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PSYCHOLOGY
AND
SOCIAL PROGRESS

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PSYCHOLOGY
AND
SOCIAL PROGRESS

Mankind and Destiny from the Standpoint of a Scientist

By
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TO

MY FATHER AND MOTHER

IN GRATITUDE

FOR INSPIRATION AND OPPORTUNITY

FOREWORD

"Earth's wheels run oiled with blood. Forget we that.
Let us lie down and dig ourselves in thought.
Beauty is yours and you have mastery,
Wisdom is mine, and I have mystery.
We two will stay behind and keep our troth.
Let us forego men's minds that are brute's natures,
Let us not sup the blood which some say nurtures,
Be we not swift with swiftness of the tigress.
Let us break ranks from those who trek from progress.
Miss we the march of this retreating world
Into old citadels that are not walled.
Let us lie out and hold the open truth.
Then when their blood hath clogged the chariot wheels
We will go up and wash them from deep wells.
What though we sink from men as pitchers falling
Many shall raise us up to be their filling
Even from wells we sunk too deep for war
And filled by brows that bled where no wounds were."

WILFRED OWEN.

To understand a thing in a way likely to lead to a more effective control of it we need to relate it in as many ways as possible to the other elements of our mental universe. Indeed, the richness of meaning which anything holds for us is nothing but a function of the relations by which we grasp it. This is especially true of things that are not particular and concrete; of the abstractions which we have to handle in intellectual and social problems; abstractions which hinge vitally on the real details of our lives and so never leave us in doubt as to their own reality.

Consequently it is a false profundity which seeks to deal with such questions as nationalism, sex, religion, education, politics, and social organisation in academic isolation. A re-interpretation of any one of these fields involves at once, if we are not to keep the compartments of our minds obstinately watertight, a re-interpretation in all other fields. That is sufficient explanation of the apparent presumption of a work which handles many vast topics in a single volume. A true conception of social reality, productive of profitable suggestions for constructive policies, is only to be obtained by rejecting the invitation to partial views which our institutions constantly hold out to us and setting out deliberately to gain a vision of the whole.

The study of progress gives the investigator a licence to penetrate into all fields of endeavour, a task for which no single person can be adequately equipped; but, if one specialist is bound to trespass into the preserves of others, surely none is better fitted to do so than the psychologist, around whose object of study—the mind of man—all these problems cluster.

If, however, the inter-relating of things commonly sundered is so productive of enlightenment, how is it that the scientists who are in the habit of dividing up their subjects into small and easily digestible morsels have made greater progress in understanding than have the philosophers, who profess to see things as a whole? In the course of our main enquiry we shall uncover many obscure causes which account for the fact that the philosophers, with all their intelligence, have remained sterile; but in the first analysis the paradox is explicable as arising from a difference of method. The scientist has learnt that it is necessary to arrange all his material before him before he begins to reason, and that it may be necessary in face of reasons to the contrary, to devour the subjects in modest bites in order to satisfy this first demand. The philosopher, delighting in discussion and the production of simplified systems of thought, has not sufficient loving attention for his material to do it the justice of prolonged examination.

Owing to the vast array of facts to be considered in any scientific treatment of a large field, especially in such a complex study as that of the social life of man, a book of reasonable size and readable quality is only possible when the exact and experimental treatment of the constituent subjects has already provided a series of authoritative summaries to which reference can be made.

The pillars upon which a social psychology could be satisfactorily erected are not yet to be found. I have been compelled to build my temporary structure, with more regard to firmness than artistic effect, on a few half-completed columns and some fairly solid heaps of material which I have had to pile before the reader at the risk of offending him with too much detail. Almost everywhere I have quoted very freely, neglecting no opportunity to let other thinkers and scientists express the views that are embodied in this synthesis. Perhaps this is a method alien to true scientific works, in which it is usually thought necessary only to quote from Nature herself, but I have adopted it in the hope that the reader, sipping a little from many new springs, may be moved to drink more freely from original sources, according to his tastes. That other type of reader too, whose futile way is to proceed to an airy denial of inconvenient facts, may, in meeting the words of those who have given immense study to particular fields, be

moved thereby to more respect than would be evoked by the writer's own bald presentation of those facts.

Lest my urgency to produce such a premature scientific sociology should dub me a lunatic, in view of the thousands of unread works on social phenomena which every library contains, I must point out that, even apart from the minor contribution of individual thought (which the reader can assay for himself as he follows the argument) the treatment introduces what will be to most a new approach and one which may stimulate further research into problems pressingly needing it. Most social problems have been treated *ad nauseam* from a philosophical, dogmatic, hortatory, inspired or intuitive standpoint. Only in the last decade has the scientific approach been possible. For the first thin harvest of experimental psychology is only a generation old and the first social psychologies which can be considered as more than descriptive are only now appearing. Psychology, of course, is not the only science which is necessary to understanding social problems—I have by no means neglected economic and natural factors which form the environment acting upon our minds—but it is the most neglected science, the development of which will yield relatively great advances in sociology. The advertisement so far given to social psychology has not been sufficient to awaken the majority of intelligent citizens, legislators, and educators to the incalculable rewards in individual happiness, and certainty of social control, which are to be gained from fostering its study.

Nevertheless, to educated circles, the general methodological approach should not be new. It has its main origins in Bodin and Montesquieu, and the germs of it lie as far back as Francis Bacon. In modern times it has become the revered touchstone in the writings of such men as Graham Wallas, John Dewey, Thorstein Veblen, Trotter, Günther, and Hurwicz, among others. But probably McDougall and Le Bon stand out most to-day as having striven to show the immense contributions which a detached psychological study of society can make to the solution of social and political problems. The latter, however, has been too intent on presenting the appearance of a finished science to a large and "popular" audience to avail himself of those very considerable advances in pure psychology during the last thirty years, which have been taken as the foundation of the present work.

In the bibliographies at the end of each chapter I have tried to do justice to those writers who can be regarded as the sources of many of the ideas expressed. The reader wishing to follow up the subject and to enquire further into the basis for certain opinions, will do well to consult the works recommended. On the

other hand, the bibliographies are far from complete, though they are a fair selection of literature on the subject, including all aspects of opinion and deliberately excluding only those contributors whose methods appear even more faulty than their conclusions.

Extreme condensation has been necessary at many points to keep the whole within a reasonable compass. Consequently the reader will pass through matter varying widely in difficulty according to the extent of his familiarity with the subjects discussed.

He will find a sharp limitation in the number of examples, and frequently even a cramping of style. However, I have tried to avoid, where forced to the use of abstract presentation instead of manifold illustration, that temptation to dwell on flowery metaphysical issues, which ruin so much sociological thought. (Compare, e.g., the purposefulness of the first part of Marx's "*Capital*" with the obscurity of the last.)

The publication of an essay on the lines of the present work, presenting a synthesis of the conclusions available from modern biology, and especially psychology, is a great need in the spiritual confusion of our times, but the writer has been painfully aware, at every step, that a greater mental calibre than his own is required for its adequate accomplishment. Natural science, approaching human problems in the science of psychology, has at last flowed over into the methodological wilderness of our political, social, religious and educational activities. A new fruitfulness is possible in all these fields; a new channel of attack, with incredible possibilities, is opened upon the ancient miseries, injustices and futilities that beset mankind. But first the attention of capable men and women must be called hither from the false trails of traditional interests and occupations.

. . . . . .

Scientific presentation does not preclude an account of the personal background of the scientist; indeed, it demands such additional co-ordinates, for the errors of a scientific work no less than those of a work of art are most easily detected and rectified when the critic knows something of the emotional life which led to its conception.

For the psychologist, who habitually looks for the relation of motives in estimating the validity of any work, it may be of interest to see the writer as belonging to the generation which escaped by a year or two the holocausts of the Great War and

moved out unscathed into the unnaturally empty ranks of the youth that had gone a little way before. To have grown up in those days of feverish effort, to have stood so near the brink of futile extermination, to have experienced at so receptive a period of life the full floods of national action and reaction, is bound to produce in one's mind a certain lack of sympathy with the more expansive and careless temperaments of those brought up in more normal times. Indeed, these strange days produced in my immediate generation an unusual seriousness which still younger generations have missed. In most they produced also an immense thankfulness for the gift of life—the simple pervasive benevolence which comes over every man when, coming within an ace of losing his life by accident or illness, he finds himself miraculously whole and living. In some, the prevalent but all too transitory sense of profound gratitude and honour to the dead, consolidated itself into a desire to serve by living, as others had served by dying, the future of mankind. They felt that if others had given so generously for the confused and doubtful ideals of war they could at least give as generously for the permanent ideals of peace which now appear clear and shining after the storm of war. Finally, there were a few among those for whom the war had not been in vain, who now asked themselves why the level of purposeful and united effort for a common goal, which had arisen during the war, should not be preserved by all throughout the years of peace and in the service of constructive ideals.

Such were the natural reactions of the adolescent mind under the impact of an epic environment. In the present writer, as in many others of that generation, these reactions shaped themselves into a distrust of all confidently asserted values and a determination to bestow loyalties and service only upon personally tested and logically defensible institutions. There was to be a very clear break with the past.

Thus, quite unforeseen by most people, there developed out of the post-war turmoil a vehement struggle of the younger half of the population into the freedom and opportunities of a broken prison-house. The manner of the attacks they made on what they conceived to be an ancient and false order of things differed, however, according to the temperamental constitutions of the participants. Broadly speaking, the extravert, artistic temperaments used the vehicles of expression which they found in drama, literature, art and journalism, whilst the more introverted and penetrating minds turned along the channels which science presented, believing that knowledge must precede action and that truth could only lie at the end of a difficult journey. The former

were more spontaneous, direct, rapid and violent in their onslaught. The wave of their attack arose immediately after the war in a towering gale of starkly realistic and emotional literature, fierce debate, newspaper invective, popular social and religious movements and bitter, cynical drama. In many ways the movement was confused, incoherent, and self-contradictory; but it loosed itself with a certain uniformity upon the blindness, the sentimental insincerity, and the selfishness of the older generation which had led youth blindfolded and bound to the slough of war. "The elders who have for so long been the sacred guardians of civilisation have bungled their task so abominably as to have lost irrevocably their influence for sobriety and sanity with the youth of the world." There we hear the recurring slogan in this post-war revolt of youth.

But this extravert reaction, emotional, unanalytical and irrational as the old forces which it opposed, was bound to have an effective life just as long as, and no longer than, the mood of its supporters. Being too simplified to correspond with the real complexities of the situation, it soon led many of its supporters to disagreement, mutual recrimination, and cynicism. Hence, a little more than a decade after the war, it begins to expire. Certainly it will have been productive in the long run of rather more good than harm: at least it will have jerked the insensitive out of their complacency; held off for a brief respite the desecrating hands of the older generation which lived comfortably through the war—"the sick hearts that honour could not move, and half-men, and their dirty songs and dreary"—and so have thrust us a little further along the road of progress.

Meanwhile, those who set out to follow the far pedestrian trails of scientific enquiry begin to find themselves in possession of long-sought truths—truths which, however, are not always sympathetic to the finders, demanding a constant revision of viewpoints, in which the only stable loyalty is a loyalty to truth and the intention to apply true knowledge to human betterment.

Since the tentative outline of this work was written, nearly eight years ago, the writer has been led first from the study of physical science to educational theory and thence to psychology, where appear to lie at last the ultimate possibilities of evaluating ideals and aptly controlling social progress.

R. B. CATTELL.

Casaletta,
Marine Drive,
Paignton.
September, 1931.

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CHAPTER ONE

THE QUEST FOR CERTAINTY IN SOCIAL IDEALS

"If a man begins in certainties, he shall end in doubts; but if he will be content to begin with doubts, he shall end in certainties."

FRANCIS BACON.

I. The Idea of Progress

No belief is more widespread than that we live in an age of progress. Few conceptions are more frequently encountered, explicit or implicit in popular discussion, than that of a general upward and forward struggle of mankind since the dawn of history.

In our own generation, many thoughtful observers, sensitive to the mass philosophies of their time, have declared that the true religion of our age is developing out of a pervading sense of the majesty of human progress. And there are many who, having deliberately cast themselves off from the old moorings of traditional creeds, have recognised the set of the tide on which they are borne away and have shaped their intellectual course in accordance with it.

These beliefs may be nothing but an illusion. The idea of progress is, after all, a relatively new one, as Bury reminds us in his interesting account of its history into which we cannot adequately enter here. Until the sixteenth century, men lived in what would be to us a strangely static and finished universe. The birth and development of the concept of progress is intimately entangled with the growth of science and the struggles for political and religious liberty. Francis Bacon was godfather at its christening; Lamarck and Darwin discovered for it great and indubitable relatives; Comte and Haeckel, among others, found for it a place in society.

Yet, now that progress is generally accepted as a fact, we can do it the greatest service, if we wish, by doubting its intellectual respectability and by making searching enquiries as to the reality of its foundations and the true qualities of its nature.

That there is change, in ever-quickening rhythm, no one can deny. But that this change betokens a true advance of culture on every front, is open to doubt and is, for some, a belief already

rejected. An attempt to get a precise appreciation of the real nature of progress, involving as it does a careful cross-sectioning of all the activities of the adaptable mind of man, promises to be an investigation of unusual difficulty, and before we put out on so long a quest it behoves us to sketch out the seas we have to sail, the dangerous places near or far away at which our vessel may founder, and the equipment with which it is necessary to provide ourselves.

