be sought through a process of trial and error. It is largely a practical matter. Each legal system has, and very likely each will always have, its own solution for many conflicts. Such is the lesson of comparative law. Such also is the kernel of truth in one of the favorite doctrines of the historical school.[41]

2. THE RELATION OF LAW AND ADMINISTRATION

Two opposite tendencies have been manifest throughout the history of the public administration of justice. One is a generalizing tendency, in which cases are referred to categories governed by general formulas and the special facts of individual cases are left out of account. The other is an individualizing tendency in which each individual case is treated as unique and is decided with reference to its special facts. Much of the administration of justice is a compromise between the tendency to treat each case as one of a generalized type of

[41] See R. Pound, *Introduction to the Philosophy of Law*, lect. 2; R. Pound, "A Theory of Social Interests," *Papers and Proceedings of the American Sociological Society*, XV, 16 (1921); B. N. Cardozo, *The Growth of the Law*, lects. 2–5; M. P. Follett, *Creative Experience*, chaps. xiv–xvii; J. Charmont, "The Conflict of Interests Legally Protected in French Law," 18 *Illinois Law Rev.* 461; W. Jellinek, *Gesetz, Gesetzesanwendung und Zweckmassigkeitserwagung* (1913); P. Heck, *Gesetzesauslegung und Interessenjurisprudenz* (1914); E. Stampe, *Grundlegung der Werthewegungslehre* (1912–1919); F. Geny, *Méthode d'interprétation et sources en droit privé positif*, 2 ed., II, § 220; L. Duguit, *Les transformations générales du droit privé* (1912) (transl. in Continental Legal History Series, vol. II, chap. v); L. Duguit, *Le droit social, le droit individuel, et la transformation de l'état*, 2 ed., 1911.

case, and the tendency to treat each case as unique. In the history of law at some periods the one tendency has noticeably prevailed and at other periods the other tendency has no less clearly been dominant. In the nineteenth century the individualizing tendency was pushed into the background and was wholly ignored by legal theory, in which it was assumed that any such process was illegitimate. Today there is a marked reaction evidenced by the continual setting up of administrative tribunals, in which the process of application of law is individualized, and by the continual increase in the powers and jurisdiction of such tribunals. One of the chief problems of jurisprudence is to adjust these tendencies, or to partition the field of justice between adjudication and administration.

This problem is behind many of the debated questions of jurisprudence. The much discussed problem of the nature of law has led chiefly to futilities because it has failed to connect the question as to what law is with a number of equally old problems, and some newer problems, as parts or phases of a larger problem. In truth, the controversy as to the nature of law, the controversy as to common law and legislation, the controversy as to the relation of law to morals, the distinction between law and equity, the discussions as to the province of the court and that of the jury, the controversy as to whether procedure should be governed by strict rules or should involve a wide judicial discretion, the movement for individualization of penal treatment and the controversies which it involves, and the controversy in Continental Europe over application of legal precepts—all these are phases of the larger problem of rule and discretion in the administration of justice.

In large part the problem is one of partition. Inheritance and succession, interests in property and the conveyance thereof, matters of commercial law, and the creation, incidents and transfer of obligations, with respect to which the social interest in the security of transactions is especially strong, have proved at all times a fruitful field for effective legislation. On the other hand, where the adjustments and compromises involve not interests of substance, but the weighing of human conduct and passing upon its moral aspects, legislation has accomplished relatively little.

Likewise the agencies for individualizing the application of law, which have developed in different legal systems, almost always have to do with cases involving the moral quality of individual conduct, or of the conduct of enterprises, as distinguished from matters of property and of commercial law.

Legal precepts are not all of one kind, as was assumed by analytical

jurisprudence in the nineteenth century. Along with rules, analogous to rules of property, and authoritative premises for legal reasoning (principles), there are standards, i. e., legally defined measures of conduct to be applied by or under the direction of tribunals. Examples may be seen in the standard of due care, applied in cases of negligent conduct, the standard of reasonable service, applied in the law of public utilities, the standard of fair conduct of a fiduciary in equity, and the standard of reasonableness in the law as to restraint of trade. In Roman law there is the standard of good faith in transactions of good faith, or the standard of use according to the judgment of a good man in the law of usufruct, or the standard of fault in contractual relations, namely, failure to come up to the measure of a just and diligent head of a family. A common idea of reasonableness or fairness runs through them all, so that they have a variable application with time, place and circumstances. Most of them contain a large moral element. Hence application of them calls for common sense or the average moral judgment rather than for deductive logic. It is significant that these standards are not used in cases where the security of acquisitions or the security of transactions are involved. They have no place in the law of property, or in commercial law. On the other hand, they are the staple resource of the law in cases involving conduct or the conduct of enterprises.[42]

3. THE LIMITS OF EFFECTIVE LEGAL ACTION

One result of the functional attitude toward law has been to change our views as to the problem of the scope of legal action. That problem has now become one of what we may do effectively by means of legal administration of justice. We used to think that there were logical or metaphysical limitations upon the scope of law. Certain things were to be ordered legally because that mode of ordering them was deducible from a fundamental, metaphysically given, datum of free will. Other things were to be left untouched by law because restraint of freedom in those respects could not be so deduced. Law was the expression or realization of an idea of freedom. The criterion by which to discover the scope and subject matter of law was, What is the relation of the proposed legal regulation to abstract individual liberty? If the legal precept in question tended to promote abstract individual liberty, it was justified. But as every legal precept was a

[42] See R. Pound, *Introduction to the Philosophy of Law*, lect. 3; R. Pound, "The Administrative Application of Legal Standards," 44 *Rep. Am. Bar Assn.*, 445; N. Isaacs, "The Limits of Judicial Discretion," 32 *Yale Law Journ.* 339; R. von Laun, *Das freie Ermessen und seine Grenzen* (1910).

restraint upon freedom, it had to be justified; and it could be justified only by showing not merely that it was compatible with abstract individual liberty but that it actually advanced and promoted a maximum of abstract, free, individual self-assertion.

Under the reign of this mode of thinking we became quite oblivious to liberty in the concrete. It was not a question of free individual self-assertion of John Doe or Richard Roe under the actual circumstances, but of free self-assertion of the abstract individual, wholly removed from the actual social contacts and economic pressures of real life. Hence, courts talked solemnly about the employee who wished to take his pay in orders on a company store and was prevented from doing so by an arbitrary statute; as if any one ever did so of real choice in the industrial society of today; as if the abstract freedom of contract of the metaphysical ideal had any counterpart in actual life.

Today we think rather of practical limitations upon the scope of law. We see that there are limitations upon effective legal action inherent in the nature of our legal machinery. Because of difficulties involved in the ascertainment of the facts to which legal rules are to be applied; because of the intangibleness of many duties which are of moment morally but defy enforcement by external pressure; because of the subtlety of the modes of infringing important interests which the law would be glad to secure effectively if it might; because of the inapplicability of the legal machinery of rule and sanction to many important human relations and to some serious wrongs; and because legal precepts do not enforce themselves, but require us to rely upon individual human beings to set the law in motion—for all these reasons it is not possible, with any legal devices of which we know, to secure completely all interests which ethical considerations or social ideals indicate as proper to be secured.

Thus the difficulty is in the machinery, not in any metaphysically demonstrated or logically imposed barrier. With improved machinery we may do more and do it better. But as things are, there is much that we may not hope to do, or at least may not hope to do well, by means of law. For these things we must rely upon other means of social control. The law can do no more than preserve a social order in which these other means may operate effectively. Yet, when we put it thus, our attitude must be very different from the attitude of those who saw an inflexible and eternal metaphysical or logical bar standing in the way of the legal securing of human claims, beyond the minimum of interference that was required to bring about a maximum of abstract individual free self-assertion. The latter could

wash their hands of all responsibility for the unsatisfied claims and repressed desires of their fellow-men. They could say with a clear conscience, We are powerless to do anything. They could invoke the immutable and eternal limits imposed upon law by its very idea and purpose as a conclusive reason for refusing to engage in the futile task of seeking to achieve something further for human happiness through the law. As we think today, this comfortable evasion of the jurist's duty is not possible. When we perceive that the limitations are to a large extent, at least, the limitations of our tools, not inherent limitations in social engineering itself, it behooves us to examine our tools in order to see what they are and how and why they fail to do all that may be asked of them. It behooves us to ask whether other and better tools may not be at hand or may not be devised.[43]

4. MEANS OF INFORMING JUDGES, JURISTS AND LAWMAKERS AS TO SOCIAL FACTS

An important problem in recent science of law is to devise an effective legal apparatus for the ascertainment of the social facts involved in lawmaking and in the judicial finding, shaping and application of legal precepts. Sociological jurists have been urging that in lawmaking and in the interpretation and application of existing precepts we must take more account and more intelligent account of the social facts upon which the law must proceed and to which it is to be applied.[44] Even in the matter of statistics of judicial administration, necessary to an adequate appraisal of the work of the courts, little more than a beginning has been made in the United States,[45] and in statistics of criminal justice especially there is still need of pioneer work.[46] Even more important is the working out of some method of informing courts when they are called on to pass upon the reasonable-

[43] See Spinoza, *Tractatus Politicus*, chap. x, § 5; W. Markby, *Elements of Law*, §§ 48–59; J. W. Salmond, *Jurisprudence*, § 30; R. Pound, "The Limits of Effective Legal Action," 3 *American Bar Assn. Journ.* 55, 27 *International Journal of Ethics*, 150; G. Jellinek, *Allgemeine Staatslehre*, 2 ed., pp. 89 ff., 324 ff.

[44] O. W. Holmes, *Collected Legal Papers*, pp. 167, 184; P. Vander Eycken, *Méthode positive de l'interprétation*, pp. 109 ff.; H. Kantorowicz, *Rechtswissenschaft und Soziologie*, pp. 5–7.

[45] See the annual reports of the Municipal Court of Chicago; S. B. Warner, "Procedural Delay in California," 8 *California Law Rev.* 389.

[46] L. N. Robinson, *History and Organization of Criminal Statistics in the United States* (1911); Cleveland Foundation, *Criminal Justice in Cleveland*, (1922).

ness of social legislation in view of constitutional guarantees of due process of law.[47]

In the United States our so-called departments of justice are offices for legal advice to executive officers, for representation of the state in its civil litigation, and for advocacy in criminal causes. In the federal government the department of justice is a well organized prosecuting bureau. Nowhere is it organized to study the functioning of our legal institutions, the application and enforcement of law, the cases in which and reasons for which it fails to do justice, or to do complete justice, the new situations which arise continually and the means of meeting them, what legislation achieves its purpose and what not and why, and thus to give expert and intelligent guidance to those who frame and those who administer our laws. Today no legislative committee is competent to the highly specialized work of a ministry of justice. Our present system in this respect is wasteful, expensive and ineffective.[48]

5. IMPROVEMENT IN THE FORM OF THE LAW— "RESTATEMENT," CODIFICATION

Finally there is the problem of improving the form of the law. As things are in English-speaking countries the form of the law is perhaps its weakest point. Where the bulk of the law is in the form of reported decisions, the advantages in the way of flexibility are balanced by a serious impairment of certainty. In any given jurisdiction many questions are still open which have been passed upon in other jurisdictions. There is no certainty that the solution which has been adopted elsewhere will be followed. Moreover, it often happens that different solutions have been reached by the various courts which have passed upon the matter, so that on many questions there are a number of competing rules from among which to choose, with respect to which the law is still open in some of our oldest jurisdictions. Sec-

[47] In this connection reference should be made to the well-known briefs of Mr. Justice Brandeis (when at the bar) in Muller v. Oregon, 208 U. S. 412 and Ritchie v. Wayman, 244 Ill. 509. See also, W. F. Willcox, *The Need of Social Statistics as an Aid to the Courts* (1913); J. G. Palfrey, "The Constitution and the Courts," 26 *Harvard Law Rev.* 507, 525–530.