II. The Blindness of Human Endeavour

The raw material for our study will lie all around us ; in every opinion of thoughtful men, in history, in our literature, in our customs and habits of thought, in the councils of politicians and the congresses of men of science. It is ground forth daily, in the strangest mixture of the important and the inessential, from the vast mills of the press. We shall find significant indications reflected in the law courts, concentrated in the universities, petrified in the churches, and distorted upon the stage. A vast chaos, from the examination of one corner of which the mind may well reel. A puzzle of astonishing intricacy, whose threads, magnified, are seen to consist of individual human striving, suffering and happiness. And at times one feels that the colours of suffering are more thickly woven than those of joy, for everywhere in the path of progress a fierce struggle rages in which the hearts and minds of men are broken. It is one of our purposes to ask how much of that struggle is directed to ends of permanent value and how much is a misdirection of effort which could, with greater knowledge, attain its true goals with less attrition.

Let us before settling down to the main investigation, approach momentarily so close to our material that we can pick out a few typical details. First let us stand behind the eyes of some particular individual and see the events of a period as they converge on a single consciousness. For that purpose, what better example could we pick than the mind of an adolescent, which, though naïve to its own motives, usually perceives life with an intelligence undistorted by habit or acquiescence, and so succeeds in being most acutely alive to the real incongruities of our world ? Secondly, we can take an instantaneous, flashlight impression of the world's happenings as they stand surveyed in the day's newspaper.

The student who dropped in last night to discuss his work and stayed to unfold his problems will provide our first picture. He discloses himself as an enthusiastic Socialist, seeing nothing but

blatant injustice and stupid selfishness in an unequal distribution of wealth. Consequently he lives in a constant reaction of painful surprise at finding the lucid propositions of Shaw not universally accepted. His faith in human nature is shaken by the libellous and unfair criticisms which newspaper men seem perversely to level at Bolshevic Russia. His attitude to nationalism clearly strikes the observer as being confused (though he himself is not aware of any inconsistency) for while his sympathy with the League of Nations, and all the internationalism he has imbibed in his general reading, have undoubtedly bent his intellectual loyalties in one direction, the trend of his emotions is almost wholly the result of his early patriotic upbringing. He can still read Brooke's sonnets, or even Kipling, with emotional, if not intellectual, assent. His sex attitudes are an equally inconsistent bundle of beliefs, and again, the views of the time fill him with irritation and perplexity. He expresses his disgust with the practice of telling "smutty" stories, current among his fellows, for he feels sex to be "sacred." At the same time he cannot bring himself to talk upon the topic without some feelings of shame. What he passionately believes to be idealism urges him to the view that there is nothing amiss in nakedness when both sexes are together, and he asserts that many young people share his views, but he is astonished to find that the law treats extreme sun-bathing as a crime. Again, equality of the sexes has always appeared to him to be self-evident, but he finds the father of the girl to whom he is attached openly boasting of his sexual adventures, whilst watching his own daughters with the utmost strictness and suspicious prudery. I gather indirectly from his conversation, too, that he does not dream of discussing his main intellectual interests with this girl as he would with a congenial male friend, and that he pays for her whenever they go out together. His habits of chivalry and his sense of male superiority must, when he achieves more self-awareness, destroy for him the remnants of this illusion of equality. Finally, he is nonplussed to find that while the Churches are, at least as regards their dogmatic and biblical foundations, discredited, they are still wielding powerful influence in education; that they exercise a veto on the games and public amusements of his leisure hours; are given a respectful position in the columns of the press, and exact lip-service from a host of minor writers, teachers, and business men. Such is the intellectual and emotional exasperation of the average educated youth of to-day.

Let us leave that perplexing picture, a literal reproduction of the personality I had before me last night, until our quest is

nearing its end, and let us now glance at the vaster blindness of the group mind and the collective actions of men.

In to-day's *Daily Telegraph*[1] I find the main emphasis on the world financial crisis and on the Government Economy Committee now sitting which, probably by drastic reduction in state expenditure and by increased taxation, will seek to save this country's financial situation. In America, troops have been called out to enforce abatement of over-production in oil-fields. The leading article suggests that "the root causes of it (over-production) can hardly be touched by administrative action."

Civil disobedience with picketting and boycotting of European shops has been resumed in India. Mr. Ghandi remains firm in his belief that India can get on better without Europeans. English opinion has a rift in it but inclines to the view that European management of India is essential to prosperity.

Children in Russia are disowning their parents by newspaper announcement when the parents' views are too old-fashioned. Wales has formed a new Welsh Parliament of Youth. Registry-office marriages are becoming more common, with a proportionate decline in church marriages, and it is suggested that registry offices should accordingly be made more attractive buildings and fittingly housed in the town halls.

There are two letters sharply criticising a certain Father Woodlock's uncompromising maintenance of the Roman Catholic Church's attitude to divorce, and one of them urges "the young people to take the law into their own hands until the law is made more humane and charitable."

On the Irish border, bitter feuds have broken out again between Republicans and Orangemen.

This is a typical daily snapshot of the blind and disorderly social life of a civilised society which has known of scientific method for at least four centuries. Doubtless every reader reacts immediately with an apt commentary according to his habitual attitude; but it is our purpose here to make a special effort to detach ourselves from participation in the struggle—to shed our usual defences and offences—and regard these happenings, these beliefs and strivings, simply as a field for scientific contemplation.

In the end, maybe, we shall be able to turn back to understand them in a new light, to pick out with greater certainty the false from the true, and to shape our own purposes accordingly.

[1] August 18th, 1931. I select this paper as giving us the facts in more detachment and without the usual overload of journalistic prejudice, with which we are not, at the moment, concerned.

III. Progress as the Master Ideal necessarily inherent in Vital Races

Fresh from the contemplation of such realities, one is first moved to ask whether friction arises from a true clash of ideals, or merely from disagreement as to the best ways of attaining agreed ideals. On the face of things, it would appear that the latter situation is most commonly found, with progress as the agreed goal and with conflicting opinions as to how it is best to be served.

But is progress a universally desired, ultimate ideal, and if so, is it one to which a thinking man can give his full allegiance? Of the varied religious and social ideals under the influence of which people in different parts of the world live, not many appear even in the rôle of disguised ambassadors for the ideal of progress and evolution. Thus, for Plato, ultimate goodness appeared to be justice and harmony within the social body. Again, for Christ, it is the existence of universal love which is the goal and standard of goodness. For the Stoics it would appear to be the harmonising of our individual striving with the will of Destiny. Bentham and Mill have judged virtue in relation to the goal of "the greatest happiness of the greatest number." Where does progress enter here?

Clearly these ideals overlap in various degrees. Their relations to the ideal of progress, however, bring us to an obscure and difficult problem, the unravelling of which we had best leave to a later chapter devoted entirely to the problem of morality.

The relationship of progress to the ideals that are, can wait. It is our immediate purpose now to demonstrate that progress is a valid ideal, perhaps the only ideal tenable for living and thinking beings.

The normal, uncritical assumption of human beings is that they choose their ideals according to reason from among a vast number of possible intellectual loyalties. But they no more do so than they choose the foods that shall be suited to their digestions, or the objects that shall provoke fear or attraction, or the things that shall taste sweet or sour. In the deepest analysis we shall find our ideals to be as much inborn, and almost as clearly shaped as the ideal of a fine web is to a spider, of a nest in the ground to a skylark, or the killing of herbivora to the lion.

One of the first tasks of psychology has been to show that the instincts which form the basis of our mental structure—the urges given in our inborn nature—determine broadly the things which

shall seem significant to us, the things to which we shall experience emotion and to which we shall direct our energies. It has now become a commonplace of popular discussions of psycho-analysis, that though our instinctive energies may be sublimated into a variety of activities by the aid of education and reasoning, the forms into which the activity of any given instinct can satisfactorily be re-directed are limited. The new activities must bear some resemblance to the primitive ones: they may be cast in a new key, but they remain essentially the old melodies.

The implication of these facts for our argument is, that the only goal or goals for which humanity may be expected to strive are those which can be deduced from the original nature of man, which we can perceive, by an objective study, to be common to all mankind. Enlarging our field still further, we can say that man, in common with all other living things, can only be expected to strive in the direction in which the known nature of life urges it to strive. To first thoughts, the only tendency common to all living matter is the tendency to live. The biologists of the last century, however, have taught us to see more than this. Living things have constantly tended to evolve "higher" organisms, more and more complex forms of life, capable of greater control over their environment and over the "lower" forms. This tendency to strive upwards to fuller life, being fundamental to all life, must be fundamental to the nature of man. Consequently the only ideals which will be in sympathy with the innate strivings of man, which will arise spontaneously again and again from his bosom, and which will give him permanent satisfaction, are those which have in them the essence of progress. The primary ideal of social life from which all others are derived, can only be that of forward Evolution.

To leave our position unweakened by minor false assumptions we must pause, however, to note that we have no evidence that this urge is veritably present in all life. We can know nothing of the subjective urges of those species, far more numerous than the ones living to-day, which have died out all along the road of evolution. Some doubtless found themselves in blind alleys, striving in directions which physico-chemical laws made impossible, and were, so to speak, too late to extricate themselves. Such were the monstrous and ungainly dinosaurs. But other forms, as far as one can see, expired almost as if from some inward apathy. At least, biological science to-day can suggest no definite reason for their decease. Probably such moribund forms exist among extant species and races. We cannot be certain, for example, that the urge to progress is present, and the ideals of progress

satisfying, to all the present races of man. But to all those that are predestined to exist in the future the ideals of progress must be intrinsically the most attractive, whatever spurious sublimations of that urge and half-true images of that goal may be consciously entertained by them at present.

From a biological study of the living world, and thus only, can we arrive at the real nature of human ideals. Not by looking into ourselves, like the priest in his chapel and the philosopher in his armchair, but by surveying objectively and in detachment the massive and magnificent trends of nature, like the scientist in his laboratory, can we best determine the ideals for which our minds are rightly constituted to strive. There is, however, a secondary and quite independent pathway to the same view, which we may follow in confirmation of our standpoint.

Regarding ourselves, not with the mixture of pride and self-abasement which has afflicted us from the first to the nineteenth century, but in the more level spirit which we have since learnt, we perceive ourselves as animals endowed with a certain amount of self-consciousness, creatures still vastly ignorant of the world around, but much given to studying the little scribblings of art, literature and superstition which we have ourselves made. With a meagre ability to reason and no knowledge of the imperfections of the instrument for thinking which we have evolved, we grope through a misty twilight, asking each other, in the moments when we are not grubbing for food, why we are here and whither we are bound. All the strain and effort, all the wrinkling of the brow, which we can give to that question now will not help us to its solution as much as a little effort towards improving our biological status would do. The answer to "Whither?" is best obtained by moving just a little farther in the direction in which we are already bound. If we would understand, we must increase our inborn powers of understanding and accumulate greater knowledge of our universe. That is to say: the surest and most logical way of finding out whether progress or other ideals of life are the most worthy is first of all to espouse progress.

The philosophically minded reader may object that this second demonstration of the desirability of the ideal of progress is not independent of the first in that it involves facts which, though incontestable, are not essentially different from those with which the first demonstration began. He will ask, "Why do we want to answer this original 'why and whither'?" Biologically this amounts to hair-splitting, though methodologically it does not. The instinctive curiosity and urge to knowledge which prompts the question is part of the general life-energy, but curiosity, the

striving to know, may conceivably exist in the absence of the high level of life-energy which determines striving of a kind likely to produce, by interaction with the environment, evolutionary progress. Expressed in terms of individuals this would mean that a man might want to know without wanting to live and propagate himself; but that, even for him, the goal of knowledge for himself and his children is only attainable by living, propagating, and evolving.

IV. Selfishness as the First and Last Virtue

Our use of the term "progress" has clearly been a general one, and included in itself reference to two processes: the progressive improvement of our civilisation and culture, and the continuous improvement of the inborn powers with which each generation is born. The maintenance of the second kind of progress—evolution—binds us at once to certain sets of ancillary ideals.

Every living species is possessed of inborn characters different from those of every other species. Further, each individual within a species differs in a very much smaller degree from all other members. We know that evolution takes place almost entirely by selection acting upon these differences of inborn traits[1] (produced by spontaneous variations), preserving those forms which confer upon their possessors greater suitability to the environment, or greater power and adaptability, and extinguishing those forms which do not confer such advantages on the living individuals in which they occur. Evolution is therefore dependent upon every living thing striving to the utmost for its own preservation, in order to give, so to speak, a thorough trial to the life-form which it represents. Selfishness, in this acute sense, is therefore the first and paramount virtue in the ethics of progress. Evolution proceeds only on the condition that each living organism shall struggle for the success and preservation of itself and of other organisms which are practically identical in type, with a complete disregard for all other life-forms (unless such regard is to its own advantage).

If that seems a strange ideal to the reader who has, as yet, thought little of the relation of our civilisation to other biological phenomena, let him dwell for a while on the meaning of that clause, "the preservation of other organisms which are practically identical in type." The vixen who throws herself upon the fangs of the hounds in order to protect her cubs; the lion who risks death at the guns of the hunter in order to get back to his mate;

[1] See next chapter, section II.

the soldier who takes a dangerous position in order to save the lives of his comrades; all these are seeking to preserve and perpetuate the life-forms most like their own, in preference to more distantly related forms. This is the greater selfishness which has produced, from the dull level of the brute, beings with the capacities of man.

Evolution is, of course, complicated by other minor processes, but the quintessence of it lies in our abstraction, and the conclusions at which we have just arrived are in no way affected by the fuller details of the picture. The contemptible way in which modern thought flies into panic and confusion, and succumbs to its respectable prejudices whenever it senses the true bearing of evolution on our historical, religious and ethical systems is an exasperating spectacle to those who have faith in the human mind, but an interesting study for the psychologist as such, and one to which we must give more attention in discussing ethics.

V. Ultimate Sources of Human Disagreement

Now, if evolution, by demanding this assertion of individual endowments, results in a great deal of conflict in living forms, might it not be that all the individual and national conflicts and cultural divergences, from the contemplation of which we have freshly come, are in truth derived solely from a conscious or unconscious adherence to the ideal of progress? A review of various examples will show that all varieties of conflict are resolvable into one of the following forms:

(1) From the direct and selfish competition, in peaceful and warlike ways, of different individuals and communities of individuals, for means of subsistence, space to expand, power and wealth. Here we have a simple extension of a tendency present in the animal world, but no longer necessarily productive of progress among human races owing to certain new conditions which we shall study in the next chapter. This is the most direct and immediate conflict, directed to physical survival and productive of survival of the most capable.

(2) From the clash of ideals of individuals, and groups of individuals, with differing inborn natures. Clearly, if ideals are in any way the reflection of subjective urges, people and peoples with natively differing temperaments and nervous constitutions cannot maintain, without doing outrage to their feelings, the same set of ideals.

(3) From differences of intention arising, not out of innately

determined ideals, but out of differences of opinion produced in similar natures by different education and environment. The service which such conflicts can really do for progress is rather obscure, but it can be shown to exist.

(4) Out of differences of opinion as to the best manner of attaining to agreed goals. Though this form of conflict is socially very common, it is, from the evolutionary standpoint, least effective of improvement.

That these are the true sources of all conflict and that no others exist will be increasingly evident as we proceed, though great care is necessary in deciding which of these sources is most concerned in any given struggle, and consequently, what evolutionary results the conflict is likely to have. Many conflicts of educational practice, for example, apparently belong to the fourth category, but are almost certainly founded largely in the second and third. On the other hand, the Great War claimed to be of the second and third, but was largely of the first. Such a struggle as the French Revolution certainly had factors lying in the second and third categories. For the present let us pass on without further exemplification.

VI. Enhanced Progress and Diminished Contention

We have now arrived at the clear proposition that while progress is the true ideal of all vital and intelligent people, it is at the same time the cause of all the conflicts which render life perplexing, cruel, and tragic for individuals and for communities. How perplexing and tragic, our recent sampling of living reality may remind us, if our own lives do not.

Men have invented thousands of material, intellectual, and social devices to alleviate their suffering. Some men and communities have even been so ingenious, and so biologically perverse, as to achieve some kind of happiness at the cost of turning their backs on the philosophy of progress which impregnates the universe, and others, like Schopenhauer, perceiving the universal scheme in which they are entangled, have declared that the noblest act of man is to refuse to participate in it.

Our allegiance goes where it must, and our intellects, serving the forces which gave them birth, are best occupied not in denying the struggle, but in finding the ways in which conflict and wastage of effort can be avoided whilst still preserving the original goal. There are vivid conscious struggles that are enjoyed; there are conflicts in which we are in doubt as to why we are at cross pur-

poses ; there are misunderstandings ; and there are bitter struggles which, in the fullness of later knowledge, we realise to have been unnecessary. All the contentions which arise from differences of opinion as to the best way to attain commonly approved goals have no need to exist. They, at least, can be abolished ; and the blind unawareness of forces and motives which renders all kinds of human conflict so poignant can be effectively dispelled. Then we shall no longer feel ourselves to be struggling purposelessly in the buffeting seas of circumstance, a jest at the hands of destiny, awakening by our efforts nothing but the ancient laughter of the gods who still hide in the lingering human twilight.

VII. Psychological Investigation : the Key to a New Era

But how can we dare to hope for such a change to-day, when such a state has been the vainly desired goal of human purpose for countless generations ? A new standpoint has come into being which may open an entirely novel chapter in human history. Mankind turned the first corner when, instead of making a blind and frantic struggle for the things it desired, and instead of thrusting its dogmatic beliefs in the face of Nature, it began to work indirectly by first seeking to understand, through science, the world it sought to control. We stand to-day at the beginning of a second enlightenment in which man may turn the methods which have been so fruitful with the inanimate world to the study of his own mind and the strivings of living things. To-day we stand not in peril from the external world, but in peril from ourselves. We have put the immense forces of the material world under the control of living forces which are themselves uncontrolled. At last, at the eleventh hour of catastrophe, a few pioneers here and there are beginning to study the sources of human error, the laws of human passions, the nature of intelligence and the direction of human drives, with the detached and empirical manner of science.

In this and this alone lies the new hope of controlling human happiness.

The naïve mind of the child and the uncivilised adult works not only in ignorance of the error to which it is liable, but without ever having thought of the possibilities of such error. Most civilised thinking in literature, politics, religion, and philosophy is equally unsophisticated.

There is a well-known introductory experimert in psychohogy in which the subject plunges one hand into a basin of hot water

and the other into a basin of ice-cold water. On putting both hands immediately aftorwards into one and the same basin of lukewarm water his first hand tells him that it is chilly, his second that it is distinctly hot. Again, in the two preceding sentences there are three deliberately misspelt words, which in all probability have been read as entirely correct by the present reader. His mind has made the error of putting into the printed page what does not really exist there. A third kind of error may be illustrated from the animal world. Every morning my dog awaits with immense impatience the arrival of the butcher who frequently brings him bones. Yesterday, in the middle of the morning, the gate flew open and the painter entered who is to begin painting the house. With little barks of delight my dog bounded across the lawn to meet him and was fawning at his feet before he discovered his mistake. Our sense organs are perjurers, our active minds project into reality more than is really there, and our beliefs are illusions depending upon what state of affairs we most eagerly desire.

These are three important sources of error in human reasoning but there are many others, for example we almost universally project on others the ways of thinking, the passions and the virtues which we ourselves possess.

An awareness of the natural errors of the mind, however, is a very small part of what is to be gained by the scientific study of mind. How futile and perverse are many of the traditional educational practices in the light of psychological facts already established! How purblind are many social reforms and political axioms in the light of the present knowledge of social psychology!

Man has kept his own mind, as he once tried to keep the solar system, beyond the reach of "prying" investigations and the "desecrating" hand of science. Astronomy revealed greater wonders in reality than had lived in man's tiny imagination and became the foundation of a science of physics which has enriched our lives most bounteously. The study of mind will not bring lesser benefits.

Psychology, however, demands a greater initial effort of detachment than do the physical sciences. In the latter, one stands, as it were, with a group of other human beings, examining and discussing some material object that lies before one. In psychology one becomes aware suddenly of the activity of the group in which one stands and steps a little farther back to include both the material world and the group of living objects in one's field of vision.

Eventually such a standpoint involves one in ways of thinking which it is possible to maintain only during the intensity of study,

and which must be laid aside, as a workman lays aside his tools, when one becomes once more a participating human being. For this attitude requires a complete suspension of those comfortable beliefs, protective moral feelings, and habitual and instinctive modes of thought and reaction without which a man would be paralysed and helpless in the social life of the everyday world. It is a mental holding of the breath, a feat of intense self-realisation and regulation which the reader must perform before he can hope to follow the true spirit of the argument. After a man has thought for some time in this detachment he may, indeed, on returning, undertake a detached revision of his prejudices and a radical reorganisation of his sense of values, but to attempt to preserve that detachment indefinitely is to pass into a ghostly trance from which no effectual action upon the world can be made. Let the reader then deny himself for a while the strong flesh and blood of his normal sentiments and follow the argument with a desire only to arrive at truth and understanding. Let him be affronted by errors in method, and indignant at reasoning from insufficient evidence, but let him not mistake for these sins those conclusions that are merely stumbling blocks to his prejudices.

VIII. The Plan of the Enquiry

We have now considered the goal of progress in its larger setting, brought out certain of its implications which are important to the first stages of our enquiry, and illustrated the psychological method which is to be the main test in our investigation.

This preliminary over, our aim in the subsequent chapters is, firstly, to examine the psychological and biological bases of things as they are, and secondly, to suggest practical measures whereby the present evils may be avoided and the desired goals attained in so far as they prove sound to investigation.

It is most convenient to start with problems that concern mainly the innate qualities of the human mind, for thereby we can follow the best introduction to psychological knowledge and provide ourselves with the right foundation of facts necessary to later discussion centering on the superstructure of acquired mental character and group reactions.

Our course, accordingly, lies through a study of nations, racial types and group survival processes, to an enquiry into the structure of the nation itself, the classes, political forces, and economic mechanisms, within the community. We must, therefore, begin with a study of nations and races, illustrating the effects of inborn

mental differences. Then we shall be in a position to discuss the morality of the whole of the present system of competing groups of individuals—of nationalist sentiment and the halting of the Christian religion at national boundaries. Thence we may turn to the psychological causes of structuration within the nation, to the origins of class differences and their biological effects. At that point, since the unusual standards of justice and goodness which we shall have been maintaining will perhaps have left an accumulated sense of mild bewilderment with the general reader, we shall enter into a thorough-going examination to clarify the ultimate basis of morality and the relation of the new evolutionary ethics to our present accepted ideals. Since, as a psychological phenomenon if not as a logical necessity, morality is bound and has been bound from time immemorial to the forces of religion, we must carefully investigate the religious impulse, the beliefs in God and immortality and the relation of science to religion.

A whole chapter will then be devoted to the sex problems of man and woman in modern life, primarily because all its aspects are of such cumulative importance in civilisation; secondly because psychology has much to offer towards the solution of these perplexities; and thirdly because the whole subject provides an important rider on the theorems of morality we shall have been discussing.

Analysis must then give way to synthesis, and since complete synthesis must not only result in new constructions in social life, but also show how they can be dovetailed into existing institutions, we are first committed to one more analysis, a psychological and sociological analysis of the institutions—press, politics, universities, literary and philosophical leaderships—which at present claim to pilot the progress of society.

And so, at last, will come the occasion to gather up all the implications dropped by the way, and to organise a clear chart of the possibilities of social evolution, of religious expansion, of international development and of the inauguration of scientific government which, through the long rumination of psychological thought, we have come to regard as the truest vision we can gain.

As to the course which the ship of human destiny will take we, as scientists, can only speculate, prophesy and hope. But our part will have been done when we have couched our suggestions in the most practical terms which present knowledge will permit.

Much of the hope of translating all that science and thought can suggest into the realities of individual and social life lies with

education. Our penultimate chapter is a very sketchy series of propositions for educational organisation.

In the last chapter we have propounded in some detail a plan for racial control, a movement which we believe to be the most urgently needed institution of our time and one to which our present energies can most profitably be devoted, for in it lies the hope of directing human striving on to a new plane and opening a new era in which mankind shall control its destiny.

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CHAPTER TWO

NATION AND RACE: THEIR SIGNIFICANCE FOR HUMAN PROGRESS

"The years-heired feature that can
In curve and voice and eye
Despise the human span
Of durance—that is I;
The eternal thing in man
That heeds no call to die."

THOMAS HARDY.

I. The Collapse of an Ideal

PATRIOTISM, to-day, is not a very fashionable virtue. The citizens of civilised countries who would rise in sympathy to the cry "My country, right or wrong!" are now distinctly in a minority. Yet it is barely a generation since the idealistic and altruistic urges of most men found expression predominantly in devotion to the national ideal.

Patriotic sentiment was one of the firmest pillars in the self-regard of all men of high character and some of low, surpassing in importance the religious sentiments of the normal man. Consequently the downfall of this master loyalty has wrought havoc in the organisation of millions of minds. Is this re-arrangement of values a passing fashion of thought produced by the shock of recent events, or does it definitely require a re-orientation of our emotional lives in accordance with a more complex appreciation of values? We can only obtain a final answer to this and the related questions which will spring up by studying the meaning of nationalism in biological terms and examining the consequences of the present national organisation.

At the back of the mind of the average man there is a belief that men of different nationalities are possessed of different characters, that they are animals strange to each other's ways, that they are of different "race." And though he usually professes Christianity or some universalistic religion, these differences seem to justify in his mind, to some extent, the mass murder of war. This is clear, for example, from the fact that if he suddenly notices some resemblance between his enemies and himself, some markedly

common features, he is astonished and begins to regard the war as a mistake. In these reactions he is betraying an awareness of evolutionist ethics which has penetrated to his mind despite the attempt of universalistic ethics, which is the only ethical system to present itself to him as such, to lead him to a totally different conception of what is right and wrong. If nations really differ in inborn characters, he may be right under the laws of evolutionist morality, in breaking under certain circumstances the rules of the Christian religion by robbing and even murdering his stranger enemy. Here we encounter an antagonism of evolutionist and universalist ethics which can only be followed to its ultimate issue in a later enquiry into moral systems. Let us for the moment shelve this question of right or wrong and enquire simply whether indeed there are inborn differences between national groups, and under what circumstances, granted an evolutionist ethic, they would justify international competition and the maintenance of barriers between nations.