[48] See J. Bentham, *Works*, IX, 507–613; T. A. Nash, *Life of Lord Westbury*, I, 191; R. Pound, "Juristic Problems of National Progress," 22 *Am. Journ. of Sociology*, 721; R. Pound, "Anachronisms in Law," 3 *Journ. Am. Judicature Soc.*, 142–146; *Report of Lord Haldane's Committee on the Machinery of Government* (1918); B. N. Cardozo, "A Ministry of Justice," 35 *Harvard Law Rev.* 113; Lord Birkenhead, *Points of View*, I, 92–130.

ondly, the unwieldy form of the law involves a great waste of labor. Time is taken from thorough consideration of causes in laborious search for the legal materials applicable to them. Again, when legislation is desired it is sometimes quite impossible to say with assurance what is the law upon fundamental points with reference to which the legislative act may have to be applied. Often the survival or partial survival of obsolete rules or institutions introduces an element of irrationality, and irrationality of form results in irrationality of substance. Frequently also confusion flows from the existence of two parallel lines of legal precepts—case law and statute law—dealing with the same subjects, the one potentially with the whole, the other with parts here and there.

When the legislative reform movement was at its height in the middle of the nineteenth century, there was a strong movement for codification in England and in America. Discussions of codification were the staple of juristic controversy in England down to about 1875, and in the United States down to about 1880. Interest in the matter died out in England because of the rise of social legislation and the sweeping reform of procedure from 1875 to 1890 through the Judicature Act and rules of court. In this country the matter was agitated chiefly in New York in connection with Field's draft codes. These drafts were crude and unsatisfactory and interest gradually waned. Recently interest has revived in England, and a new movement for codification was evidently setting in when it was arrested for a time by the war. In this country the matter is still dormant, but it seems reasonably clear that a revived interest must be expected, and that codification will be one of the chief problems of American law in the next generation. In the meantime, a private codification, as it were, is going on in the "restatement of the law" under the auspices of the American Law Institute. Very likely this may be the forerunner of a future American code.[49]

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[49] See Lord Birkenhead, *Points of View*, I, 150–190; J. C. Carter, *Law: Its Origin, Growth and Function*, lects. 11, 12; J. F. Dillon, *Laws and Jurisprudence of England and America*, 178–187; J. Austin, *Jurisprudence*, lect. 39 and Notes on Codification; H. Oliphant, *The Relation of Current Economic and Social Problems to the Restatement of the Law*, Reprint from Academy of Political Science of New York (1923).

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CHAPTER X

ETHICS

By Robert Chenault Givler

I. INTRODUCTION

1. THE DISTINCTION BETWEEN ETHICS, MORALITY, AND RELIGION

Ethics is neither a polite synonym for morality, nor an impolite synonym for religion. As yet, all these three terms are unfortunately quite distinct.

Morality and ethics are unlike in that the former implies group customs which have been unconsciously adopted by the majority in a hasty attempt at social organization and control; ethics, on the contrary, represents the effort of individual thinkers to attain a critical knowledge of the true nature and needs of men. Again, morality usually involves the enforcement of old customs by the uneducational method of ostracism; while ethics carries with it the presumption that human life is an experiment, the conditions of which are perpetually changing, and that consequently one must always be prepared to find new solutions even for old problems. On its worst side, morality implies the demand for an outward uniformity, as well as an imitation of mediocrity; while ethics tends towards the development of picturesque leaders, whose function is to remind us of those sources of freedom we continually ignore. Against the inertia of morality ethics makes a bold and effective protest. And here a final distinction has particular emphasis. For while it is often the case that the public and private morality of a group or of an individual may be quite distinct and incompatible, no such dualism or duplicity is possible where an ethical insight has finally been achieved.

On the whole, morality, in that it represents the tendency toward rigidity, conservatism, and ostracism, is derived from the older parts of the nervous system whence habit and the cruder emotions have their source; while ethics is a function of that part of the human brain which was the last to be developed. And since it seems to be nature's unspoken edict that the newer is the better, there is some basis for hoping that the benefits of an ethical insight will finally counteract the more serious mistakes of morality.

A contrast between religion and ethics may be drawn only if we

understand religion to mean supernaturalism rather than social morâle. It is then immediately obvious that ethics is a protest against that older and less enlightening form of religion which claims to have been revealed in other ways than those by which knowledge is properly accumulated. Supernaturalism, first arising from trepidation at the vast and portentous enigma of nature, next manifesting a tendency to take paradoxical refuge in the object of awe by making nature, if not friendly, at least communicable; still later developing a way of escape from the evils of this world through the ingenious belief in kind friends and pleasant places at the far end of this life; and finally seeking by ritual and moral mythology to obtain vicarious satisfactions for thwarted overt activities,—supernaturalism, you might say, represents a sort of beautiful untruth, which, while perhaps once expedient, and doubtless still dramatically appealing, is nevertheless now regarded by the sober-minded as being less and less important for the conduct of life.

Ethics, indeed, agrees that nature is very much of an enigma, but nevertheless it bravely sets to work to find out just how many of its secrets can be known. Ethics is thus more patient and perspicuous than is traditional religion. Again, instead of seeking for invisible friends or foes behind the phenomena of nature, ethics begins a passionless inventory of the resources of human life, admitting that good and evil are both equally natural and equally worthy of acquaintance. In so doing, ethics seeks not to escape from life. It regards this world as the everlasting work-shop of the human race, where a substantial, even if a modest, good may perhaps be achieved. And finally, ethics teaches that to look for vicarious satisfactions is after all symptomatic of infantile trends of character; that even if the world is in the last analysis half comedy and half tragedy, the thoroughbred will not whimper when he finds it out, nor demand to eat his cake and have it too.

Ethics is thus in the strictest sense of the term a philosophy of life. It regards the earth as the permanent arena of human activities, rather than as a tutoring school for a future existence. It holds life to be a bold adventure, rather than a stereotyped repetition of outworn custom. It aims to develop the capacity for a wide choice of behavior, rather than to restrict men to the limits of maxims and threadbare aphorisms. What especially must not be forgotten, modern ethics seeks to understand human nature before it ever suggests what is right or what any one ought to do. And while ethics may learn from both morality and religion something that is useful, it also aims to redirect them both into more wholesome channels.

Being a philosophy of this life, ethics is dependent upon a wide knowledge of this world, and consequently it differs from both morality and religion. Morality is restricted to localities, to narrow neighborhoods, to quaint customs, to taboos; while supernaturalism has traditionally been concerned with imaginary realms beyond our ken. Neither of these human institutions can be said to have any element of necessary knowledge in their construction. Ethics, on the contrary, is always supported by extra-ethical considerations,—by a knowledge of something else than human conduct. To furnish this support one of two sources of knowledge must be available,—either a knowledge of the world in which we live, or a knowledge of the human mind. Fortunate and justly famous have those ethical theories been which have such a two-fold foundation. A knowledge of the world in which we live, which we shall hereafter refer to as metaphysics, is essential for ethics, not only because man is a product of nature, but also because conduct is so largely a matter of the interplay between the organism and the environment. To live successfully demands some clear knowledge of nature's ways,—of crops and rainfall, of tempests and tides, of earthquakes and minerals, of seasons and sun-spots,—in a word, of the metaphysics of everyday existence. A knowledge of the human mind is important for the reason that conduct is so often the expression of secret thought and feeling. Even if it is now only figuratively true that our minds determine our behavior, it is still necessary to know something of the transmutation of a wish into a will if we would understand even the simplest rudiments of human conduct. Ethics, in thus being supported by either a naturalistic metaphysics or by an empirical psychology, is thus a derivative science. Were this not the case, it could have no claim to be preferred to the fugitive aphorisms of morality or the speculative fairy tales of supernaturalism. Ethics is better than either of these because it is based upon related coherent knowledge that comes from a wide variety of sources, and is consequently subject to more checks upon its errors. It is indeed this give-and-take of ethics, and not either its rigidity or its infatuation for an absolute truth, which has made it of all human pursuits the most worthy of incessant consideration.

II. A BRIEF HISTORY OF THE MOST IMPORTANT CONTRIBUTIONS TO THE MODERN SCIENCE OF ETHICS

1. SOCRATES

Ethics began in the mouth of Socrates because he was the first man to admit that a theory of conduct is helpless without either meta-

physics or psychology to give it stability. Of these two, Socrates chose the latter, for he had become an agnostic with regard to the nature of the universe or man's place in it. The ethics of Socrates indeed represents a protest against a widely prevailing doctrine of his day,—the doctrine of the relativity of all Being. This doctrine, which was originated by the brilliant Heraclitus, was transmuted by the sophist Protagoras into the general relativity (that is, insecurity) of all knowledge, and by other sophists into the special relativity of ethical values. Protagoras had proclaimed:[1] "Man is a measure of all things, of things that are, that they are; and of things that are not, that they are not." Moreover, each man at any time is the measurer, the criterion, the final judge of experience; as Tennyson's sceptic says:

"And truth is this to me, and that to thee."

To which Socrates may be pictured as replying: "Not so fast, good sir; for only if you mean by the word 'man' Mankind in general, is your statement correct. It is my conviction that if you give each man a full chance to ventilate his ideas on ethical subjects, you will find more general agreement than disagreement among human beings. That is to say, if you can give ethics the proper background of a knowledge of human nature,—if you can help each man to realize just what the expression 'Know thyself' means, then you will find out that ethical values are not particular, but general, and that in the end all persons will agree on the significance of the good and the right." And whether Socrates was correct in the conclusion he assumed, he was masterfully astute in his method, which was actually the statistical method in ethics.

This insistence upon a wide knowledge of human minds as a necessary prologue to ethical theory also appears under another guise. In the *Symposium* of Plato Socrates is represented as the last speaker at a banquet where the theme of each toast is the nature of Love. One speaker praises Love as the best and fairest of the gods, another descants upon love in nature as manifested by affinities of various sorts, a third indicates the greater benefits which lovers, as contrasted with non-lovers, have achieved both in war and peace. All this is typical (and modern) after-dinner speaking, pleasant and shallow, a way to kill time. But when Socrates' turn comes, he asks just one simple question, namely, "Is love the love *of* something or of nothing?"[2] The question is momentous, overwhelming. At the ut-

[1] Quoted from Bakewell, *Source Book in Ancient Philosophy* (1909), p. 67.
[2] Jowett's Translation, 200.

terance of this question "evolution turned a corner," man became conscious, and occidental civilization began. And as question and answer follow one another in the *Symposium*, it turns out that love is neither a god nor a substance, but a function of man's mind. It arises from a sense of want, it desires that which it does not possess, and is a confession of incompleteness. As a matter of further discussion in the Platonic dialogues, even knowledge is similarly regarded as having an instrumental function. They who want to know something, do so because they realize their ignorance; the truth-seeker, like the lover, is in the intermediate stage between having nothing and having something. Subtract man from the universe, and neither knowledge nor love would exist. Socrates, by thus destroying absolutes, gave us universals.

These two motives,—the need for a wide knowledge of human nature, and the necessity of taking a functional view of human interests,—are what make Socrates an ethical rather than a moral philosopher. It is these motives, these psychological backgrounds, which reinforce so strikingly the truth of his doctrine that Virtue is Knowledge. Every case of doing the right thing is a case of knowing how to accomplish acceptable results. Contrariwise, vice, in Socrates' estimation, was involuntary,—that is, it was a sign of ignorance,—ignorance both of methods and of results. According to this philosopher, the secret of profitable living was to know what you want and to know how to obtain it. But before a man can know what he wants, he must know his own nature so thoroughly that when he gets what he wants he will want what he has gotten. Such self-knowledge is both necessary and sufficient for virtue, and virtue thus safeguarded by knowledge is bound to bring happiness. Freedom, too, has its sole basis in intelligence; we are free to do only that which we are equipped to do. No one can give us freedom; it is a present which we make to ourselves.[3]

Socrates actually died a martyr to his method, which is not at all astonishing when it is realized that people have always wanted their happiness in a hurry, claiming it as a natural right or as a bonus for consenting to existence. It is hard to regard it as something that must be honestly earned.