II. How do Racial Qualities Change?

It is an astonishing thing to find that though the average elementary- and secondary-school-educated man, and the press which caters for him, are considerably interested in the question of national character, they have never troubled to inform themselves that nations and races have entirely different boundaries and are totally different entities. They will speak glibly of the "British Race" and the "German Race," perhaps innocent of any intention to mislead, but drawing conclusions which would be tenable only if the word "race" were used in its technical sense. Any clarity of popular thought on national questions is also rendered difficult by the general ignorance of the real nature of inheritance and the universal unawareness of the bearing of biological processes upon social life. For this difficulty in following up the only possible scientific approach to our social problems we have to thank the reluctance of entrenched educational institutions to make room for biology in our schools.

In studying the psychology of national and racial differences, as in studying almost all psychological problems, it is first necessary to discover which mental features are inborn and which acquired through environmental influences. Our concern in this chapter must be largely with the inborn constitutional qualities, because they must first be elucidated; because the psychology of acquired characters and cultural life is still chaotic, and because

inborn qualities are of more lasting importance in world affairs. A general discussion of the relation of inborn and acquired characteristics is necessary to clear the way of misconception before we can proceed to a real investigation. Consequently, I must ask those who are familiar with the ground to bear patiently with an exposition of the present position of scientific opinion in regard to inborn characters and the nature of heredity.

The extent to which qualities are inborn or acquired through the influence of environment has long been studied by biologists, and considerable knowledge has been accumulated concerning the physical characters of various species. But until the psychologist in his own studies realised the importance of deciding which qualities of mind were inborn and which were acquired after birth, very little was known about the behaviour of intelligence, disposition, special aptitudes, temperament, etc., in inheritance. On an exact appreciation of the dividing line between innate characters and the superstructure of education depends the success of all our attempts to understand and control the development of mind in the individual and the group. If an uncontrollable temper is a product of environment, let us find out how it arises; if intelligence is inborn and not affected by training, let us cease to pretend to train it in our schools; if the conservatism of the Chinese is due to a rigid social tradition impressed upon each generation of naturally enterprising minds, let us perhaps continue to proffer Western ideas, but if it is an innate character of the people let us cease our useless meddlesomeness. Referring to the field of political psychology, a politician of some academic distinction has written in a similar vein: "One of the most fertile sources of error in modern political thinking consists, indeed, in the ascription to collective habit of that comparative permanence which only belongs to biological inheritance."

The wide prevalence, even in the face of the growing biological knowledge of recent years, of the Lamarckian theory that the characteristics acquired during the lifetime of one generation will be handed on in some measure among the inborn characters of the next generation, is psychologically interesting as an example of the very common wish-fulfilment illusion. In former years, when there was a dearth of evidence in favour either of the Lamarckian or of the opposing Darwinian theory, the popular mind put its belief solidly in the Lamarckian standpoint, and now that the evidence is strongly, nay overwhelmingly, in support of Darwin's notion of evolution by the action of selection upon chance, abrupt variations, the earlier ways of thought disappear, even among biologists, much more slowly than would be the case if the mind

were merely an instrument of reason. Yet it is a simple matter to show that even the desire to believe in Lamarck's theory is misguided; there is as much to lose by such a state of affairs as there is to gain. The results of our present intensive education would, it is true, be handed on in some degree to the next generation, so that the teacher would not be compelled to start, generation after generation, with the same level of inaptness and unsuitability for culture among his pupils. But who would wish his children to bear in their inborn characters the stamp of the perverse educational methods of the nineteenth century? Should we wish to inherit a stunted and failing physique as a legacy from the physical disuse, hygienic ignorance and disease which have been so prevalent during man's attempt to adapt himself to a more complex civilisation throughout the last four centuries? Would an American citizen be pleased to find that his children had great difficulty in learning English because their forefathers had for countless generations lived in Poland?

Fortunately, perhaps, what at one time looked like a fairly sound array of evidence for the Lamarckian view has now, on closer examination, melted away (though not always with such sad and dramatic circumstances as led to Professor Kammerer's suicide) so that to-day we are left with but three isolated pieces of experimental evidence which in any way support the notion of inheritance of acquired characters. These are McDougall's experiments showing a tendency for the inheritance of maze-learning habits acquired by rats, Pavlov's work on the conditioned reflex in dogs, and McBride's work on colour changes in lizards. Even these await confirmation, and though McDougall's fine experimental results may really need no confirmation, they admit of explanation on other grounds than those of a true inheritance of acquired characteristics. In each case the changes are extremely small in each generation, whilst in two of the three experiments they concern changes in nervous function, not in bodily structure. Against these persuasions is ranged an immense array of negative evidence.

Accordingly, Darwin's account of evolution, with the few minor modifications which modern biologists have added, is to be accepted as accounting for the greater part of the changes which we see, though there still remains the slight possibility of some scarcely appreciable inheritance of acquired characteristics affecting the nervous structure.[1] Evolution, that is to say, takes

[1] Major Leonard Darwin has summed up the evidence as he sees it in the conclusion: "Men of science now hold that changes in our surroundings to-day will affect the inborn qualities of succeeding generations either not at all —or only after the lapse of a very long period of time." *Eugenic Reform*, p. 111.

place through the selective action of environment acting upon (1) the host of minor variations in inborn characters which appear in any species, and (2) the larger spontaneous changes in inborn structure which have been called mutations. From time to time there arise these sudden changes in the inborn qualities of the individual members of the species. Some of them may be useless or detrimental, so that the individuals bearing them do not survive, but occasionally others appear which bring real advantages to their possessors. This new type, being still better fitted to its environment, henceforth becomes the prevalent type of the species. It may be hardly necessary to point out that this "survival of the fittest" is not necessarily the "survival of the noblest" as some literary enthusiasts (e.g. Nietzsche) have painted it. In the world of the sewers a rat is a "fitter" creature than a man. Neither is it a dramatic battle of tooth and claw; rather it is on a par with the economic struggle which the little business man wages with his neighbouring rival. The improvements of the native qualities of a race, therefore, cannot take place by means of a system of education, perfect as it may be, nor yet through the improvement of material conditions. Progress in this basic sense can only be maintained through the continuation of a greater survival rate among the more capable individuals and groups than among the less capable.

III. The Conditions of Human Improvement through Group Competition

Does this lead us irrevocably to the standpoint that competition between national groups is good? That standpoint, we know, is at present subject to intense criticism, on the grounds of economic waste, of the dangers of disastrous wars, of its being contrary to religious and moral principles common to all mankind, and also because there are some who would like to see an inter-class struggle developing in its place. To test the validity of these criticisms would require a broader basis of knowledge than we have, up to this stage of the argument, supposed; but we are quite equipped to ask whether the original purpose of evolution is being fulfilled by a struggle of nations.

Improvement of the human stock in its inborn abilities and temperamental make-up can only have occurred in historical times if the group antagonisms have been such as to result in the survival of those groups with the highest average level of desirable inborn qualities.

A little careful thought will show that if the struggles and wars of nations in the past have been of any use in improving the human breed they would have had to have been attended by the following conditions:

(*a*) Success must have depended not on the size of the groups, but only on the qualities of the individuals composing them, i.e. the groups must have been approximately equal in size (except in so far as the membership of a larger group testifies to a greater degree of loyalty and imagination on the part of its members). Thus a defeat of the (probably) more highly-endowed Greeks by the numerically greater Persians would have removed from the earth one of the most highly capable peoples and thrown back human evolution by thousands of years.

(*b*) The members of one competing group must be of a different inborn racial type from the other, else there is no selective action resulting in the greater prevalence of a fitter type.

(*c*) Success in the struggle must be determined by these inborn abilities, not by biologically irrelevant, acquired factors such as the possession of greater natural resources or the chance legacy of greater knowledge and technical skill handed on from some previous civilisation. The slaughter of the northern tribes by the Romans may well have been a set-back to human evolution, since it probably consisted in the defeat of a natively more intelligent people by a less able people possessing the advantages of an unearned civilisation. When England narrowly escaped defeat at the time of the Armada, the accident of numbers had nearly destroyed a more intelligent people and frustrated evolution. Perhaps in the Great War there has indeed been such a temporary set-back, in which a people of greater vitality and intellectual ability have been prevented from spreading by the accident of greater natural resources and numbers being in the hands of their opponents. Of course the possession of greater natural riches is frequently itself a result of greater courage, enterprise, and skill on the part of the possessors.

(*d*) The contending groups must be relatively homogeneous. For suppose they are not, and that one group is composed of one set of natives, type A, possessed of great strength and ability, and of another set, type B, of lesser ability but of a higher breeding rate. Then, in consequence of the goodly proportion of type A, the group will tend to meet with success and to expand at the expense of slightly less gifted groups. But in consequence of the differential breeding rate, the group, now possessed of power and ability to cut short the expansion of other groups, will be increasingly composed of the B type of individual. By this abominable process

of parasitism, evolution will have been inverted: the higher type has vanished and the lower type, now in full possession of the natural resources, is able to hold up the growth of other groups composed of types actually superior to themselves.

These conditions favouring progressive evolution are actually more often fulfilled than not, for they are in reality nothing but the absence of special and unusual conditions. Thus it is that in spite of occasional reversals of evolution through numerical discrepancies and chance advantages of one group over another, in spite of long-drawn-out and objectless struggles of groups derived from a single racial type, the improvement of human inborn capacity has shown no cessation.

All this discussion is an abstraction of the essential possibilities in the biology of evolution through group survival and has been illustrated for clarity by a few partially conjectural examples. Our next step is to see how the principles may be applied to the actual nations of the earth. To proceed without error we must first ask what inborn differences actually exist among human beings, what the notion of race implies, and how existing nations are built up from constituent races.

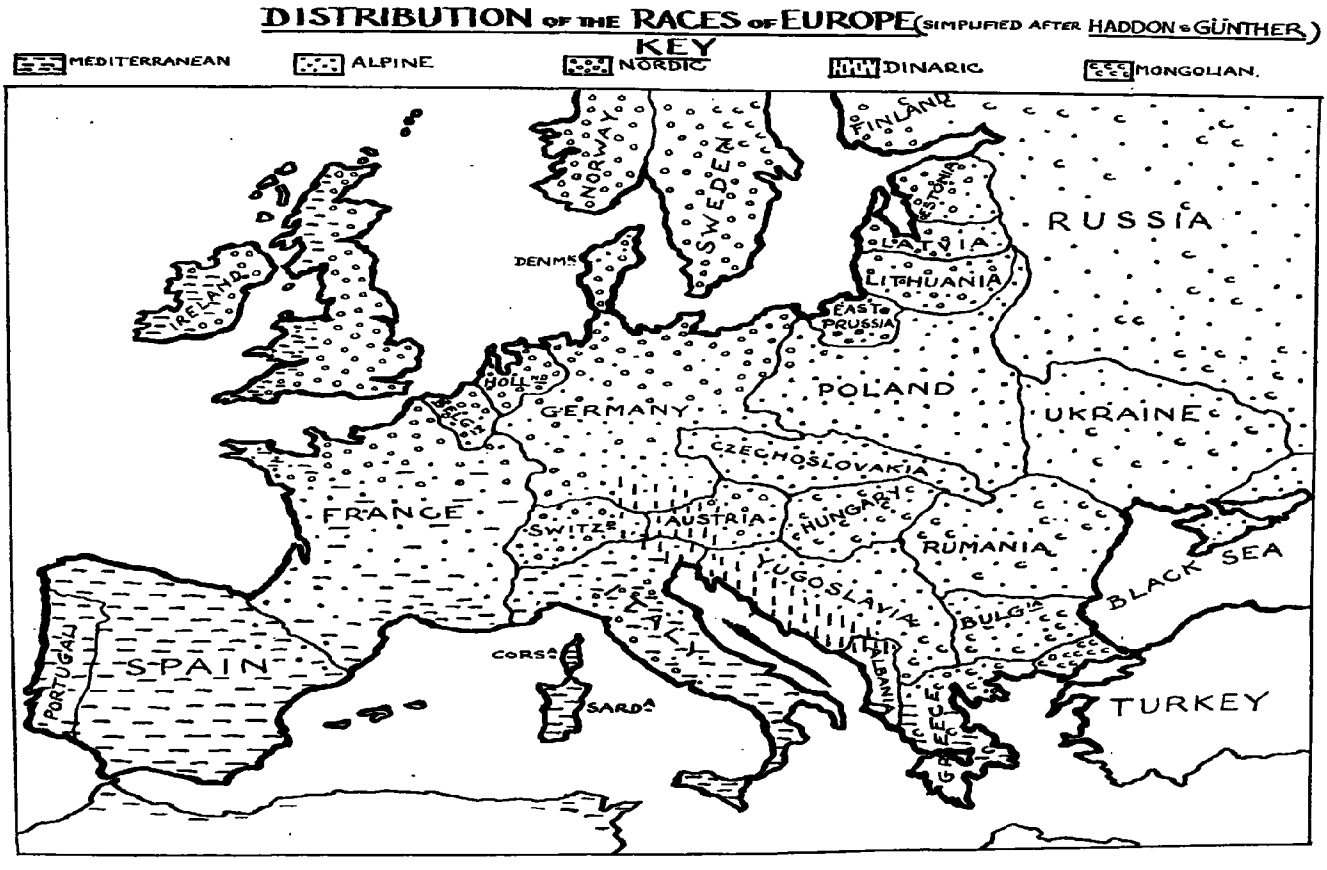
IV. Inborn Differences in Man: the Races of the World

Anthropologists, beginning with the physical characteristics of men, but passing in recent years to the more complex mental traits, have succeeded by many laborious researches, in classifying the people of the earth, according to their inborn differences, into a comparatively small number of races. Dixon[1] has concluded that there are eight main races out of which all the varieties of human type have appeared by intermixture. Other anthropologists have not adopted such an analytical treatment, but have described and classified types as they find them. The general agreement, however, is extensive enough to provide a sound outline upon which we may safely build our conclusions, so we will proceed to a description first of the physical features of races and then of the mental features.