2. PLATO

The ethical theory of this renowned philosopher comes well recommended, since it is backed not only by astute psychological observa-

[3] Compare W. G. Everett, *Moral Values* (1918), Chap. xii, "The Ethical Interpretation of Freedom," especially pp. 358–9.

tions, but also by a theory of man's place in nature. The metaphysical background, however, is not very important, and Plato uses it only as a sort of refuge from the irritating facts of concrete experience. To him reality is supersensible, a world of pure ideas, rather than the good, red earth; consequently the cogency of that part of Plato's ethics which derives from a transcendental world is correspondingly lessened.

Plato was a student of psychology, and gave us the first hint of the laws of association, as well as of the theory of dreams now attached to the name of Sigmund Freud. The chief theme of Plato's ethics is the harmonious life, to which all the vital, mental, and social functions of man have something to contribute. Head, heart, and abdomen each have an important place in the economy of the human organism. Each also has its characteristic virtue, or strength: that of the head is knowledge; that of the heart, courage; and that of the abdomen the use of the simple animal desires to promote a general well-being. Each also has its characteristic defect, or vice: in the same order respectively, ignorance, cowardice, and sensualism represent the mal-functioning of these body-parts. All this is derived from a theory of the body as a natural, explicable phenomenon. A harmonious life, then, consists in using each of these three sources of good, stifling none, and rendering coöperative all the varied traits and interests that the human soul produces.

Greek to the core, Plato urged not only harmonious living, but wide experience and multiplicity of talents. The state, the gymnasium, the theatre, the concert, the library,—all these institutions were sources of the beautiful and the good. Plato advised an intimate acquaintance with all things of any importance, not for the sake of the thrills, but for the fruits of wisdom that might result. "Platonic love," as it is conceived by the ignorant sentimentalist, was not Plato's brain-child. He expressly says that love begins with the love of fair forms, of beautiful bodies; then it advances to the love of minds and of fellowship, and finally culminates in the love of pure ideas. Plato did not believe in building character down from the top.

Nevertheless, Plato was now and then just a little remote from the arena of conduct. For he deemed that only by contemplating the supersensible world of ideas could the harmonious life be finally attained. In his own case it might have been true, but the figure of an intellectual cloister comes forcibly to mind nevertheless. That Plato did not carry out Socrates' experimental program in ethics is plain; it is also the characteristic defect of a worshipper of pure

abstractions that he rarely troubles to compare them with those of the impure variety for purposes of verifying their utility.

Plato enlarged his ethical theory to include politics, which with him signified nothing more than life in a small city, and in the *Republic* he emphasized the determination of what is right and just by reference to the needs and capacities of living men. As in the individual a harmony of desires is the highest good, so it is in the state. This condition is known as justice, in the definition of which Plato very closely approximated the modern phrase, "From each according to his ability, to each according to his need." And while Plato recognized individual diffefences among men, they were differences of caste, of the accident of birth, rather than differences of capacity. Laborers, soldiers, and statesmen are the only three types he mentions. Moreover, when he argues in the *Republic* for the mating of the brave with the fair, and for the obliteration of the private family, even though he touches here on eugenics, he nevertheless fails to recognize that man is cryptogamous and whimsical in his affections. Rich in allusion as the *Republic* is, and potent as it has always been to stimulate discussion, it is nevertheless greater as literature than it is as ethics. For while Plato forgot nothing that Socrates said, he learned little of what Socrates had to teach.

3. ARISTOTLE

The background for Aristotle's ethics is furnished by his psychology rather than by his metaphysics, and, as was the case with Plato, it is found more particularly in that phase of psychology which is derived from biological considerations. Aristotle states that the mind is a function of the body, and he particularly says that if the eye were an organism, vision would be its soul. Such a naturalistic conception of mind could well be expected to produce fruitful results in the realm of ethics.

According to this philosopher, the good of any animal is the exercise of its specific function. The parts of our bodies are so fashioned as to do certain things with particular ease and effectiveness, and our desires set these parts into activity to supply our needs. Thus we attain that which we call good. Moreover, what is good is determined by what is sought after; value arises when something is desired, and this is true for the whole realm of living things. But man, unlike the other animals, not only desires things, but also deliberates on what he wants as well as on what he has already gotten. Hence this peculiar human function of reason, as it is called, must also be em-

ployed if the whole man shall get all the exercise he needs. The resemblance to Plato's scheme at this point is obvious; but Aristotle, instead of fixing upon a harmonious life as the ideal type, settles upon a life of moderation.

Each human trait may manifest itself in one of two extremes of action, producing either too much or too little of what might otherwise be a reasonably good thing for the organism. Between these extremes lies the golden mean, and this is the goal of rational conduct. For example, courage is the mean between timidity and rashness; liberality is the mean between stinginess and spendthriftness; candor is the mean between lying and boastfulness; and so on throughout as long a list as one may care to make. This doctrine of moderation does not mean quite the same as the more ancient Greek motto, "Too much of nothing," since it asserts definitely commendable modes of behavior. Aristotle's theory often sounds extremely artificial, seeing that it is by no means certain that all questions of conduct can be treated as simple problems in mathematics. The golden mean is theoretically the mean proportional between two obvious extremes; practically it is felt to be no such thing. In the formulation of this theory Aristotle was himself somewhat deceived by the words he employed. Nevertheless, he was alert to the difficulty he had encountered, since he admits that only by experience can we determine just what the mean is in specific circumstances. It depends upon the performer, the object of desire, the time, the place, and the circumstances. This empirical observation is extremely important, since it furnishes the real test for the soundness of the theory.

It is, however, in Aristotle's discussion of the function of the fine arts, and especially that of the tragic drama, that we find what is perhaps his greatest contribution to a science of ethics. Tragedy, he says, furnishes us an excellent means for purifying our minds of emotional conflicts by letting us go through certain painful experiences *in imagination*, thus forestalling the necessity of going through them in real life. Tragedy lets us realize what might have happened if our own anger, our own jealousy, our own fretfulness had been realized in overt acts, and thus serves both to anticipate and modify experience, and also to let dangerous energies evaporate harmlessly. True to his calling as a philosopher, Aristotle was more interested in the ethical function of the stage than in its merely sensuous appeal.

The large, broad, full life so characteristic of Athenian conduct appears in the conclusions of the *Nichomachæn Ethics*. Aristotle

agreed with Socrates that virtue could be taught, but he also added the necessity of making its practice habitual. Virtue is not worthy of the name until it has become pleasant. "A man is not good at all unless he takes pleasure in noble deeds." Virtue must be the exercise, not the drudgery, of a specific human function. Moreover, the virtue which leads to happiness does not consist of denials, but of affirmations; asceticism is equivalent to ethical starvation. "Happiness plainly requires external goods, too . . . ; for it is impossible, or at least not easy, to act nobly without some furniture of fortune. There are many things that can be done only through instruments, so to speak, such as friends and wealth and political influence; and there are some things whose absence takes the bloom off our happiness, as good birth, the blessing of children, personal beauty; for a man is not very likely to be happy if he is very ugly in person, or of low birth, or alone in the world, or childless, and perhaps still less if he has worthless children or friends, or has lost good ones that he had."[4]

4. THE STOICS

Of all the various types of philosophy, Stoicism has stuck the most persistently to man's tongue, since the perennial phrase, "He took it philosophically," always implies the Stoical attitude toward life. Indeed, the Stoic ethics comes highly recommended, seeing that it is based upon both a theory of nature and a theory of mind.

The Stoic metaphysics conceives of the universe as a reasonable, orderly, and necessarily complete scheme of existence. Nothing is but what has to be. Cause and effect are always operative; they never sleep. Any inquiry into the secrets of nature, any science that investigates the universe always finds law as an inevitable result. To study physics, chemistry, astronomy, or any other science is *ipso facto* to study logic; it is Reason alone that rules the world.

As it is with nature, the producer, so it is with man, the product; reason is the universal, permanent, ennobling element in both. By reason man comprehends nature, and by reason he learns to comprehend himself. The three parts of the Stoic philosophy,—physics, logic, and ethics,—are moreover basically identical. To do the reasonable thing is not only virtuous, but natural as well. The unifying principle of a good life is the same as the unifying principle of the world. The famous Stoic maxim, "Follow Nature," implies a heroic attempt to feel at home in the illimitable universe.

[4] Quoted from Bakewell, op. cit., p. 256.

The inevitable consequences which follow these premises are accepted without murmur by the Stoic. If nature's way is the right way, why should man complain about any natural calamity? "No man should fear death," says Marcus Aurelius, "for it is according to nature, and nothing is evil which is according to nature."[5] Conversely, he who follows nature will realize that nature never laughs, or indulges in an excess of any feeling; why, then, should not the wise man be always "like nature calm, like nature cool?" Epictetus, in his *Discourses*, constantly stresses the point that there are two kinds of circumstance,—those we can, and those we cannot help, and his blunt advice is to mend the first and to regard the second with a calm indifference. Indeed, so intensely syllogistic is this particular Stoic that he exclaims: "Does the Emperor desire my head? Well, then, let him take it; but he cannot at the same time deprive me of my willingness to part with it." Perhaps it is only the middle register of the Stoic philosophy that has appealed so persistently to the popular imagination, for the ideal of the "passionless sage," when carried to extremes, is a curious mixture of mournful stubbornness. Nevertheless, the Stoic philosophy, in that it actually furnishes the means for tiding one over very great difficulties, is perhaps the most significant contribution of antiquity to practical ethics. Whatever else they may do, thoroughbreds never whimper. It was the Stoics who first taught us by example the importance of this truth.

5. THE EPICUREANS

"Simple flavors give as much pleasure as costly fare, when everything that can give pain, and every feeling of want, is removed; and corn and water give the most extreme pleasure when any one in need eats them. To accustom one's self, therefore, to simple and inexpensive habits is a great ingredient in the perfecting of health, and makes a man free from hesitation with respect to the necessary uses of life."

These words, seldom quoted, and less often known, taken from the letter of Epicurus to Menœceus, represent as well as any quotation can the true Epicurean philosophy. The sentiment here expressed is in striking contrast to the evil reputation from which Epicureanism has traditionally suffered.

The Epicurean ethics, like that of the Stoics, is based on both a theory of nature and a theory of man's mind. Epicurus, following the Atomists, anticipates the modern view that nature is a mechanism

[5] Meditations.

in which no accidents can happen. Whether this philosopher was, as is commonly asserted, an atheist, let the reader judge from another quotation from the aforementioned letter:

"And that man is not impious who discards the gods believed in by the many, but he who applies to the gods the opinions entertained of them by the many."

Both the Epicureans and the Stoics believed that nature was orderly, but the former, unlike the latter, did not conceive of nature as something that could be followed. "For there are gods," writes Epicurus, "but our knowledge of them is indistinct." The true opinion and the false opinion being hard to distinguish, moderation in all things becomes the chief Epicurean doctrine.

The psychological background of this philosophy has also its ethical implications. The obvious fact is that life is a matter of sensation; to live is to feel, and the feeling of our existence arises long before the knowledge of it. Here, then, is another cue for the conduct of life. "Accustom yourself also to think death a matter with which we are not at all concerned, since all good and all evil is sensation, and since death is only the privation of sensation. . . . For there is nothing terrible in living to a man who rightly comprehends that there is nothing terrible in ceasing to live."[4] It was with this smiling fortitude that the Epicureans met the "challenge of death."

On the whole, the Epicureans were much more easy to live with than were the Stoics. To use Jack London's phrase, one could count on them to "wake up smiling," and one would certainly find them agreeable before breakfast. Both Stoic and Epicurean taught us the first principles of plain living and high thinking, but the latter showed us that these traits need not exclude the capacity for the finer social affections.

6. THE CYRENAICS

None of the preceding ethical philosophies have expressly asserted just what is the status of pleasure in the determination of the good. It was left for Aristippus of Cyrene to declare that pleasure is the sole criterion of value,—a teaching which is derived from psychological considerations.

The recurring fact of life is that our desires direct our conduct, and that it is our feeling of contentment, our happiness,—concretely stated, our pleasure,—that announces the satisfaction of any desire. Theoretically, then, "if we could live from moment to moment, feel-

[4] Bakewell, op. cit., p. 297.

ing each with the fullest delight that sense and mind are capable of receiving, that would be the ideal of life."[7] Practically, this is impossible. We do not always feel that we have gotten what we wanted, much less that we want what we have gotten. There are irritating by-products of many desires which mar the pleasure of realization. Consequently, while pleasure is and must be the goal of life, true pleasure must be pure to be worthy of the name. It is the fruits of experience, and not experience itself, which is the measure of a wholesome life. Socratic insight must be employed as a test of what is worth while.

Only for the finest mental pleasures does the true Cyrenaic strive. All else are unsafe. Excessive bodily passions,—gourmandizing, drunkenness, sexual excesses, and the like,—all have a mocking appeal; they illustrate the hedonistic paradox, namely, that to pursue pleasure too avidly leads invariably to pain. Pleasures of the mind, on the other hand, while just as thrilling as those of the body, are never followed by a headache on the morning after.

Thus stated, the Cyrenaic philosophy "affords no room for the play of those finer sentiments about the good and the just. . . . But in compensation, it offers a well-defined view of life, with no nonsense about it, which lends itself to what is intellectually the simplest and most clear-cut of theories, and which, besides, appeals powerfully to the natural man."[8]

7. THE CYNICS

Contempt of pleasure, a single standard in morality, and the preference for just men ahead of one's relatives might be the contents of a telegram announcing the novelties of this striking philosophy.[9] The Cynics have been grossly misquoted, in that they have been represented as professional scoffers, whereas their dominant trait was the determined effort to live as blamelessly as possible.

The two most renowned Cynics of antiquity, Antisthenes and Diogenes, represent an ethical philosophy that has a psychological rather than a metaphysical background. What the universe meant they did not care; all they knew was that life was a predicament. Their theory of conduct is derived from the consciousness that all unnecessary cares are liabilities. "The simple life" (Diogenes' own phrase), is the only way to virtue, and such a life can be pursued only

[7] A. K. Rogers, *A Student's History of Philosophy*, p. 64.
[8] Rogers, op. cit., p. 65.
[9] Bakewell, op. cit., pp. 146–7.

if one "travels light." Hence the prologue to a virtuous career is to rid oneself of all needless impedimenta. This was the first step in "knowing what you want and knowing how to get it." Antisthenes held that virtue was itself sufficient for happiness, and that men were to be measured for their equality, not by rank or purse, but only according to their standards of conduct. Moreover, he observed that all good men everywhere are friends, that virtue is the only weapon of which a man cannot be deprived; and that one should listen very carefully to one's enemies, since they are the first persons to detect one's errors Do such remarks substantiate the popular disesteem in which the Cynic is held?

It is true, indeed, that Diogenes had a little more of the iron in his soul than did Antisthenes. The loss of his family honor through his father's embezzlement, his experience as a slave in the public market, and other equally bitter experiences served to add personal touches to his philosophy of life, which in the baldest terms may be epitomized as follows: You do not have that which you seem to possess: it has you. Diogenes, reducing his worldly goods to a minimum, and making a tub serve both for clothing and shelter; accepting putrid meat and offal for his fare, intentionally muddying Plato's clean dining-room floor as a rebuke to the "nervous housewife"; hunting by day with a lantern for an honest man; asking Alexander to stand out of his sunlight; calling aloud for the men of Athens to draw near, and when the rabble had approached, scornfully crying: "I called for men; ye are excrements!"—hereby stubbornly refused to make any compromise with the eternal shams of life. Let us admit that he warned, rather than taught; but let it also be whispered that his secret followers are more numerous than any public vote of confidence in him would ever reveal.

8. JESUS

Informed students of philosophy and history know very well that it is purely by convention that the word *Christian* is applied to everything from a civilization to a business man, since the ethical teachings of Jesus have had far less effect upon the occident than have those of the Stoics, Epicureans, Cynics, or Cyrenaics. The doctrines of Epicurus and Aristippus are always the most evident in a time of prosperity, those of Antisthenes and Epictetus in times of depression, while the so-called Christian ethics are used principally as an over-sanction for what is regarded as commendable, or as a

higher source of rebuke for what is felt to need censure.[10] The reason for this may be very hard to find, but it seems to be due in a measure to man's inveterate love of deduction,—in this case to the desire to estimate things by their roots rather than by their fruits,[11] and to prefer the roots of authority to the fruits of experience. Moreover, Jesus the man has been so persistently confounded with the mythological concept of the Christ, and so often smothered under the habiliments of a sacrificial savior, that it has become almost impossible to distinguish what he himself said from that which hopelessly biassed persons said that he said. For Socrates had his Plato, but Jesus had only the evangelists.

According to the best authority we possess,[12] Jesus was an untutored man who first appears in Judea as an exhorter whose sole reported utterance was: "Change your minds, for the Realm of Heaven is at hand." He seems to have had a large following, and at the beginning of his brief career he was content to utter maxims and parables on the individual conduct of life. But Jesus also undertook certain public reforms, in the pursuit of which he was destined to annul this early, favorable reputation. His first rebuff came when he forcefully condemned the extreme formality with which the Jews interpreted their social law, and by his doctrine of passive resistance he affronted the Junkers of his neighborhood who were secretly conniving rebellion against Rome. Then suddenly he appeared at the capital city Jerusalem where he immediately got into serious difficulty because of his criticism of the way in which certain of the temple services were managed. It appears that devout Jews had to pay their contributions to the church in Jewish money, over which the priests had a monopoly and for which they charged a rather high rate of exchange. Moreover, the only sacrificial animals that were deemed fit to be burned on the altar were kept by the priests in their private stockyards, and for this registered stock fancy prices were charged the devout communicants This extensive moral profiteering Jesus seems to have discovered and broadcasted, and Professor Kirsopp Lake is rather of the opinion that Jesus paid for this criticism of ecclesiastical prerogatives with his life. Such an account of the career of this famous man is, we are more and more coming to believe, much truer than the customary one.

[10] See John Stuart Mill, "Of the Liberty of Thought and Discussion," in his *Essay on Liberty*, (Everyman's Library, pp. 100–102).

[11] See R H. Dotterer, *Beginners' Logic*, (1924), pp. 329–30.

[12] *The Gospel of Mark;* see also Kirsopp Lake, *Landmarks in the History of Early Christianity*, (1920).

What, then, shall we say that Jesus made as an original contribution to ethics, or in other words, what metaphysical or psychological background did he employ that was new or useful as a working theory of conduct? And here we must remember that compared to the schools of ethics we have previously been discussing, Jesus was comparatively a "modern." Socrates lived as long before Jesus as did Christopher Columbus prior to our own generation. Similarly, Aristotle, Epicurus, and Diogenes had been dead nearly three centuries before Jesus was born. Moreover, the doctrines of these and many other Greek ethical teachers had thoroughly molded the thought of the Roman Empire in the first century A. D. Indeed, the New Testament, in its lucid passages contains more Greek philosophy than anything else. The Gospel of John begins with a half-quotation from the Neo-Platonist Philo; the Socratic willingness to die for the truth reappears, some say less fortified by logic, in the death of Jesus; the Epicurean love of simple pleasures finds its echo in the notion that "the life is more than meat"; the Stoic conception of a world ruled by reason is mirrored in the doctrine that long-suffering in this world is temporary and will be rewarded in the next; while the Cynic contempt for economic sufficiency is illustrated in the vagabond life which Jesus led. Indeed, anachronistic as it may sound, Christianity spread very fast around the Mediterranean countries simply because it was already there.

Nevertheless, while the evangelists were not original, Jesus himself seems to have been so. His contribution to ethics rests upon a psychological principle, even though he may not have suspected it. He observed, let us surmise, that human conflicts usually arise because two persons become angry and unyielding at the same time, and that such conflicts persist only to the degree that both contestants simultaneously nurse their wrath to keep it warm. The famous doctrine, "Love your enemies," treated analytically, rests upon a very ingenious and penetrating psychological insight. The assumption is that if an angry man is confronted by a completely different sort of an antagonist from that which he expects, for example, by an agreeable, considerate, relaxed individual, his preparation for conflict will likely wilt, thereby opening the way for a restoration of social peace. Moreover, the man who thus meets anger with cordiality will probably be better prepared to solve even the angry man's problems than will the angry man himself. This doctrine (granting that it altogether ignores individual differences), being theoretically good psychology, is also good ethics. A similar tendency is shown in the wish to be forgiven our own debts just in proportion as we forgive

the debts of others. Nevertheless, it is quite apparent that such psychological pacifism, whatever be its good points, is not a solution for all the problems of life. Significantly enough, Jesus himself abandoned the doctrine when he undertook his public reforms, and he does not seem to have remembered it in the critical instance when he was most in need of friends.

9. SPINOZA

In Spinoza's *Ethics* we find the most persistent attempt ever made to provide a complete background of metaphysics and psychology for a theory of conduct. To use William James' phrase, Spinoza was "tough-minded"; he attempted by geometrical reasoning to demonstrate the nature of the universe and man's relation to it. Particularly does the pertinacity of Spinoza's mind show itself in his transition from metaphysics to psychology, and from psychology to ethics. And while he may have been wrong in many of his conclusions, his program is today duly honored by its numerous imitators. Incidentally, he had the longest span of attention of any man that ever wrote.

The metaphysical basis of Spinoza's ethics is largely Stoical. He regards the universe as infinite and perfect, and everywhere revealing the immanence of God. Being perfect, the universe undergoes no change or improvement; it was not created and is not evolving. Consequently it has no purpose, as human beings use the term; there are no final causes.

Of all the possibly infinite ways of revealing itself which the universe manifests, man is aware of but two,—material objects and mental processes. These two are also coördinate, the obverse and reverse of each other. Every material object can be thought of in its absence, and every thought has its final referent in a material object. Moreover, this parallelism of thought and matter is constantly revealed in man's conduct: the body that carries out our individual volitions is inseparably connected with the mind that knows what to do. As Spinoza says, "The will and the intellect are one and the same."

However, when the human emotions were taken into consideration, Spinoza, like his philosophical god-fathers, the Stoics, found the unity he sought after becoming more and more elusive. For while the intellect and the will may be one and the same, the intellect and the emotions are not. According to Spinoza, it is the emotions which always disturb our perception of fact and truth and our will

to act upon it. And while there are both good and bad emotions, yet since the general tendency of mankind is to lose the power of moderating and checking the painful feelings, and to become altogether subservient to the pleasant ones, for a man to have emotions is equivalent to his having confused ideas. Man is in chains of slavery on account of his feelings; he suffers from them as from a disease. The way of salvation is the way of escape from this thralldom. Only one human emotion is exempted from this list of liabilities,—the intellectual love of God,—the joy in the universe as the totality of perfection.

In his medievalism and asceticism Spinoza reverts to an age that was already dead and buried; in his giving a prominent place to the affectional side of human nature his face was turned toward the present. His greatest contribution to modern ethics is his ambition to unify the personality, and in this he voices a perennial need. But it is doubtful whether the attempt to make the feelings subservient to the intellect, especially if the former be regarded as essentially hot and the latter as necessarily cold, is possible until the feelings themselves have been studied without prejudice. What we would control must be first understood.

10. HOBBES

Whenever the question arises as to how much of our daily conduct is *natural* and how much of it is artificial, we find ourselves in a pitfall, if not indeed a vortex, of thought. When passed over quickly, this word "natural" appears to be a useful and intelligible one; but whenever it is repeated or emphasized beyond a certain point, it ceases to be used with confidence. The whole history of philosophy, of law, of religion, and of some other things could well be described as a battle over the right of equivocal words to exist. Sometimes the struggle ends with the banishment of the word completely from the vocabulary: today, for example, no physicist talks about Matter, and no psychologist discourses on the Soul. But in earlier days, words died more reluctantly, and prior to their death they often held a celebration. The ethics of Thomas Hobbes furnishes such a case in point with regard to the word *natural*.