Over Eastern and Central Asia prevails the Mongolian variant, round-headed, yellow-skinned, with straight black hair, high cheek bones, and the Mongolian eye. Migrants of this race also apparently constituted the Eskimo and the original inhabitants of North and South America.

The long-headed, black, curly-haired negro is the natural type

[1] *The Racial History of Man*, New York, 1923.


DISTRIBUTION OF THE RACES OF EUROPE (SIMPLIFIED AFTER HADDON & GÜNTHER)
KEY
MEDITERRANEAN
ALPINE
NORDIC
DINARIC
MONGOLIAN
NORWAY
SWEDEN
FINLAND
ESTONIA
LATVIA
LITHUANIA
RUSSIA
DENMK
IRELAND
EAST PRUSSIA
HOLLD
BELGIUM
GERMANY
POLAND
UKRAINE
CZECHOSLOVAKIA
FRANCE
SWITZD
AUSTRIA
HUNGARY
RUMANIA
BLACK SEA
YUGOSLAVIA
BULGA
ALBANIA
GREECE
TURKEY
ITALY
CORSA
SARDA
SPAIN
PORTUGAL

of Africa, whilst in South-Eastern Asia lives a similar race, possessing, however, a smaller skull height. This latter type, constituting some of the less developed peoples of India, spreads out over Malaya to Australia and the Pacific islands, where it forms blends with the Mongolian race type.

All the world surface outside Europe is (or was until historical times) peopled by these three races and their modifications. In Europe itself anthropologists were wont to speak of a fourth race, the White or Caucasian race, but to-day three races are recognised in the European area apart from the modifications probably produced by interbreeding (e.g. Günther's Baltic race). The oldest strain is the short, long-headed, olive-skinned Mediterranean man with dark eyes and black, curly hair. Many anthropologists regard this type as derived from, or distantly related to, the negro.

North of the Mediterranean, which is peopled by this race, is a slightly taller people with straight, brown hair, round (brachycephalic) heads, and brown eyes. This race penetrates Europe like a wedge from the East along the central plateau of France (Günther calls it the "Ost-ich race" to indicate its Easterly origin). This race, which has many similarities to the Mongolian, is usually called the Alpine race.

Finally, in the North, spreading out from around the Baltic Sea, is a tall, long-headed, fair-haired, light-eyed type, with the lightest complexion of any in the world, usually referred to as the Nordic race. The regions of these races, with the national boundaries superposed, are shown in the accompanying map. Naturally there is a more or less extensive zone of intermixture where the races come together and there are numerous inlets and islands of racial stocks, of interesting historical origin, which are too small to be shown on the map facing.

The bodily characteristics of these races were evolved and stabilised during prehistoric times, and there is no evidence that five or six thousand years of historical time have produced any change in them.[1] An interesting and striking example of this stability of racial type is seen in the precise resemblance of Egyptians depicted in ancient drawings to the Egyptians and Arabs of to-day.

Physical racial differences, then, are of great antiquity, and no change of environment, even continued over thousands of years, seems able to alter what took tens of thousands of years to produce. A selective death-rate, favouring certain characters

[1] Professor Ripley cautiously concludes his review of the evidence: "The persistence of ethnic peculiarities through many generations is beyond question."

intensively, may be producing a slow change, but environment otherwise leaves these physical characters quite unchanged; they are entirely a matter of heredity.[1]

V. *The Mentality of European Races*

It is a sad reflection on the adaptiveness of human reasoning that though most people have no difficulty in accepting the facts of the inheritance of physical characters, they prefer not to believe in inborn *mental* differences among races. They will admit that a tiger cub brought up with sheep will develop the physical features of a tiger, but they would suggest that his reactions will be those of a sheep. A moment's reasoning and a little recourse to experience should be sufficient to dismiss the notion out of hand. There is every reason to believe that in man, as in other animals, the particular environments which, acting on each race over tens of thousands of years, produced the marked divergence of physical types, must also have produced equally marked differences of mental constitution.[2]

But to realise that differences exist, and to discover the essential nature of these differences, are two very different tasks. The state of affairs here illustrates well the fact that popular interest in a problem sometimes obscures rather than produces the truth. We must begin our enquiry into the mental differences of races by rejecting an immense accumulation of facile, mutually contradictory generalisations on national and racial character made by literary men and casual travellers.[3]

[1] Professor Boas believes he has detected slight changes in the cephalic index (head breadth divided by length) among immigrant generations in the U.S.A., but this evidence has been much criticised.

[2] The opinion of Le Bon, as a great traveller if not as a psychologist, is worthy of quotation: "L'impression la plus claire rapporté de mes lointains voyages dans les pays les plus divers, est que chaque peuple possède une constitution mentale aussi fixe que ses caractères anatomiques, et d'où ses sentiments, ses pensées, ses institutions, ses croyances, et ses arts derivent." *Lois de L'Evolution des Peuples.*

[3] The Great War brought an additional spate of these absurd simplifications of racial psychology, futile in method, entirely inadequate as to facts and perverse in influence, both politically (as far as such writings have any political influence) and scientifically in preventing the demand for more laborious scientific enquiries. Keyserling's *Europe* is a typical example of what intuitive thought and glib expression can do. Hurwicz, in his own careful collection of general data, stands almost in despair before the flood of lighter literature and insists: ". . . kein Gebiet bietet der falschen Auslegung, der Kombination und Hindeutung psychologischen Tatsachen so viel Raum (und bedarf daher so sehr einer streng systematischen Durcharbeitung) wie die Völkerpsychologie." *Die Seelen der Völker*, p. 10.

The approach that can yield valuable results involves careful statistical comparisons of equivalent racial areas in regard to such matters as the incidence of genius, of nervous disease, of the amount of money spent on various satisfactions, of various types of crime, and of social and religious activities. This approach will not lead necessarily to the inborn qualities of the races in complete distinction from the social inheritance and from the conditions produced socially by the interaction of individual inborn qualities. Consequently it needs to be supplemented by direct psychological testing of large numbers of individuals sampled from the various racial groups. The patient work of many investigators has now provided a little direct evidence of the latter kind of which we shall shortly avail ourselves. But insufficient support of psychological research is withholding information which would go far to solve many harassing political problems of the present day.

European races have received the fullest attention up to the present, and there is now remarkably good agreement in the findings of anthropologists and psychologists approaching the problem from various directions. The condensed accounts which follow are largely derived from McDougall, Ripley, Huntington, Günther, Porteus, and other sources to be mentioned. They must be regarded as provisional accounts awaiting further confirmation and analysis.

The Mediterranean race, which, it will be remembered, constitutes the population of Spain, Central and Southern Italy, Southern France and parts of North Africa, is characterised, according to McDougall, by a markedly extravert temperament, in contrast to the Nordic race, which is of highly introvert temperament. The distinction of temperament on the introvert-extravert basis is probably the best descriptive classification at the present stage of psychology. These terms, introduced by Jung to define opposite temperament types, have been developed by other psychologists, notably McDougall, and are now receiving some experimental verification.[1] The following sums up the differences of the extreme introvert, and the extreme extravert, but of course there are few people who really fit the extreme types.

[1] See "Temperament Tests" by the present writer in the *British Journal of Psychology*, Jan., 1933.

EXTRAVERT	INTROVERT
Sociable.	Unsociable.
Easy expression of emotion.	Little expression of emotion, or lame, partial expression.
Responsive.	Apparently unresponsive.
Interested in reality and the variety of the external world.	A dreamer tending to abstract interests. Wrapt in his own thoughts.
Natural, unembarrassed, tending to self-display.	Shy, self-conscious, retiring.
Naïve, impulsive, emotional.	Ponders on his motives, reserved, calm.
Interests tending to Art, social activities and dealing with things.	Interests tending to philosophical principles, individualist expression, and dealing with ideas.

The descriptions given above might equally well apply to the Schizothyme—Cyclothyme temperament distinction of Bleuler and Kretschmer, which also is regarded as being largely innate and related to bodily and nervous structure. It seems probable that temperament depends partly on inborn characters of the nervous tissue and partly on environmental influences incident in early life.

The Mediterranean man, then, if he is of a relatively extravert temperament, will be cheerful, sociable, passionate, and naïvely interested in the world of the senses. He is also endowed with a particular balance of instinctive equipment which distinguishes his mentality from that of other types. The mind of man is generally recognised to be based on instincts similar to those which provide the motive forces for the minds of most animals. McDougall, as is well-known, has distinguished some fourteen instincts, each prompting man to a particular form of activity, and accompanied by a distinctive emotion. Thus, for example, there is a protective instinct urging us to the protection of the young and helpless, the self-assertive instinct which causes us to find satisfaction in excellence of attainment, the mating instinct with its accompanying emotion of lust, the gregarious impulse which causes us to feel loneliness in isolation and urges us to rub shoulders with our kind once more, and so on. Other psychologists have adopted slightly different arrangements, and some have tried to get along without calling these activities instincts at all, but McDougall's scheme probably remains the best first approximation

to truth. It is clear that different species may possess particular instincts in different degrees. Thus the gregarious instinct is stronger in dogs than it is in cats; the protective instinct in mammals stronger than in birds; and the constructive instinct in man stronger than in sheep. Similarly, the different races of man and different individual men may possess different emphasis on the items of the instinctive endowment, giving to each type its particular disposition.

The inborn disposition of the Mediterranean type appears to be highly gregarious, lacking in self-assertion, more sexual and, possibly, relatively strongly protective. Statistical analysis seems to show that his crimes are crimes of violence and passion, that he is seldom involved in divorce or suicide, and that he is relatively generous. In nervous diseases he is more likely to suffer from hysteria than neurasthenia (McDougall). He loves strong, vivid colours and vivid impressions of all kinds, and is rather vain. He has a gift of persuasive eloquence and is often a skilled orator, rather given to suppleness and craft.[1] A very interesting enquiry by B. S. Bramwell,[2] in which he compared the subjects taken by Cambridge students of Welsh origin (largely Mediterranean) with those from East Anglia (mainly Nordic) shows that the Mediterranean preferred Theology and History and were averse to Mathematics. The Nordic groups elect Mathematics, Classics and Natural Science, but they give way to the Welsh in Classics. These results were confirmed by Oxford records where the Welsh, in addition, added modern and Oriental languages to their preferences. After following up this work by comparing the origin of people engaged in various occupations, Bramwell concludes: "In pursuits where proficiency depends on mechanical or constructive skill, the northern element appears prominent, but if proficiency depends on the spoken word, argument or persuasion, then the Welsh element is more strongly represented." Later on, in the same work, he says: "In the one case (Nordic) a greater tendency towards construction, creation and such exercises as yield fruit in the Baconian sense, and, in the higher planes, the pursuit of a train of thought a step or two farther than most can; in fact a slightly greater tendency to exercise pure reason. In the other case (Welsh-Mediterranean) the oral word, argument, the appeal to the emotions. The one slightly inclined to look forward, the other slightly inclined to look back."

[1] So far, this is following McDougall *National Welfare and Decay*, and Günther *Rassen Kunde des Deutschen Völkes*.

[2] "Observations on Racial Characteristics in England," *Eug. Reform*, xv, p. 556.

A tendency for the Mediterranean type to constitute a priesthood has frequently been noted, and Havelock Ellis's survey of racial stock in regard to history bears this out. (See footnote p. 43 of present work.) They also show considerable activity in expressing themselves in plastic art. (Barker, *National Characteristics*, p. 32: "The earliest areas of historic art coincide with areas of Mediterranean population.")