This philosopher bases his theory of conduct upon materialistic metaphysics and psychology. All that exists is bodies, and all that happens is motions. Even sensation, imagination, thought, and feeling are due to motions in the brain and interior parts of the body of man; our conception of them as of a different order than the

material is an illusion. Moreover, pleasure is any motion "helping vital action," and pain is any motion "hindering it."[18] The pleasant is also the *good*, and the painful is *evil;* and, since each man's appetites or desires first tend to preserve his own life, while his aversions serve to prevent him from having pain, ethics is fundamentally individualistic. Let him who hesitates to accept this view remember, counsels Hobbes, that "when taking a journey he arms himself; when going to sleep he locks his doors; when even in his house he locks his chests; and this when he knows there be laws and public officers, armed, to revenge all injuries shall be done him."

Society is thus *naturally* unsocial; it is a truce between incurable egoists. Yet since men must live together, they must obey certain rules of the game. While in a sense each man has a natural right to all that he can get hold of, yet, inasmuch as property needs defenders, a solitary man can keep only what he can guard night and day. Here is where Hobbes justifies the existence of government. Man wants not only possessions but also peace, and this latter he cannot have without the help of others. Consequently, men establish and maintain governments in order to have a common defence against the encroachment of one individual upon another. This is what makes the state powerful in war, especially in a war of aggression; it gets every one's applause for doing publicly what no one can do privately.

It may be remarked that the acceptance of this theory largely depends upon how guardedly it is uttered. When clothed in the picturesque language of patriotic altruism, it always brings down the house. But what is more significant is that we have here the first attempt to coördinate without the slightest friction individual and social ethics. This integration is accomplished largely by the use of the word "natural." It is natural for each man to want everything, to seek peace and to follow it, to defend himself by all means at his disposal, to perform all covenants which he has made, to keep the donor of a benefit from repenting of his good will, to strive to accommodate oneself to society, to pardon all possible offences of penitents who desire pardon, in dealing vengefully to consider the greatness of the good that is to follow rather than the greatness of the evil that is past, to avoid declaring by deed, word, countenance, or gesture hatred or contempt of another, to acknowledge every man as one's equal by nature, and, upon entering into conditions of peace, not to reserve for oneself any right which one

[18] *Leviathan*, Part I, Chap. vi.

denies to any one else.[14] According to Hobbes, all this is *natural*, but whether this word has to be translated into "inevitable," "conventional," "desirable," "as it should be," or into some other synonym in order to be something else than a pitfall of thought, does not appear in the *Leviathan*.

By virtue of the shudder which a materialistic metaphysics always produces in otherwise intelligent persons, Hobbes' ethics has been accepted with great reluctance. As a forerunner of Freudian psychology, it is nevertheless a penetrating and significant insight into the problems of social behavior. In trying to be clear and direct, Hobbes may have committed the fallacy of pseudo-simplicity, but he is to be commended openly for insisting that the realm of ethics begins at the level of the ground and ends six feet above it.

11. LOCKE

Locke's *Essay on the Human Understanding*, justly famous for its originality and penetration, furnishes the background for his ethical theory. According to this philosopher, all ideas come from but two sources,—sensation and reflection. Simple ideas from either source may be combined into more complex ones, while those from both sources, when fused and united, make up the most elaborate and comprehensive thoughts that pass through our minds. No matter how complex an idea may be, as for example, our notion of justice or of the universe, every contributing element has its source either in what some one of our senses has supplied us, or in some reflective operation of our thinking minds.

Locke writes: "Amongst the simple ideas which we receive from both sensation and reflection, pain and pleasure are two very considerable ones."[15] These ideas are directly acquired by experience, and are inescapable; indeed, "they cannot be described nor their names defined." Moreover, things are good and evil only in reference to the pleasure and pain they entail. "Pleasure and pain, and that which causes them, good and evil, are the hinges on which our passions turn; and if we reflect on ourselves, and observe how these, under various considerations, operate in us . . . , we may thence form to ourselves the ideas of our passions." Both good and evil have degrees, and moral good is described in terms of its conformity to "the aggregate of all rules by which conduct is ordered," which

[14] *Leviathan*, Part I, Chap. xiv.
[15] Op. cit., Book II, Chap. xx.

aggregate Locke regards as the law of God. And while Locke does not definitely say so, the inference is that to say "God is good" is equivalent to asserting that there is more pleasure than pain in human experience.

Locke's chief contribution to ethics, however, is his thesis with regard to the universality of moral ideas, and especially with respect to their innateness. In this excursion into the realm of individual differences, he touches upon the general question as to whether the "moral sense" or "conscience" is the same in each human being. Locke's position here is that no moral principles are so clear and so generally received as those of mathematics, and he further states that just where we should expect to find the most agreement, there we find the least.[16] For when we enquire among savages (who might be expected to exhibit virgin minds), among the children of civilized persons (who could make us more readily acquainted with their intuitions), or among savants (who possess the necessary discrimination for the task), we find no strict agreement at all. This finding, which means that conscience is not only acquired, but also that it has racial character and local color, makes Locke the first geographer of morals. And while some have averred that his denial of a uniform moral sense to all mankind was destructive criticism, yet it is only by the recognition of individual differences that any basis for an international ethics can be discovered. The motto "Thou shalt love thy neighbor as thyself" has been applicable only where persons recognize the similarity of both their interests and their predicaments. The more effectual teaching is that only by a broad understanding of human nature can a serviceable affection for it be generated and maintained. Among those ethical teachers who helped to develop this view Locke stands out prominently.

12. KANT

Kant's position among the ethical philosophers ought to be easy to determine, since the method he employed in his *Critique of Pure Reason* was just the method that one might expect to be fruitful of results when applied to ethical problems. As it was, however, he preferred to ignore its ethical implications, giving us weakened absolutes where he might have given us sturdy universals. It is only because his original program promised something of profit that his name is included in this survey of the history of ethics.

[16] Ibid., Book I, Chap. iii.

Kant's plan, in brief, was to examine the intimate structure of the human mind in order to determine what are the necessary and fundamental patterns which thoughts always exhibit, whence might thereafter be deduced a working hypothesis of both knowledge and ignorance. And although Kant's excursion into the realm of genetic psychology was misdirected, he nevertheless pointed out clearly certain definite and ineradicable trends in adult mentality when he declared that we cannot help thinking of things in terms of space, time, and causality. From these forms of thought ("categories of the understanding") we can never escape,—they are like colored glasses set before our eyes, of which we are naively unconscious, and around the edges of which we cannot hope to peep to see what reality, the *thing in itself,* is like. Let anyone delete from thought and speech all those ideas which are expressed in metaphors of space and time, and those which have meaning only when linked in a chain of cause and effect, and see how nothing at all, save ghosts and shadows, is left. We are all pledged to employ these and other standard forms of thought just as the carpenter is obliged to use the tools of his trade. Indeed, these forms are the presuppositions of all thinking, and they define and standardize the limits of human knowledge.

This program in philosophy was both ingenious and epoch-making, having significant implications for ethics. But Kant strangely tired of using it when he discovered that such an avowedly finite theory of mind could not lead to satisfactory conclusions with regard to that forbidden fruit of philosophy,—transcendental concepts. It was unfortunate that Kant was obsessed with the desire to pursue the phantom of the Absolute. No philosopher may attempt to straddle the universe with impunity; the universe was made just one size too large to satisfy any such ambitions.

Had Kant used his original method with regard to ethics, and sought out the basic presuppositions of all ethical ideas, keeping his attention upon the baldest facts of our everyday experience, that is to say, had he dealt with the human body as he treated the human mind, the results might have been different. It was left for persons whose grandfathers breathed the same air as did Kant to apply to ethics the program he thus deliberately abandoned. The reader will hear something of these persons, commonly called Behaviorists, in due time.

13. THE UTILITARIANS

The chief members of this school are Paley, Bentham, and J. S. Mill. The doctrine of Utilitarianism is not the direct outcome of any particular metaphysics, save perhaps that of Hobbes, but it has nevertheless a psychological basis to which reference has already been made in connection with Epicurus and Aristippus. Utilitarianism, briefly stated, holds that pleasure is the only good sought for, or in less rigorous language, that the pleasurability of an object is the measure of its value. This doctrine, known as psychological hedonism, is often transmuted into ethical hedonism, by which is meant that pleasure is the only thing for which a man *ought* to strive. Socialize this doctrine, make "the greatest happiness of the greatest number" the goal of living, and modern utilitarianism is complete.

Paley's method of deciding ethical questions "is chiefly that of estimating the tendency of actions to promote or diminish the general happiness."[17] Of course, in the predicament of meeting a burglar, Paley would advise us to knock him on the head, to prevent the burglar from making too many people unhappy in the pursuit of his own pleasure, while "by urging the importance of forming and maintaining good habits, he partly evaded the difficulty of calculating the consequence of particular actions."[18] The general good is equivalent to "quality of happiness," to which "every pleasure that we do to our neighbor is an addition."

The most strikingly new element in this ethical philosophy is Bentham's Calculus of Pleasure. How are we to determine the relative merits of a lot of pleasures? Are all pleasures equal in value, or are they capable of being graded like eggs and apples? Bentham gives the following criteria by which such an estimate may be made.[19] When only one person is concerned, a pleasure is determined by (1) its intensity, (2) its duration, (3) its certainty or uncertainty, and (4) its propinquity or remoteness; when a number of persons is considered, three additional tests are supplied, namely, (5) its fecundity, (6) its purity, and (7) its extent, or the number of persons affected by it. A higher pleasure is determined by the spread of its effects to other things; a lower pleasure is one that does not so extend its consequences; anything that decreases happiness is an unworthy pleasure; while even those pains that serve to increase

[17] Henry Sidgwick, *Outlines of the History of Ethics* (1886), p. 227.
[18] Ibid., pp. 227–8.
[19] Jeremy Bentham, *An Introduction to the Principles of Morals and Legislation* (1823), Chap. iv.

happiness are good pains. Moreover, when sufficient facts are taken into consideration, the happiness of all is correlative with the virtue of the single individual.

Mill[20] particularly emphasizes the necessity of every man having "a feeling of unity with his fellow creatures" as a very important sanction for the greatest happiness principle. He thinks that this is "an attribute which it would not be well for [human beings] to be without," seeing that in most persons the strongest feeling is one of complete self-interest. There is a slightly wistful note in Mill's plea, when he says that in the present "imperfect state of the world's arrangements" a man can often "best serve the happiness of others by the absolute sacrifice of his own." Nevertheless, he thinks that a "conscious ability to do without happiness gives the best prospect of realizing such happiness as is attainable." In making this remark, Mill seems to imply that man has become more conscious than is good for him. If so, it may not be inappropriate to suggest that self-consciousness may be only a passing phase of human evolution.

14. HERBERT SPENCER

This man, well known as the last philosopher to attempt a survey of all mysteries and all knowledge, employs a biological background for his ethical theory. He regards "the evolution of conduct as correlated with the evolution of structures and functions."[21] "Those functions which are already compounded to achieve what we regard as single bodily acts, are endlessly recompounded to achieve that coördination of bodily acts which is known as conduct." In this we pass "from the thought of combined internal functions to the thought of combined external motions."

Since ethics has evolved along with the universe and with living creatures, the stages in the evolution of conduct may be traced throughout the animal kingdom. They are briefly summarized in the principle of the nicer adjustment of acts to ends as we ascend the ladder of the living. But in addition to this, there is also a "prolongation of life" as well as an "increased amount of life." Mere "length of life is not by itself a measure of evolution of conduct"; one must live largely to live well. Thought, feeling, and action, rather than span of years, is the final criterion.

Yet not even in the completest life of a single individual do we find ourselves at the summit of ethical evolution. We must also

[20] John Stuart Mill, *Utilitarianism* (1863).

[21] Herbert Spencer, *The Data of Ethics* (1879), Part I, Chap. ii.

consider "those adjustments which have for their final purpose the life of the species." Self-preservation is both necessary and well, but preservation of the species is better; and when we go beyond this, we come to the highest good now known, namely, mutual dependence, which results in the establishment of "permanently peaceful societies." It is this which Spencer holds to be the limit of evolution.

It is obviously impossible to make any theory that is derived from general considerations apply to particular instances without modification. Spencer, indeed, considers that the primary business of ethics is to "formulate normal conduct in an ideal society" in which there is no "pleasure unalloyed by pain anywhere." In particular instances such an "Absolute Ethics" has to be modified into "Relative Ethics," in order to determine in a rough way how one should act in order that life may be attended with a "surplus of agreeable feeling." For it is more than a possibility that a surplus of life and a surplus of pleasure can be regarded as correlative.

III. THE PRESENT STATE OF ETHICAL THEORY

During the last twenty years the problems of human conduct have received so much emphasis, and significant contributions to ethical theory have come from such a wide variety of sources, that no other topic of study and conversation now exceeds it in its capacity to rouse, bewilder, or provoke lengthy discussion. The shade of Socrates is appeased; ethics has at last come into its own.

This sudden increase in the importance of ethics has been due in the main to three contributing causes. In the first place, science, by the subtle method of supplying innumerable conveniences and safeguards of life, has finally convinced man that the universe is run according to natural law, rather than by fiat or caprice. In so doing, it emphasizes a new world-order at the same time that it shows us how to live easily and safely. The gifts of electric lights and chlorinated water, for example, are of such far-reaching importance that he who accepts them is tacitly bound to consider and respect the implied source of his blessings, namely, the scientific hypothesis of an orderly universe. Along with this increase in the life-enhancing function of applied science, there has been a gradual decrease in both the fear and the confidence with which supernatural things were formerly regarded. Life, not death; earth, not Heaven; trouble, not Hell; man, not God, have become the supreme objects of curiosity and concern, chiefly for the reason that the old-time faiths and

beliefs did not keep pace with man's ambitions and needs, but remained as antidotes and palliatives for discontent. And finally, the mechanization of labor, following the industrial revolution, caused multitudes of men and women to admit that whatever hopes they might fulfil and whatever pleasures they might realize could not be too long deferred without the risk of going mad. The questions: What is life for? Has it any purpose? Is it worth while? have been emphasized by the time-clock, by the pressure of cost-accounting, and by the demolition of the apprentice system to a greater degree than was ever the case when men believed implicitly in a hereafter that was to compensate them for the pains and tears of their probationary existence. Ethics, as a philosophy of life, as a way of grappling with the problems of individual existence, has indeed become *the* problem of the present generation.

While no man or group of men can today offer anything like a final solution to the perennial ethical problems—since we have all become too suddenly conscious of our difficulties even to state them clearly—yet the argument for an increased pessimism is not thereby substantiated. The fact that so many men, experts in so many lines, have sought to understand human nature and its needs gives us hope that we may outrace the catastrophe that seems at times to be upon us. It is our business here and now to review the contributions to ethical theory which have been made during the past two decades, in order to take stock of those ethical resources which the mind of man has provided. Then, when we shall have seen what is known about human nature, we shall better be able to consider how this information can be used, as well as to predict its further development. We shall gain nothing by impetuousness, especially since many an ethical problem is half solved by knowing just where to place the emphasis in stating it.

There are at least a half dozen ways by which ethics is being served at the present time. We may first mention the writings of certain empirically minded philosophers, such as R. B. Perry's *The Moral Economy* (1909), W. G. Everett's *Moral Values* (1918), Dewey and Tufts' *Ethics* (1909), L. T. Hobhouse's *Morals in Evolution* (1906), L. Lévy-Bruhl's *Ethics and Moral Science* (1905), and John Dewey's *Human Nature and Conduct* (1922), as typical of the newer movement to establish a naturalistic ethics. Next in order we may mention the anthropological approach to ethics, by which is meant the comparative study of the ways in which men all over the world actually live, independently of

the manner in which any one particular race thinks the others ought to live E. Westermarck's *The Origin and Development of the Moral Ideas* (1906), the same author's *The History of Human Marriage* (1904), and W. G. Sumner's magnificent work on *Folkways* (1907) sufficiently indicate tendencies along this particular line which are being developed in numerous journals and books. Closely allied to the foregoing is the sociological approach to ethics which is familiar to all readers of the standard works in the field of pure sociology, in addition to which we may mention such books as R H. Tawney's *The Acquisitive Society* (1920), Frank Watts' *An Introduction to the Psychological Problems of Industry* (1921), and Ordway Tead's *Instincts in Industry* (1918) as examples of the distinctly psychological flavor which both economics and sociology have at present acquired Medicine also serves ethics, as may be gathered from a hundred titles now on display at any large book-store, as well as from the particular contributions of such notable scientists as W B. Cannon,[22] G. W. Crile,[23] and E. J. Kempf,[24] whose researches upon the secrets of the human organism have furnished us with many astonishing new ideas concerning the problems of conduct. The psychiatrist, from his intimate contact with disordered minds, has in the person of Drs. Sigmund Freud,[25] C G. Jung,[26] Wm. A. White,[27] and others convinced us that the ethical problem is too large to solve either by telling people to be good or to use their "will-power." There are also significant biological contributions to ethical theory, particularly evidenced in the eugenics movement and the work of bacteriologists and doctors of public health. Today, indeed, biologists are more concerned with the life-cycles of organisms than they are with their remains. And finally, psychologists have on the whole given up that bad habit of introspection, and are more and more devoting their attention to those problems of mind that have a direct bearing upon the questions of every-day living. It is thus no stretching of the truth to say that ethics has finally become the chief business of the most thoughtful men. The list we have given might be extended indefinitely, and it certainly should not intentionally ignore the contributions of Dean Roscoe Pound and Mr. Justice Holmes

[22] *Bodily Changes in Pain, Hunger, Fear, and Rage* (1915).

[23] *The Origin and Nature of the Emotions* (1915); *Man, an Adaptive Mechanism* (1916).

[24] *The Autonomic Functions and the Personality* (1918).

[25] *Totem and Taboo* (1918); *Wit and Its Relation to the Unconscious* (1916); *Leonardo da Vinci* (1916).

[26] *Theory of Psychoanalysis* (1915).

[27] *Principles of Mental Hygiene* (1917).

in the field of law, much less those of social workers and organized societies whose business is to relieve and discover the manifold causes of misery and unrest.

Let us now briefly indicate what are some of the tendencies of our time with regard to ethical problems, and let us hear the philosophers speak first.

Perhaps the most strikingly new thing about modern philosophic discussions on ethics is the relegation of both pleasure and the Self to subordinate positions without the elevation of social or altruistic considerations to places of unusual importance. Perry's fundamental term in ethics is *interest*, by which is meant anything that "deals with its environment in such wise as to keep itself intact and bring itself to maturity; appropriating what it needs, and avoiding or destroying what threatens it with injury."[28] If pleasure results from such a process of satisfying an interest or a desire, it is simply a by-product; the main thing is the satisfaction of the interest or the desire, for in that alone goodness consists. In the case of conflicting interests, the wiser choice and thereto the right act will result in satisfying as many of them as possible, thereby "butchering the least good." Ethics thus becomes the problem of organizing and furthering the greatest number of human interests. It is anthropocentric to the last degree.

Everett and Perry both agree on the subordinate status of pleasure, not from any Puritanical moral scruples, but simply because so large a part of life proceeds independently of hedonistic considerations. Everett also denies that any one value is or can be supreme. "Many voices call, many interests attract, many duties claim us."[29] Furthermore, this philosopher regards freedom in the same way as did his predecessor Socrates, namely, as something to be achieved only by first understanding human nature and its true needs.

To what an extent the Inner Self has fallen in the estimation of philosophers may be gathered from these emphatic remarks of John Dewey. "Many good words get spoiled when the word self is prefixed to them: Words like pity, confidence, sacrifice, control, love. The reason is not far to seek. The word self infects them with a fixed introversion and isolation. It implies that the act of love or trust or control is turned back upon a self which is already in its full existence and in whose behalf the act operates. Pity fulfils and creates a self when it is directed outward, opening the mind to new contacts and receptions. Pity for self withdraws the world back into

[28] Op. cit., p. 11.
[29] Op. cit., p. 177.

itself, rendering its subject unable to learn from the buffetings of fortune. Sacrifice may enlarge a self by bringing about surrender of acquired possessions to requirements of new growth. Self-sacrifice means a self-maiming which asks for compensatory pay in some later possession or indulgence. Confidence as an out-going act is directness and courage in meeting the facts of life, trusting them to bring instruction and support to a developing self. Confidence which terminates in the self means a smug complacency that renders a person obtuse to instruction by events. Control means a command of resources that enlarges the self; self-control denotes a self which is contracting, concentrating itself upon its own achievements, hugging them tight, and thereby estopping the growth that comes when the self is generously released; a self-conscious moral athleticism that ends in the disproportionate enlargement of some organ."[80]

The background for these theories in ethics is clearly psychological, and consequently the theories themselves carry considerable weight. If psychologists, upon investigating the human mind without bias or preconviction, discover neither that pleasure is the sole motive in human action, nor that any one goal or value is in reality sought above all others, nor yet that the idea of the Self is presumed in all judgments and in all behavior, then philosophers do well in taking such conclusions seriously. Indeed, by no other token could modern philosophy show its strength, not to mention its right to exist, than by accepting the discoveries of psychologists as a starting-point in ethics. One is tempted to predict that self-consciousness is already being regarded as a needless accompaniment of human life and mind, and that pleasure is less valuable and exhilarating than is absorbing work. And while no man is competent to predict just what these implications may lead to, yet much may be hoped for from such a procedure since much has already been gained by it.

It would be trespassing upon the domains of other writers in this volume to include here anything more than the briefest mention of the anthropological and sociological contributions to modern ethical theory. Suffice it to say that the study of anthropology, as illustrated by such men as Westermarck and Sumner, leads to the conviction that a great variety of human *natures*, rather than one single basic human nature, is to be in the future the object of study and appreciation. Such a relativism in ethics, far from resulting in pessimistic scepticism, only serves to emphasize the need for getting well acquainted with all the people who inhabit and inherit the earth. We can only be fond of those to whom we are fair, and we

[80] *Human Nature and Conduct* (1922), pp. 138–9.

can only be fair to those whom we understand; moreover, we can only understand those we look at without the Procrustean attitude, and we can only do that if we employ the method of scientific detachment. This is what both anthropologists and sociologists are doing, and already the results are being employed to remake ethical theory. The fact that sociology is today built upon psychological foundations argues well for the great importance of that science in bridging the existing gap between morality and ethics.

In a sense, medicine has always been the most effective practical ethics we have had. The close relationship between being well on the one hand, and being happy, agreeable, and proficient on the other, needs no emphasis. Contrariwise, the effect of disease and pain upon not only the conduct of life, but also upon a man's philosophy would make a very long chapter in the annals of the human race. It might be instructive to consider that pessimistic philosophies like those of Schopenhauer and Henry Adams [31] are far more striking and famous than are optimistic *Weltanschauungen*, with which, by the way, the names of no famous systematic thinkers are connected. The extent to which medicine, through its gift of health, may alter man's ethical outlook has not yet been sufficiently recognized. But not only is medicine ethically important by virtue of its curative function; today the more important business of this science is the prevention of suffering and the funding of health. Here again ethics is bound to prosper from the wide knowledge of human nature which is being accumulated for this purpose. Already the effects of this knowledge are being felt in the recognition of the vast amounts of superfluous pain and sacrifice which exist.

More particularly, however, is it to be noticed that medicine must rest upon solid foundations in order to be effective and valuable as an ethical instrument. Largely in the interest of medicine have biology, physiology, histology, and bacteriology been so rapidly developed in the last two decades. These four sciences have also contributed to our knowledge of that part of human nature which is commonly referred to as the human body, and thereto they have helped us to understand ourselves to a greater degree than was hitherto possible.

To the student of ethics perhaps no topic of joint interest to medicine and psychology is of more importance than that of the origin and nature of the emotions. This particular theme has always been the bugbear of ethical theory. It has been comparatively easy to devise a rationalistic ethics, but it has been exceedingly difficult to

[31] *The Degradation of the Democratic Dogma* (1916).

employ it because of the disparity between judgments made in a cool hour, and feelings undergone in a hot one. Need we more than casually recall how this problem puzzled Plato and Aristotle, or how it vexed the Stoics and the Epicureans, or to what extent it plagued that most determined rationalist of them all, Spinoza, in his effort to give the emotions their proper (!) place in the arena of human existence? Today we no longer thus shudder at the emotions; for although we may not yet have learned to use them, we are much nearer than ever before to an understanding of them.