Professor Fleure, who has contributed so much to race study in Great Britain, remarks: "In gatherings for religious and artistic purposes of certain kinds, the shorter, darker, long heads are a notable element, especially in Wales, and Welsh life would be sadly impoverished without them," and continues further, "being aquiescent in certain affairs, they do not go so far towards selecting and adopting their environment."[1]

Let us now leave for a while the description of Mediterranean race qualities, and, to gain clarity from contrast, enquire into the qualities of the tall blond Nordic people of England, Scandinavia, Denmark, and Northern Germany. McDougall sums up the evidence by describing them as introvert, that is, reserved, unsociable, not given to expressing emotion—indeed inapt in expressing emotions in words or actions. In instinctive endowment, the Nordic is strongly self-assertive, and, lacking self-submissive tendencies, is independent, bold, and difficult to lead. He has a comparative deficiency of the gregarious impulse, and a strong endowment of instinctive curiosity which underlies his interest in science and exploration,[2] and accounts to some extent for his dislike of dogma and mysticism. It is probable that his acquisitive instinct is also strong. The study of areas where Mediterranean and Nordic peoples come in the same social units shows that, at least as far as the Church is concerned, the Mediterranean elements are more generous with their donations. (The general opinion which has made the "cautiousness" of the Scot and North German proverbial may also be accepted as some evidence for the existence of stronger acquisitive tendencies combined with introversion in the Nordic race.)

There are many reasons for believing that Nordic peoples set a somewhat higher value by cleanliness and comfort, possibly because of a more strongly developed instinct of repugnance. Travellers in many cities would agree as to the relative cleanliness of Nordic cities, but the interpretation may be more complicated than that suggested here. According to Günther's able analysis of history, the Nordic type is of an adventurous disposition, self-

[1] *Eugenic Review*, xiv, p. 99.

[2] See Havelock Ellis's results below, and arguments on preceding page.

reliant,[1] and endowed with foresight; has a highly developed sense of reality, and is a natural leader. The researches of Odin in France, Galton in England, and Röse in Germany[2] discover a disproportionately large number of creative men of genius and great leaders from the Nordic parts of these countries.[3]

Kretschmer, on the other hand, asserts that the Nordic-Alpine intermixture area is the region productive of genius, but he brings no clear statistical evidence to support this unusual assertion.

The Nordic crimes, as McDougall has pointed out, are not those of jealousy and passion, assault and murder—indeed suicide is the peculiar crime of the Nordic. Günther remarks: "North-West Germany, where the Nordic race shows its greatest predominance, within the German tribes, has the lowest criminal percentage. The figures for crime rise as we go East and South, that is, in the lessening of the strain of the Nordic blood. In North-West Germany, it is dangerous bodily wounding and fraud that are especially rare; in Scandinavia theft and fraud."

In mental diseases, the Nordic inclines to neurasthenia rather than hysteria (McDougall) and perhaps, if we interpret Kretsch-

[1] The general historical evidence, for England, France, Greece, and India, is summed up by H. Onslow, *Eugenic Reform*, xii, 1920, p. 212, in an article "Fair and Dark: Is There a Predominant Type?" in which he concludes: "Throughout history it has been noticed that the fair, northern type has been the conquering and ruling race, and that the small, dark type has been the conquered and enslaved, or has succumbed to poverty in the economic struggle for wealth. These men have also excelled in the study of the natural sciences as opposed to craftsmanship, and most of the great English scientists have been of the fair type, as for instance, Newton, Darwin, Kelvin, and J. J. Thomson" (p. 241). The same writer makes some interesting observations on Havelock Ellis's enquiry into the racial origin of eminent men. Havelock Ellis calculated an "index of blondness" for each group of men (shown in brackets after each group: high figure for blondness; low for nigrescence—100 being the average) and found the following relations: "Men of low birth (35) had an index nearly three times as low as that of created peers (102). Newly created peers (102) were found to be fairer than hereditary peers (82). Political agitators and reformers (233), soldiers and sailors (150), lawyers (107) all men of irrepressible energy and sanguine personal force, have the highest indices. Men of science are very fair (121). Philosophers and men of letters have a low index; and divines (59), men whose mission in life is to preach resignation to a higher will, are very dark." Onslow continues: "It is evident from these figures that the fair man is bold and domineering, and the dark man resigned, religious, intellectual, and conservative."

[2] Günther.

[3] Many observers, e.g. Professor Fleure, have commented on the fact that Nordic types, in contrast to Mediterranean types, seem less inhibited by fear of criticism and less susceptible to hypercritical attitudes in those around. This observation may well be related to the fact that carping criticism is particularly rife in Mediterranean areas. The Irishman is typically "agin the government"; democratic government, as Barker remarks, has always been difficult in Mediterranean lands because of bitter hypercritical parties; throughout these countries all constructive plans founder on the love of critical contemplation which replaces active self-assertion.

mer's bodily types as racial ones, the Nordic and Mediterranean tend to delusional insanities and melancholia rather than to manic-depressive insanities, which characterise the round-headed Alpine.[1]

Comparatively little attention has been given to the character of the Alpine race. This race of shortish, stockily built, broad-headed, brown-eyed, straight-haired people which extends from Central France, Southern Germany, through Czecho-Slovakia and Jugo-Slavia to the Slavs of Russia was first described as falling midway between the Nordic and Mediterranean races in its characteristics, but it seems increasingly evident that just as in origin it is most certainly less related to these races than they are to each other, so also in mentality it is built on a very different plan.

In temperament, McDougall describes the Alpines as lying between the Nordic and Mediterranean extremes of introversion and extraversion, whilst according to Kretschmer's observations they are the most cyclothymic (i.e. gay, "temperamental," genial, emotional) of European races; indeed, he ascribes the qualities of Mediterranean peoples to Alpine admixture. They are also relatively lacking in self-assertion, for they produce surprisingly few leaders, despite the fact that in science, music, and literature they have developed proportionately to Nordic standards, almost their quota of able men. McDougall regards them as highly sociable and gregarious and probably relatively weak in curiosity. Huntington's maps of culture-distribution[2] seem to show that this race has produced very little of the flower of civilisation; yet many people regard it as the most obstinate supporter of culture. Professor Barker describes this people as "a silent industrious race, which if it does much of the world's work makes very little stir in the world's affairs"[3]; whilst for Günther the Alpine type is "reflective, hard-working, and narrow-minded."[4] Barker has, I think, rightly said that agriculture is less rooted in England than in France because the Alpine race is widespread in France and absent among ourselves.[5] The sturdy, hard-working peasant[6]

[1] Kretschmer mentions researches which indicate that constitutional and racial types are not identical. At the same time he argues that races are distinguished by being predominantly cyclothymic or schizothymic, and he bases an extensive and interesting racial psychology on this connection. Op. cit., ch. v, "Genius and Race."

[2] *Character of Races*, p. 230, figs. 11 and especially 12.

[3] Barker, p. 32.

[4] *Race Elements of European History*, p. 59. [5] Op. cit., p. 32.

[6] Both the Mediterranean and Nordic race have been described as "lazy" by some anthropologists, but never to my knowledge has the Alpine. McDougall doubts whether such a trait as industriousness is heritable. It is, however, probably related to heritable qualities, e.g. submissiveness, tenacity, suggestibility.

population of Germany is almost entirely of this race. According to the arguments of Günther, the Alpine man makes the sober practical "bourgeois" who patiently makes his way by dint of economy, circumspection, and carefulness, not by enterprise; he deals with what is near at hand and has no urge to the noble and heroic, while his religion is a peaceful "sunny" contemplation rather than the deeper feeling of other European races.[1] I have shown (Chap. V) that there is reason to believe that the religious impulse in this race is less strong than in others and more akin qualitatively to the Mongolian. It has been referred to as the inconative race.[2] It is doubtless these qualities[3] of circumspection, stubbornness, and avoidance of risk that have accounted for the spread of Slav types, not by conquest, but by outbreeding and outliving in the steady, protected life of civilisation. Professor Burt (*Eugenic Review*, IV) concludes that the Nordic and Mediterranean races are conative (active, enterprising) and the Alpine race unconative (contemplative, steady), but whereas the Nordic is intellectual and practical, the Mediterranean is emotional and imaginative. This agrees well with other views. In France, he reminds us, the Nordic and Mediterranean areas yield easily the largest number of noted men of letters. The Alpine areas are relatively free from divorce and suicide, the Nordic areas (as McDougall has pointed out) being worst in these "crimes." (See further evidence in Ripley's *Races of Europe*.)

Hence, although the Alpine race has been less studied scientifically than some others, the general observational evidence of anthropologists agrees very well in giving us a complete and compatible picture of its mental characteristics.

On the whole it looks as if the gregarious impulse of the Alpine man is even stronger than that of the Mediterranean, for his desire to be orthodox,[4] his dislike of individuality,[5] and his general clannishness are very marked. It is perhaps an element of this (Celtic) strain in the Cornish and Welsh Mediterranean types of Great Britain that explains the proverbial gregariousness of these people.

So much for our skeleton account of European race types, European history is decipherable as the resultant of these inborn mentalities interacting with economic geographical factors. The social and political problems of our day will likewise yield readily

[1] Günther, op. cit., p. 60.
[2] Cyril Burt, op. cit.
[3] Günther, op. cit., p. 60: "The Alpine man and his family make up a close, busy, selfish group."
[4] Note, e.g., that the Catholics in Germany are Alpine areas.
[5] Sovietism flourishes at present only in Alpine (Slav) countries.

to an analysis according to the racial characters of the people concerned and the economic situation in which they are placed. A wealth of valuable ideas for the cultural difficulties of our times lies waiting for the student who delves into the literature, from the more extensive theses of which the material of this chapter has been derived.

The great need of the moment is more extensive and ingenious psychological research directed to discovering the quantitative aspects of innate mental differences in European races.

VI. The Mentality of Races beyond Europe

We have omitted any remarks on the East Baltic and Dinaric races which some anthropologists recognise in Europe, and also an account of races concerned in Asia Minor and Arabia, but with a derivative of these latter, namely the Jews, we are justified in making a more detailed examination, owing to their peculiar entwinement in many of the sociological problems which we may later wish to examine and disentangle. For the same reason, namely, that imminent politico-sociological problems of great importance are involved, we must give some account of what little is known in regard to the Negroes and the Mongolians of China and of Japan. (The population of India resolves itself into races which we shall then have studied.)

The Jews are, of course, not a race but a nation, and like other nations are composed of several races.[1] Günther[2] points out that they are mainly a blend of the Hither-Asiatic[3] race (related to the Dinaric—a branch of the Alpine) from Asia Minor and the Oriental races[4] (the original Semitic-speaking people). But there is little doubt that they have received infusions of Nordic, Hamitic, Alpine, Mediterranean, and Negro blood at certain times and that these produce some variation in the Jewish type according to the country in which it happens to live. Yet there is a tendency to a type in spite of admixture, and this is due to the influence of

[1] Ripley (p. 289) observes that the Jews everywhere tend to resemble the races with whom they live. "The boasted purity of descent is a myth; they are not a race, but a people." [2] *The Jews.*

[3] The Hither-Asiatic race is of middling height and thickset: the head is short and rises straight up at the back; the face is narrow with a very prominent nose. The hair is brown or black, generally curly, the eyes are brown and the skin brownish.

[4] The Oriental race is short to middling height, slender, long-headed and narrow-faced. Nose curved in lower third, under-lip slightly protruded. The skin rather fair, almond-shaped eyes. Akin to Mediterranean. Most strongly represented in Arabian bedouins.

selection, seclusion, and inbreeding. It is indeed possible that a "secondary race" has arisen, but this is open to criticism. The inherited racial differences of physique and mentality between the European races, to which a European can successfully blind himself when they occur within his own nation, can no longer be overlooked when he encounters a race of extra-European origin, and the feeling of strangeness which he experiences in regard to these intruders into Europe, is no small factor in his aversion to them. Hilaire Belloc in his sometimes unbalanced but stylish, lively, and acute book on the Jews has drawn attention to this. He mentions the accusations of cowardice, treason, and avarice brought against the Jew and continues: "One might continue the list of such accusations indefinitely, and in every one you will find that the root of the quarrel is not the presence of a particular defect, but the presence of a difference in circumstances, temperament and character, a different colour and taste in the quality or defect concerned. It is THAT which offends. It is THAT which causes the misunderstandings and which leads to the tragedies."[1] Whether a man is right in taking offence at such differences of type in those who share his institutions is a question to be considered fully later, but the essence of the answer is to be found in our account of the conditions which must operate if evolution through group survival in competition is to be effective without immense expenditure of human life. The groups must be composed entirely of their own types.

There is surprisingly little collated evidence as to the real inborn instinctive and temperamental features appearing in the Jewish composition—an excellent example of the fact that heated controversy and the method of discussion are unproductive of real knowledge. Fundamentally, the Oriental race would appear to be like the related Mediterranean type—emotional, artistic, impulsive, "temperamental"—features brought out, for example, in Colonel Lawrence's accounts of his dealings with the Arabs—and the imposed control and reserve of the selected, highly-intelligent European Jew cannot hide this highly emotional substratum.[2] In his interest in dramatic and religious activities, the Jew is again nearer the Mediterranean type. But to the qualities of the Mediterranean we must add a strong, self-assertive instinct accounting for the Jewish powers of leadership, Jewish tenacity and "drive," a diminution of the gregarious impulse,

[1] *The Jews*, Constable, 1922, p. 79.