The work of Drs. Cannon and Crile has been justly famous for its revelation of the effects which violent emotional disturbances have upon the organism. Emotions are produced when certain energizing substances from the ductless glands are poured into the blood in considerable quantity, thereby activating the whole body to a marked degree. The emotions warm up the body for fight or flight; the increased pulsation of the blood-stream raises the temperature of the body, brings the muscle-foods more quickly to their termini, and carries off the waste products with more expedition. Literally, the emotions *mean business;* but far from being now regarded as evil or useless, they are being recognized as the sources of every human drive, of every ambition, of every ennobling as well as of every deleterious course of action. The question, Shall we banish them from our minds? is no longer seriously entertained; instead, the question of how shall we use them (if we cannot educate them) to serve the better aims and ideals of the race has become paramount.

There are further ethical implications to be derived from these fascinating and useful investigations upon the emotional side of man's nature. The emotions are produced by the autonomous action of a part of the nervous system, and scientists have demonstrated that the same stimulus which causes changes in the blood pressure and the heart-beat also affects the sweat-glands of the skin, the pupil of the eye, and the digestive tract. In other words, the emotions are more wide-spread in their effect upon behavior than is the so-called intellect. Spinoza seems to have been in error. It is rather the will and the emotions which are the same, not the will and the intellect. Perhaps we are coming to the view that it is the habits we form, rather than anything like pure, cold reason which regulates and controls our emotional outbursts.

Further even than this, it is now held that the two fundamentally different kinds of emotions, the pleasant and the unpleasant,—the former illustrated by joy and love, and the latter by disgust, fear, rage, and grief,—arise whenever the autonomous part of the nervous

system stimulates the internal organs of the body to opposite and incompatible modes of activity. This means that within the human body there is a hair-trigger mechanism which operates quite unconsciously to produce sudden alterations in the personality. No longer then can we depend upon moral maxims and precepts for ethical guidance. We must rather become acquainted with thresholds of emotional aggravation in order that we may, by controlling the environment, prevent the arousal of unprofitable emotional excesses. From all this it can be seen that the emergence of an ethical technique based upon a scientific knowledge of the human body is both imperative and imminent.

Closely related to the contributions of medicine and physiology to a science of ethics are those of modern psychiatry. The work of Drs. Freud, Jung, White, and others clearly shows how great is the need for an understanding of the secrets of the human mind before any corrective measures can be undertaken. Chiefly is the psychiatrist concerned with what used to be called the Inner Life, or Soul, or Conscience which, far from appearing today as an unmitigated source of benefits, or as an authority on moral questions, seems rather frequently to be a decided detriment to the personality.[32] And whether we accept the Freudian theory of an unconscious mind or not, we must at least recognize that such phenomena as suppressed desires, self-stifled motives, and elaborate wish-phantasies are extremely common, and that the fabled *sana mens in corpore sano* has almost reached the status of a myth. Minds are sound only to the extent that they are free from suppressions and introversive tendencies: this is the terrible but brave new gospel which psychiatry gives to our age.

The reaction of all this upon ethical theory is profound. We have been calling man a rational animal for over two thousand years, and while this naïve supposition may have erstwhile been useful (like whistling in the dark to keep up one's courage), yet we are now realizing that our mental integrity is relatively unstable, and that most men and women are only one step this side of mental disorder. More than this, much of our customary morality is being recognized as founded upon an evasion of the problems of life, and is hence strictly unethical. Where fear rather than frankness is the settled habit of mind, where supine yielding to a neurotic domestic tyrant stifles the initiative of the whole family, where "mirror personalities" are intentionally developed, or where an "inverted hedonism" takes

[32] Compare: J. D. Stoops, "The Inner Life as a Suppressed Ideal of Conduct," in *International Journal of Ethics*, Vol. XXX, pp. 16–24.

the place of an honest and sincere grappling with the problems of every-day existence,—wherever such is the case, psychiatry has shown that ethics has not yet begun to exist. Gradually we are realizing that most men are somehow afraid of each other, and that many of them make it their daily business to trade on this fear and to enslave the courage of their fellow-men. And when this is done in the sacred name of morality, as is frequently the case, the need for an ethics based upon a wide knowledge of the human mind becomes a desideratum of the first importance.

The final result of this alliance of psychiatry and ethics cannot be anything but salutary. Already the work of such practical organizations as the Massachusetts Society for Mental Hygiene has justified its existence through its re-education of mutilated minds and its stimulation of confidence in its positive effects upon society. Psychiatry has shown us that most human beings are mentally insolvent at some time or other during their lives, and that those who most stoutly claim to be otherwise merely reveal the extent to which they have practised self-deception. On no other basis than this can ethics hope to construct ideals and establish institutions that will be either human or permanent.

The extent to which both physiology and psychology can become coöperative allies of ethics may be illustrated by reference to two recent publications, *Social Psychology* (1924) by F. H. Allport and *The Ethics of Hercules* (1924) by R. C. Givler. Both of these books attempt to apply the principles of Behaviorism to the problems of conduct, with a view to showing that the methods of ethics and the methods of applied science are the same.

Behaviorism is the theory that mind is not one kind of thing and body another, but that if we must make a line of cleavage, we had better say that mental phenomena are one and all generated by the human organism through its contacts with the environment. Sometimes this is expressed by saying that mind is a function of the body, or that when body reaches a certain complexity, mind then emerges. This theory is monistic rather than dualistic, and it is one of the most significantly ethical theories that has ever been announced, since it furnishes the only sound basis we have ever known for the unification of the personality. Theories which have made mind the superior entity have uniformly resulted in introversion and asceticism, despising the body and taking refuge in an inner consciousness; Behaviorism, on the contrary, realizes that the organism is not only body, but the body and everything it is capable of doing, one of which things is called mental activity. One of the most forcible arguments

for this position is that every mental operation is performed only at the expense of bodily energy. Mind may indeed create, in the sense of planning, willing, and producing a work of art, but it is not self-renewing. It is a product chiefly of the brain, and it requires food for its maintenance. This theory, which in effect makes mind a part and product of the natural world and a member of the household of all living things, is in many ways a reflection of the original Kantian program in philosophy. The Behaviorist might as well utter the tacit implications of his method and say: If you want to know what are the fundamental presuppositions of all ethics, study the mechanics of the human body.

This is exactly the program which is carried out in both Allport's *Social Psychology* and in *The Ethics of Hercules*. In the former book we find a discussion of such topics as the physiological basis of human behavior, the measurement of personality in terms of performance, the fundamental importance of language and gesture, of facial expression and bodily posture, as devices for social stimulation, and clear to the end of this engaging book the capacities of the human body are made basic in the study of human interrelationships. Perhaps even a more thoroughgoing restatement of the whole ethical program is found in *The Ethics of Hercules*, as may be gathered from the following brief summary. (1) As the human body is constructed, so must we act; and as action is the parent of thought, so must our ethical notions be products of the experiences which our body has had in its adaptation to its environment. (2) Antonyms like good and bad, right and wrong, virtue and vice are so prevalent in thought and speech because of the predominance of muscular mechanisms for producing actions of an antagonistic character. (3) We have more uses for the words good and right than for the words bad and wrong simply because the actions implied by the former are outgoing, that is, they bring more of the environment within our range of response than do the latter. (4) Freedom and obligation are not antagonistic concepts, but when we properly state the conditions under which freedom of action exists, obligation is the natural resultant. (5) The question of ideals is strictly an empirical question and must be answered by reference to the capacities of individual men. "And while many a man may choose for himself, yet none can choose for all."[28]

Such, in brief, is the present situation in theoretical ethics. Many men differing in expertness, and approaching the problem from diverse angles, are making new and effective contributions to an

[28] Op. cit., p. 53.

understanding of human nature. The problems of ethics are intricate, perplexing, and stupendous, for they amount in the last analysis to the problem of the direction in which human evolution is proceeding. And whether or not any solution is possible, the problem itself cannot be either overlooked or treated contemptuously. It may be that in comparison to the "massive drift" of cosmic evolution, man's poor thought is relatively unimportant, but the time is past when such an unfavorable comparison can be taken as an argument for quietism. Times have changed since the days of Leibnitz.

IV. THE RECONSTRUCTION OF ETHICAL THEORY

The thesis proposed at the beginning of this chapter was that ethics must be based upon metaphysics and psychology in order to be respectable. We have recently seen that all the great philosophies of life have either openly or tacitly acknowledged this implication. It is now our business to enquire what type of ethical theory will result from the view now dominant among scientists concerning the order of nature and man's relation to it. Specifically let us ask what sort of a philosophy of conduct will eventuate from the conviction now prevalent that the totality of nature is a mechanism whose laws man did not make and cannot alter. At this point one feels much as did Macbeth when he tried to look into the seeds of time and tell which would grow and which would not. Today a similar hesitancy is felt by anyone who ventures to predict what revolutionary changes ethical theory will soon undergo. And while it is always possible for evolution to turn a sharp corner, it is nevertheless reasonable to forecast the future by considering only the dominant tendencies and prospects which the present reveals. Certainly the views we have outgrown will never again be revived; the past always dies no matter how imperceptibly it breathes its last.

Doubtless many persons will regard ethics as impossible in a world which has lost its final purpose. The alternative conceptions of ceaseless movement, ceaseless change, and ceaseless unpredictable novelty are not regarded by them as sufficiently inspiring to offset this loss or to restore their vanished delight in living. For generations they have been fed upon the sugared milk of animism, and they have learned to personify nature in a thousand ways. The shock they feel upon learning that the traditional personalization of nature is only naïve myth writ large is too great for them to bear, and their first reactions are of protest and discouragement, not to say anger

and rage. Perhaps all we should say here is that such persons should be relieved of the responsibility of constructive thinking and be left undisturbed in their dream. Certainly they cannot be encouraged in their desire to hinder others from emerging out of the cave of illusion and looking wide-eyed at the light of reality.

Other persons there are who consider the greatest practical difficulty with the mechanistic view of nature to be this, that while they have been taught to *think* in terms of geological eras, they still perforce must *feel* in terms of the calendar and the clock. Somehow knowledge has seriously diminished their capacity for enthusiasm. As their view of nature has broadened, as they have learned to look upon things from a universal rather than from a local point of view, as they have progressively outgrown the provincial attitude of their family, their neighborhood, their political party, their nation, and even of their world, and have come to think in terms of inexhaustible times and spaces, the old loyalties have vanished without being replaced by any sentiments of a consolatory character. And while perhaps no such replacement is possible or necessary, the loss is distinctly felt and will continue to be so felt until their readjustment is complete.

This is simply another case of the old conflict between the intellect and the emotions. To be sure, not all of the emotions are concerned; they never are. Neither is all of the intellect involved; it seldom is. It may be elliptical, but it is not hyperbolic to say that knowledge feels and feeling knows: never was there a sentiment without its appropriate logic, nor a logical process without its sentimental drive. Applied to the problem under consideration, this means that the maladjustment now felt by many who accept the mechanistic view of nature is not of necessity an unhealthy sign. The attempt to escape from a local and provincial view of nature is itself correlative with a more inclusive and wholesome sentiment than was ever possible when man was regarded as the apex of creation and the darling of the gods. Nevertheless, this advantage has its peculiar tax. The attempt to think impersonally about nature cannot yet be undertaken by beings who must always act in a strictly personal capacity without some conscious loss. Man has been taught to think before he has learned to act in harmony with his wider knowledge, and as a result he is conscious of a mal-adjustment that often becomes acute. However, since man has capacities of which he seldom dreams, there is no cause to doubt either that there are as important ethical prospects today as there ever were, or that the present unrest is an exceedingly

hopeful sign. Indeed it may be taken as categorical that all such impatience as a widening knowledge of nature provokes is an infallible token of capacity.

Our conceptions of the universe have recently changed to such an extent as to alter completely our notions of the relation of man to the cosmos. This familiar earth of ours, far from being the center of the universe, is now known to be one of the smallest satellites of the sun, while the sun itself is without apology asserted by astronomers to be a dying star. Our position in the universe is a lonely one. The total number of stars that one can see on the clearest night is only an insignificant percentage of the whole celestial galaxy that comprises the conceivable universe. This galaxy is in the shape of a thin disc, which disc is thought to be alternately expanding and contracting about its center in almost unthinkably long periods of time. Neither the earth, nor yet the sun is in anything like a fixed position; but while the earth spins dizzily about the sun, the sun "with its rabble of planets" is flying rapidly toward a larger star somewhat near the center of the whole galaxy. On this lonely bit of rock called earth, itself the insignificant satellite of an aged star, and this old star presumably turning to ashes as it carries the earth to an unknown destination, lives a passionate creature who calls himself *Homo sapiens*. He has no source of communication with the neighboring planets, he is forever restricted to the rock on which he was born, he is ignorant of his past and of his future, he does not know the interior of his rock, or how long the sun will last, or what dark star it may strike in a fatal encounter. He has not the slightest inkling of what the whole celestial business accomplishes; he has given up the notion that it has any meaning as a whole, any purpose whatsoever in which he particularly figures, any motion which he can alter to the slightest degree. Compared to the imaginable totality of space and time, man's life appears to be a curiously pathetic incident.

It is fortunate indeed that mere bigness is not the sole criterion of worth. The curious thing about our new conception of nature is that the seemingly insignificant, subordinate, helpless position that man occupies gives him no new cause for either madness or suicide. If the truth must be told, the mere bigness of a star or the infinitude of empty space is of no account in the balance sheet of ethical implications. Granted that the size of such a star as Betelgeuse arouses both wonder and awe, what can or need we ever do with such a remote and irresponsible object? Physicists also tell us that the interior of such a star is very simple in structure, while the interior of the earth is vastly more complex and problematical. On

this basis of comparison the earth does not seem so despicable after all. To say that the earth is the only solid, habitable object that we know is, so far as the physicist is concerned, equivalent to making the assertion that stellar evolution has proceeded farther at this end of the solar system than at any other portion of the galaxy. Something then is to be said on both sides: we may be insignificant in size, but we are also a little farther along in development than is the rest of the visible universe. All things considered, the most that our knowledge of the vastness of the universe can do is to get us away from anthropocentricism, and to furnish us with a healthy sense of detachment. If it does this, it is enough, and if such a result cannot be obtained by any other means, the means are justifiable. One more point needs emphasis here. It is clearly manifest that although pride of place has gone, and confidence in fixity has vanished, man seems to have plenty of sentiments in reserve to replace those which were lost when his illusions about the cosmos were destroyed. Even though the earth is the only known habitable object in the whole universe, it yet remains our own familiar, safe abode which we would not trade for any other planet within our ken. It is not "the best of all possible worlds" by any means, it is simply the only half-way possible world we would care to experiment with. What is more to the point, however, is that no matter with what wholesome suspicion we may regard the whole scheme of celestial things, we find ourselves making more profitable plans for the future than we did in the kindergarten age of man's intelligence.

In some ways the sciences of physics and chemistry have altered man's philosophy of nature even more than has modern astronomy. Not only are we now cognizant of infinitely great spaces and infinitely long periods of time, but also of infinitely small particles of matter as well. The molecule in giving way to the atom, and the atom to the electron as the ultimate unit of substance, supplies us with a conception of nature that completely revolutionizes our views of life. Vibrations, periodicities, valences,—these are the new realities which relegate our notions of hot, cold, solid, liquid, or gaseous "substances" to the dust-bin of discarded entities. The human body may be still regarded metaphorically as the seat of the soul, but it is also a temporary collocation of electro-magnetic particles, massed together by means unknown, to make and keep that familiar form called the shape of man. This human body, after consuming and transforming great quantities of nature's elements, and after altering here and there to a slight degree the configurations of its environment, is sifted back again among nature's elemental stores to supply nourishment

to other lives, other forms, other ceaseless regenerations. And yet even though man realizes that this is going on, he seems neither to resent it nor to wish that it were different. His capacity for new and encouraging sentiments is not affected by the loss of his old prejudices and passions. It does not plague him to acknowledge that the cycles of nature are eternal, while he himself is but temporary.

Here again, as in the former instance, the secret of sanity lies in establishing the proper relationship between the impersonal and the individualistic points of view. Even if in the last analysis nothing but electrons exist, the various ways in which these electrons unite in conglomerate masses are just as interesting and important as they ever were. Granted that we have come to call things bricks, potatoes, and men only because we are unable to perceive their electronic structure, we would still need two designations for every object in the world because man is not only a physicist, but an eater, a lover, and a builder as well. Man's realities are as manifold as are his interests and sentiments,—that is real of which he takes any account, no matter how he takes account of it. Moreover, human beings need not lose any significance because they are regarded by the physicist ultimately as groupings of electrons; the very fact that scientists are so hot-foot after the minute and fine only implies that they wish to understand more completely the large and the dense. Consequently, while the physicist and the chemist have relegated our former notions of substance to the limbo of fancy, they only intensify our curiosity as to how these newer velocities and periodicities ever combined to make human beings. That a naturalistic account of these developments will be supplied, no one seriously doubts; the point to be more particularly emphasized is that with the vanishing of the anthropocentric point of view, the interest in things human has become greater than ever. Is it not clear from this that the ethical implications of a mechanistic philosophy of nature are bound to be more astonishing than we had ever imagined to be possible?

Not even has modern behavioristic psychology, with its attendant disillusionments, resulted in the destruction of an interest in the perennial problems of life. Rather has it deepened and broadened this interest to a surprising extent. The doctrine that mind is in the strictest sense of the term a function of the human body, and that it depends upon the integrity of the nervous system for its continued existence, combined with the tacit implication that death terminates consciousness, has not discouraged those who accept such a doctrine from undertaking even vaster projects for the betterment of men than were contemplated when personal immortality was the

settled tradition of the race. The modern psychologist has abandoned Mind, Soul, and even Consciousness as data of scientific importance; he studies thoughts rather than Thought, feelings rather than Feeling, individual volitions rather than a hypothetical Will-Power; he even calls the passing thought the real thinker; he analyses ideas into sensory images, and he says that it is our muscular sensations that give us our ideas of mass and velocity; he even asserts that the unintrospectable background of mental activity is more important than the obvious foreground; he holds, paradoxically enough, that we cannot remember unless we have forgotten. What the psychologist has come to study today is the total behavior of the organism, and he is not at all perturbed when his analysis reduces this behavior to an intricacy of nervous discharges and mechanical motions. For all this the interest in psychology—psychology with the Psyche left out—is greater today than ever before.

What does this mean? It signifies, we undertake to say, these two things: in the first place, the craving for knowledge is perfectly legitimate, and cannot be curtailed or limited; and in the second place, every desire to know arises from the conscious need of being more perfectly equipped to live. In some ways psychology tells a stranger tale than does any other modern science, but along with this it continually emphasizes the fact that ourselves are the last persons with whom we ever get acquainted. Ethically, this amounts to a challenge, but the gauntlet which has been thrown down has been immediately picked up. Granted that we may not ever know what manner of men we are, the very boldness with which the doubt has been uttered has become a source of stimulation where we might have expected it to provoke a profound despair. Moreover, modern psychology has made other minds far more interesting than ever was the case when it was the wide-spread belief that the secret Ego knows all about itself. This scientific interest in other minds has already had a salutary effect upon education, upon the feeble-minded and the insane, upon the management of hospitals and prisons, and its superior usefulness is being recognized by those who have to do with the problems of employment, the diagnosis of disease, the analysis of character, and household engineering. If psychology does not hereby furnish positive ethical implications having even greater import than was the case with the sciences that study the non-living, then ethics is now and always has been an illusion. Some, indeed, may take such a position and defend it with perfect frankness. Nevertheless, the more reasonable philosophy seems to be that we have come to that period of man's development when science and ethics are to be re-

garded as inseparable. They are the obverse and reverse, the complement and supplement of each other.

The reconstruction of ethical theory will perhaps chiefly consist in allying and consolidating it with the rest of the natural sciences. We are gradually accepting the thesis that there is only one field of knowledge, although there are many ways of approaching it. This conviction that only one field of knowledge exists must necessarily have its subtle effect upon the various methods of investigation, namely, to simplify, unite, and clarify their hitherto diverse aims. This can best be expressed by saying that the future aim of all science is the "humanization of knowledge," that is, the pursuit of fact and truth for the benefit and use of men. And I venture to say that it is this single purpose, itself an ethical presupposition, which has been responsible for the growing conviction that the field of knowledge is one. Man has come to regard the totality of nature, even to the outermost limits of the galaxy, as his home, he has learned to accept it as his neighborhood and habitation, and to be as much interested in the infinitely large as in the infinitely small. In this he may be presumptuous, but he is none the less courageous; he may be daring, but he is also canny; he may be self-deceived, but he is nevertheless willing to try the most ingenious experiment that was ever devised.

This attempt to unify the aims of knowledge involves other unifications. Morality, religion, and ethics are still farther apart than their common purpose warrants. All are ostensibly means to the same end, namely, the increased capacity for living well. And yet the word "moral" still implies a sort of humdrum uniformity, a repression of independence, a standard of living laid down by the deceased. Worst of all, here in the United States, *immorality* invariably refers to sexual excesses. No doubt some kind of *mores* will always exist, and uniformity of behavior will always be necessary in order to avoid accidents and to establish bases for recognition and confidence. But when customs, for which there can be only a lame defence, hamper the understanding and hinder the liberal education of the emotions, they can no longer be regarded as being worthy of homage. The gap between ethics and morality could be bridged in two ways: first, by the discarding of those customs which no longer serve the larger purpose which ethics reveals, and second, by establishing only such habits of conduct as the discoveries of science show to be of value in our social intercommunication.

In the same way, the aims of religion and ethics can and should be identified, in order that religion may also be thoroughly human-

ized. We are still somewhat under the spell of an ancient teaching that man is composed of three elements,—the physical, the mental, and the spiritual, and that these three must be dealt with independently. Doubtless each of these phases of human nature, when properly understood, is a legitimate subject of discussion; but when, as has so frequently been the custom, they are regarded as necessarily distinct and incompatible, the result has been a dismemberment, rather than a unification of the personality. We have given over to the gymnasium the job of educating the body, to the college the task of developing the mind, and to the church the problem of uplifting the soul. As one enters the doorway of each of these institutions, one feels the necessity of leaving most of the aims and benefits of the other two outside. Ethics would do away with all this. The motto, divide and conquer,—practically equivalent to dismember and stultify, —which now represents the dominant policy of these three institutions, should be replaced by a program to unite and make mutually beneficial all the various attributes of man's nature. If ethics, religion, and morality need to be in any way distinguished, let ethics stand for the expert knowledge and technique of living, religion for the simultaneous education of all profitable sentiments, and morality for the habitual practice of all those actions which are stimulated by an enlightened enthusiasm.

Obviously, such an ethics as we here describe will involve many changes in the conduct of every-day life. Many idols will be noisily overthrown, such as race-prejudice, religious prejudice, and Chauvinism. We shall have to try many painful experiments. We may even have to accept the dictum that it is more important to think in order to live than to live in order to think. Our treatment of criminals may involve the serious attempt to re-educate them. Talents, rather than geographical sections, may eventually be represented in government. Men, rather than books, may receive the greater study. Unremitting toil may come to be regarded as an evil of the first magnitude, and may be abolished. The fear of death may be replaced by the love of a preferred life, and this preferred life may be made possible for every one capable of pursuing and contributing to it. Ethics, in coming into its own, can no longer be separated from the needs and capacities of living men.

When we say that the aim of ethics is primarily to unify, it is not to be considered that this unification must be dreary or monotonous. Almost the exact contrary is to be preferred. Picturesque individuality of life, of thought, of feeling, is clearly compatible with the aim of ethical enlightenment. A new word is needed at this

point to express the modern constructive attitude toward life. Perhaps no new word will be coined, and it may be that no such coinage is either possible or desirable. We may indeed have come to that period in evolution when what we do is vastly more important than anything we say.

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