[2] H. E. Garrett (see later page of intelligence tests) found Jewish students above American average in intelligence measurements, and still more above in college achievement, but scoring a little less in emotional stability.

making it possible for the Jew to endure ostracism and to stand out from the group, and a strong instinct of acquisition. The original strong sex instinct of the Oriental people has undergone a proper inhibition of its manifestations. That this has taken place in the Jewish people, would explain and agree well with the suggestion of certain psychologists that the Freudian theory[1] of the all-importance of the sexual-repression situation, the product of a Jewish mind, is particularly applicable to the structure of the Jewish mentality and only in a lesser degree to other races. The cautiousness, "watchful reserve, and crafty spirit of calculation"[2] and the tenacity of purpose which frequently give introvert characteristics to the Jews in Europe would seem to be derived from the Hither-Asiatic admixture. These inborn introvert features are also concentrated, of course, by the selective process of prolonged persecution which the Jewish nation has undergone while in Europe.

But for the present we are studying broad racial differences without digressing into their mode of origin or prematurely following up their effects.

Owing to the negro problem being most acute in America—a country where considerable advance is being made in scientific sociology and psychology—the negro character has been the subject of some interesting researches. We may regard the Negro as extremely extravert[3] in temperament; excitable, emotional, sociable,[4] and strongly endowed with the tendency to act under the influence of primitive passive sympathy.[5] The instinct of submission and the gregarious instinct are strongly active in his make-up. It is interesting to realise how this accounts for the peculiar features of the negro adaptation of the Christian religion.

One of the finest psychological studies of races outside Europe is that which Porteus and Babcock[6] have carried out on Chinese, Hawaians, Filipinos, and Japanese, in Hawaii. It is particularly

[1] It is interesting to note that Metchnikoff, also a Jewish scientist, was obsessed with the importance of the sex instinct in human evolution.

[2] Stiel on Hither-Asiatic Armenians among German war prisoners, quoted by Günther, p. 70.

[3] Suicide, an act far more common among introverts, has a frequency among negroes only one-fourth of that among whites. Frenay, A. D., *The Suicide Problem in the U.S.A.*, Badger, 1927. Suicide is less frequent among women than among men, among Catholics than among Protestants.

[4] Lehman, H. C., and Witty, P. A., "The Negro child's index of more social participation," *Journ. Applied Psychology*, 1926, x, 462, concludes that at every age, negro children are more sociable in their play than white children. This is really a handicap as far as well-balanced development is concerned.

[5] For the full implications of this term, see McDougall, *Outline of Psychology*.

[6] *Temperament and Race*, Boston, 1926.

valuable because of its extensiveness, the objective methods employed, and the tests used. Its value is further augmented by the comparison of these groups with groups of Americans, Spanish, Portuguese, and the mixed races of Porto Rico in a uniform environment. The importance of a uniform cultural environment in studying racial differences is obvious.

The physical differences between the Chinese and Japanese are not very great since they both belong to the Mongolian race and consequently the mental differences, though increased by the different selective processes in the two countries during the last four thousand years, are probably not as great as between one of these nations and a European nation. The Japanese are less purely Mongolian owing to their having absorbed the Ainu race, a people related to European races, and also because of their admixture with Malayan races.

On the whole, the Chinese race is self-submissive whereas the self-assertive disposition of the Japanese, according to Porteus's results, is as marked as that of any European race. From Porteus and Babcock and other researches, we conclude that the Japanese have more group spirit than the Chinese, are more suggestible, less static and prudent—all qualities which are generally included under the notion of extraversion. The Japanese, again, are evidenced to be more emotional, though the emotionality may be masked by greater dependability and greater tact. Adaptability is a feature of the Japanese lacked by the Chinese and probably the conservatism of the Chinese is in part an innate quality. Judged by the standards of the Nordic race, these Mongolian types are hyper-cautious and lacking in initiative and adventurousness. This applies particularly to the Chinese. The industriousness and close application of both exceed any European race. (Here again the Mongolian is resembled by the round-headed Alpine race.) This evidences itself, for example, in scholastic work where, despite inferiorities of intelligence which we shall presently demonstrate, the Japanese, and occasionally the Chinese, make better showing in examinations than American children in the same schools.

This is as far as we need go in our survey of the races of the world and their temperamental qualities; for all but the most backward races, which are no more actively concerned in politico-social problems than are children, have now been encountered. However, to complete the picture of mentalities, we must add to the character-temperament estimates which have so far occupied our attention, some measurements of intelligence in the various races.

VII. The Nature of Intelligence. What are the Racial Differences in Intelligence?

Conducting his enquiry into the working of the mind, the psychologist meets with highly varying degrees of difficulty at various points of attack. On the whole one can say that he remains baffled by many problems of character and of the emotional life, but has made unexpectedly great progress in exact methods of measuring man's abilities. Unfortunately, progress in any science at once sweeps its problems out of the realm of popular discussion, for it begins to bristle with technical terms and formulae made necessary by the complexities beneath the surface of homely entities dealt with by the layman.

Much of the discussion on character and temperament qualities in the preceding section will only be fully intelligible to the reader conversant with the main ideas of modern psychology. To read of a strong self-assertive instinct means little or worse, unless the implication of ambition, of independence of character, of the possibilities of simple aggressiveness or of a finely developed self-regarding sentiment, is realised at once. Again, it is of little value to describe a race as being marked by a strong gregarious instinct and primitive passive sympathy reactions unless the reader pictures that people as fond of town life rather than the country, liable to be swept easily by group emotion, suggestible, united and solid in opinion, averse to isolated action and impatient of disagreement and non-conformity. Even these descriptions need detailed modification before they would meet with the approval of the professional psychologist, who sees everywhere further complexities, unsolved problems and the need for an immense amount of research.

In common usage, the term "intelligence" means now one thing, now another, and the recent progress of psychology in defining and measuring it has affected general language not at all. Probably the abilities covered by the term "intelligence" in common use (if common use really exists) consist of "g," the "general ability" which the psychologist recognises as running through almost all activities, plus a number of special abilities and temperament qualities. To the layman, paraffin oil is a single substance; to the chemist it is a rather ill-defined mixture of several substances. The layman's entities in psychology are similarly astray.

Intelligence, or rather "g,"[1] may perhaps be best defined as the

[1] We have to thank the monumental researches of Professor Spearman in

ability to perceive relations between things (especially, of course, the ability to appreciate, grasp, and apply the most complicated relationships). It manifests itself in adaptability to new situations, (not emotional adaptability), in originality of thought, in the power to reason abstractly, in rapidity of learning, and indeed in almost all the activities of man which are not purely habitual.

When once the psychologist began to measure intelligence, the remarkable discovery was made that intelligence, developing rapidly in the early years of life and slowing down as adolescence approaches, practically ceases to increase after the age of fifteen. All the increased capability which distinguishes the man of forty from the youth of fifteen is due to accumulated experience, knowledge, and the formation of highly-skilled habits. A second discovery is that a value known as the Intelligence Quotient, obtained by dividing the "mental age" of a child by his actual age, remains constant[1] throughout the period of development, in spite of any environmental influence (intensive or desultory education, application to or neglect of reasoning) which the child may encounter.[2]

Finally, this intelligence seems inborn and inherited from parents to just about the same extent as are such physical qualities as stature, muscular power, coloration,[3] etc.

The intelligence quotient of a normal child is usually written 100. Rather less than one half of our population are scattered between I.Q.'s of 90 and 110. Secondary school pupils usually fall somewhere between 115 and 145. University students in England, owing to the selection for intelligence that has taken place, are rarely below an I.Q. of 130 (one person in about ten thousand, goes to a university).

The mental-deficiency line is arbitrarily fixed according to the number of people who can be accommodated in institutions or in special schools. It is also fixed for adults according to the criterion of whether or not they are able to look after themselves,[4] but this obviously depends upon the complexity of the situation

this country for the progress made in a most difficult subject. For further steady understanding of this fascinating problem, read : *The Abilities of Man*, C. Spearman ; *Mental and Scholastic Tests*, C. Burt ; *Group Tests of Intelligence*, P. B. Ballard ; *Psychological Tests of Educable Capacity*, H.M.S.O.

[1] The mental age of a child is the actual age of a normal child who shows just the same amount of intelligence development. Normal here means average.

[2] It is thus possible to train a child to get into the habit of reasoning, but it is not possible to increase his reasoning powers by training.

[3] See for example "The Inheritance of Mental Characters," Cyril Burt, *Eugenic Review*, Vol. IV.

[4] We consider, for example, that most of the inhabitants of our worst slums are "able to look after themselves."

or civilisation in which they are called upon to live and how we interpret "looking after themselves."

With this brief account of the more important features of intelligence testing the reader will be clearly more able to appreciate the results of measurements made on different races.

It must not be overlooked that a great number, though not all, of these results, derive from measurements made on immigrant groups of various races in America, Hawaii, and elsewhere.

Consequently one must be on the watch for any influence which would cause the emigrants from any country to be consistently above or below the average of those left behind. Such influences exist, but I know of no reason to suppose that they affect any one of the countries to be considered more than another, and for comparative purposes they can be ignored.

With tests standardised for Anglo-Saxons it is found that Spaniards, Portuguese, and Italians (in ascending order of performance) and other members of the Mediterranean race score an average I.Q. of 85,[1] whilst the Negro averages about 83.[2] Relatively few measurements of pure Alpine populations exist, but an average score of between 90 and 100 seems to be indicated. Pure Scandinavian populations score rather more highly than the adulterated Nordic populations of England and America, usually showing an I.Q. of about 105.[3] In intelligence, Chinese and Japanese, representative of the Mongolian race, show little difference from Anglo-Saxon stock, the Chinese having an average I.Q. of about 96,[4] and the Japanese being generally slightly lower. Much lower figures have frequently been obtained for Mongolian and Mediterranean racial stock, but these I have discounted as being clearly due to measurements made on a very poor (manual labouring) selection of these races. Some of the highest scores in intelligence tests have been made by Jews, indeed Jewish children

[1] See Arlitt, McDougall, Porteus, and Babcock.

[2] Yet Lord Olivier, with the possibly sound object of obstructing the "exploitation" of the negroes, brings himself to write: "Negroes are now indisputably the equals of white men in categories in which one hundred years ago their masters would have confidently argued they were naturally incapable of attaining equality." (*White Capital and Coloured Labour*, p. 17.) One would expect the findings of mental tests to be confirmed by casual observations so far as such observations can go. Against Lord Olivier's observation, one may surely match those of Sir Francis Galton, always a most acute psychological observer, who was forced to comment on "the incredible stupidity" which characterised so many of the negroes he encountered.

[3] See, e.g., Brown, G., "Intelligence as Related to Nationality," *Journal of Educational Research*, 1922, v, 324.

[4] See Young, K. T., "Intelligence of Chinese Children in San Francisco and Vicinity," *Journal of Applied Psychology* 1921, v, 267.

and adults have been consistently proved to have slightly higher intelligences than Anglo-Saxon stock in England and America.

The above racial differences, before they can be regarded as completely and accurately expressed in quantitative terms, must be subjected to measurements still more widely sampled and under more favourable conditions, but I think the following provisional order of racial intelligence will not be found far wrong: 1, Nordic and Jews; 2, Alpine; 3, Mongolian; 4, Mediterranean; 5, Negroes; 6, Lowest Races, Australian blacks, etc.

Now, so far, we have only been dealing with averages, and an average tells only part of the story. In every race there is more or less of a "scatter" of individual measurements above and below the average figure. The extent of the "scatter" or "deviation" is a matter of some practical importance, for we may find that a member of a race with a low average is actually superior to certain members of a race with a much higher average. In most biological measurements on large groups, the individual measurements scatter symmetrically about an average in the manner of the normal distribution curve, an example of which is shown on p. 56, with some explanatory notes in case the reader is unfamiliar with the graphical representation of statistics.

In all races of the world, the scatter of intelligence is extensive, and the overlap of any two races is considerable, being greater or less according to whether the averages are near or far apart. For negroes and Anglo-Saxons there is an overlap, such that the highest 60 per cent. of the negroes equals the lowest 60 per cent. of the whites. No reliable measurements for other races are available, but the overlap would generally be greater than this. The figures below are taken from a chance sample of the results in the American army intelligence testing, including both white and negro recruits.[1]

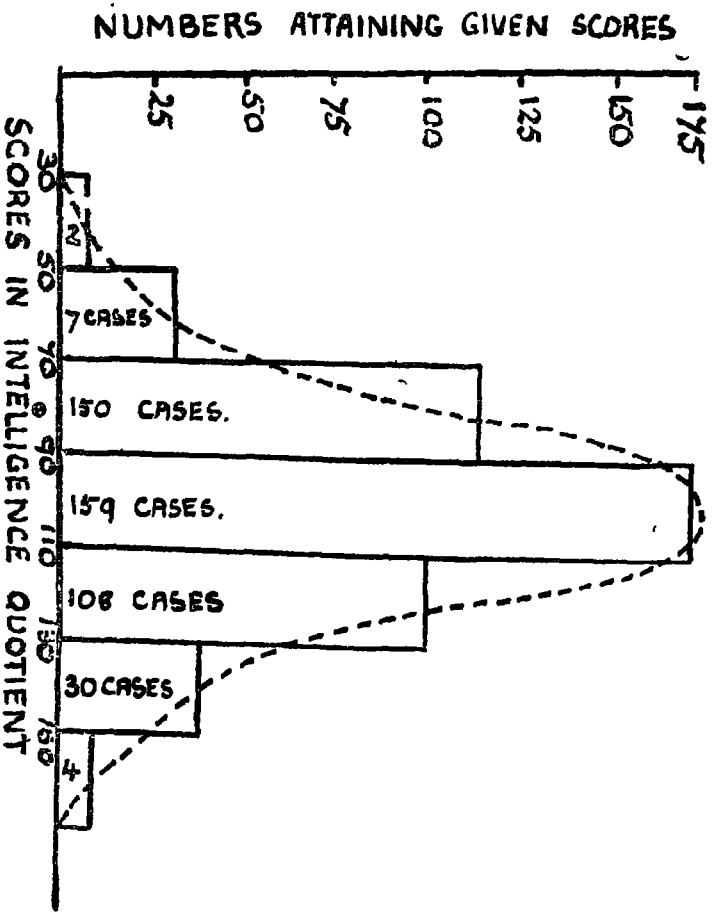
	H	G	F	E	D	C	B	A	Class in Intelligence Tests
White	0	11.0	32.5	21	20	7.7	3.7	1.4	
Negro	3.5	36.0	36.0	13.5	6.1	1.8	0.9	0.7	

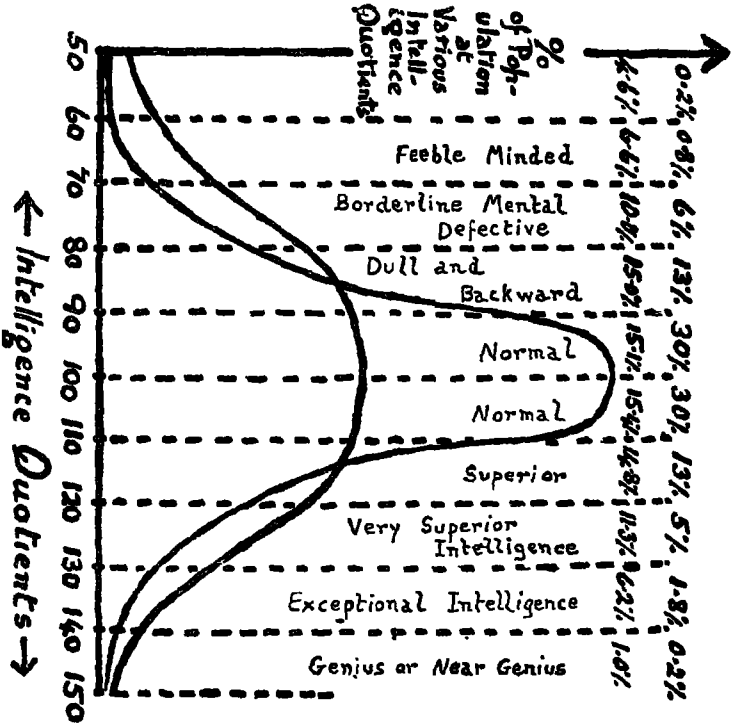
In the two lowest classes, according to I.Q., there are 39.5 per cent. of the negroes and 11 per cent. of the whites. In the two highest classes, 1.6 per cent. of the negro group and 5.1 per cent.

[1] The figures will be found, with a valuable discussion, in McDougall's *National Welfare and National Decay*, p. 64. In the above histograms I have combined the figures for literates and illiterates in each group, giving equal weight to each. This gives an advantage to the negroes, in whom the illiterate are more numerous and less distinguished in intelligence from the literate.

HISTOGRAM

To show frequency distribution of intelligence scores (Actual scores from elementary school children in the city of Exeter.) Each column is proportional in height to the number of children whose I.Q.s fall within the range covered by the bottom of the column. A distribution curve is obtained by drawing a best-fitting curve (dotted line) through top centres of columns.





NORMAL DISTRIBUTION CURVE

These curves show a practically symmetrical distribution of ability in the population as a whole. The taller curve (upper row of percentage figures) is based on an extensive survey in America; the flatter curve (lower row of figures) on a less extensive sampling of all classes in London. Apparently the variation of ability is greater in this country.

of the white recruits. The best fitting distribution curves, if superposed, would bring out clearly that although there is much overlap, the available intelligence in the two groups is very disproportionate.

Yet another "dimension" must be considered. Not only are the averages different and the extent of scatter, but it is possible that the distribution in some races is unsymmetrical about the average, i.e. different in some way from the normal curve. A race might be composed of highly capable individuals with relatively few persons of average capability and a long tail of subnormal members. Or vice versa. Something of this kind does occur. A uniformity of type and a certain average level of intelligence was fixed, we may suppose, during the long ages in which the core of the race evolved under conditions of free admixture of all parts of that race. But since then the results of migration, of social segregation, of isolation of parts of the race in its wide-flung territory, may well have led to changes of considerable importance, changes which make us ask whether it is safe to speak of races as a whole, or whether it would not be more exact to confine ourselves to sections of each race in some social and geographical division. The answer must be given for each race on the merits of the situation, some as, e.g. the Jews, must be regarded and treated very differently according to the place of origin of the sample concerned, for the Jews show the widest extremes of intelligence. Others, as e.g. the Scandinavian peoples, can be more correctly reacted to as a simple whole.

VIII. Where to Look for the Origins of Racial Differences

Ultimately the major racial differences must be put down to the selective influence of geographic, climatic, and other environmental influences acting on relatively isolated stocks over thousands and thousands of years, in the way we have already discussed. It is a mistake to suppose that the more rigorous conditions will always produce the more capable and vigorous races. Although the benevolence of the tropics has resulted in relatively unintelligent and improvident types, the extreme inclemency of Arctic regions has resulted again in a type—the Eskimo—of no outstandingly fine mentality or physique. An active and intelligent type will obviously be produced only where activity and intelligence increase the chances of survival, i.e. in a temperate climate where the getting of food and property is only possible through an active struggle with a distinctly complex environment.

But apart from the steady evolution of prehistoric times there has been considerable racial modification in more recent periods, largely through the instrumentality of migration and war. The latter we must examine more closely in the next chapter, but with the relatively simple effect of migration we can deal forthwith.

Huntington[1] has brought into clear emphasis the importance of migration, at least in prehistoric and early historic times, in raising the level of capacity of a people. The ancient Greeks were a section of the already highly-endowed Nordic race which acquired a still greater average capacity throughout the selective rigour of its long southward migration into Greece. Huntington demonstrates that the high level of average ability in Iceland, as well as certain traits of hypercautiousness in temperament, is due to the selecting effect of migration across the ocean under difficult conditions. It is unnecessary to multiply examples of the positive action of migration, suffice it to add that even to-day, when migration is not the dire struggle that it used to be, migrants are generally of a higher ability than the parent stock.[2]

Relying on this principle established in the instances examined, one can argue with considerable probability of truth that the Angles, Saxons, Norwegians, Swedes, and Danes who peopled England were on the whole more enterprising, capable, and strong than those who were left behind in Scandinavia and Germany, and this must have applied particularly to the women.[3] Hence this section of the Nordic race must be slightly superior to other sections, though not perhaps to the same extent as the Icelanders. A second fractionation took place during the early migration to America again, and as a result of the rigorous selection that took place during early colonist days. This may well account for the still greater enterprise, practical capacity, and perhaps intelligence of the early American. All the evidence in regard to immigration during the steamship age, however, goes to show that the original high level in America has been considerably pulled down by immigration from Southern and South-Eastern Europe. Immigration is not always a sorting-out of the best. Under easy conditions it may even be a selection of the spineless and incompetent. East

[1] *The Character of Races.*

[2] Negro stocks in Northern U.S.A. are more capable than those who have remained in the South. The selection in this case takes place in the original home, the more able and enterprising undertaking to move, not by selection *en route.*

[3] Well discussed in Huntington, E., "Why the American Woman is Unique," *Nation*, 1927, p. 125. There was a strenuous selection of first women settlers leading to rare physical and temperamental qualities, and to active and bright dispositions.

remarks (p. 319): "The crucial point in the whole matter seems to be that in the early history of the United States the immigrants came from the best stocks their countries afforded; in recent times they have come from the lower part of the distribution. This is true even of the Hebrews, who, contrary to general belief, are probably the most variable race on earth." American psychologists have done yeoman service in struggling to bring before executive bodies the results of this investigation and in demanding differential restrictions on immigrant groups according to their social orign. The door has been shut on the dumping of all and sundry on American soil, but perhaps too late to prevent irreparable damage.

Undoubtedly the great intellectual power of the Jews must be put down to the effect of emigration and settlement in hostile areas and its influence in cutting off progressively the weaker types, for here indeed we have a people possessing outstandingly higher intelligence than its parent races. It is usually safe to assume that the individuals further removed from their original home represent the most selected types of their stock. In that case the Jews of Western Europe and America, who indeed rank higher in intelligence than the corresponding classes in their adopted countries, represent the very peak of the Jewish nation.

These arguments suggest—and the conclusion is supported by the views of several eminent Jews—that the Jewish people is one with a very great scatter; a spread from types equal to the very best that any race can produce down to types of the low level found in South-Eastern Europe. Our reaction to the Jewish nation as a whole must depend on a clear appreciation of its whole construction.

Again, the outflung wing of the Mediterranean race, that portion of the more enterprising tribes which migrated North by sea and land into England, Ireland, Scotland and even Iceland, later to be pushed back into Wales, Cornwall, and Southern Ireland, must, according to Huntington's arguments, have finished up distinctly superior in intelligence and enterprise to the main body of the Mediterranean race which stayed around the Mediterranean. General observation and psychological testing confirm this line of reasoning, for the Mediterranean elements of England, Scotland, and Iceland appear distinctly above the standard of native Mediterranean intelligence and initiative, especially in the case of the Welsh who, however, had mingled with early waves of Alpine and Nordic peoples before the Anglo-Saxon invasion.

This is a suitable point at which to deal with the contention of Griffith Taylor. As all anthropologists recognise, there has continually been a tendency for Central Asia to produce fresh types of man and animals which spread out into the surrounding areas and are again pushed outward by still later types. Almost invariably the more primitive types are found most remote from this centre, the more highly evolved types being encountered as one moves towards it. The distribution of human races does indeed support Taylor's theory that "the Alpine-Mongolian group is the central and presumably the latest developed of the three major groups of mankind." From this generalisation, however, Taylor has proceeded to argue that the Japanese and Chinese are really the superiors of the whites, and that consequently, for the good of the world, they should be admitted to his country (Australia) and that miscegenation should be encouraged. It is not surprising that he became a notorious and unpopular character in Australia. The general theory may be sound and yet permit exceptions, and we might well expect exceptions in the case of man. Almost certainly the round-headed Mongolian-Alpine types are the last evolved in this Asiatic home of man's evolution. But the earlier types may meanwhile have been subjected to still more severe and more selective conditions, so that they may have evolved ahead of the centrally-situated groups. The Nordic race has certainly been subjected to such acute struggle; the Mediterranean race not so. Consequently we find, as we might expect to find, that the results so far available show the Nordic race most highly evolved in intelligence and stability of temperament; the Alpine race very closely following them; and the Mediterranean race considerably behind in these respects.

IX. A Reply to Race Slumping and Shallow Idealism

Our picture of racial mentalities is now sketched in its essential outlines. It remains for us to tackle, while the evidence is still fresh, a fundamental practical question which should perhaps otherwise be met among the corollaries of a later argument.

There are certain writers, and they are numerous in propagandist circles, who, generally as a result of the clash of their ideals with certain views, sometimes falsely and rashly deduced from racial differences, seek foolishly and almost maliciously to create a smoke-screen over the whole field of racial investigation. Such eloquence and persuasiveness as they produce in lieu of facts may be a very real check to open-minded investigation. These

"race-slumpers" as McDougall has called them, do not however stop at criticising those deductions that deserve criticism, but they go further and make such assertions as that racial differences are insignificant. Their most reasonable argument, which merits examination, is that since there is a great overlap of ability in any two races compared, positions and privileges should everywhere be given to individuals without consideration of racial origin.[1] They generally argue, too, that cross-breeding gives rise to individuals more dynamic and capable than either of the constituent races, and that future progress requires a mingling and interbreeding of all races until there is uniformity over the whole earth.

The more educated of these writers are usually stampeded to such suggestions by fear of wars, or they are led to them because, being educated to a conviction of the truth of Christian ethics, they have dared to be consistent in thought. Let us study these suggestions.

The frequency with which the assertion has been made by politicians, journalists and others, without a shred of evidence, that cross-breeding gives rise to superior types, leads one to enquire whether there is any, perhaps unconscious, analogy influencing thought.[2] In agriculture a mixture of soils frequently leads to greater fertility and there is, of course, always the union of male and female as the prototype of the creative effectiveness of mixing opposite characters. Certainly the belief in the goodness of racial intermixture can be easily aroused. An assertion of such a hope but not a belief, though indeed without any attempt to bias the facts, is expressed by Sir John McDonnell in an article

[1] The psychologist Thorndike, *Educational Psychology*, Vol. III, "Individual Differences." After pointing out (p. 22) that "Large glaring differences mark the achievements of races and seem to need large differences (of constitutional) nature in their origin," continues (p. 224), "even if differences were far larger than these, the practical precept for education would remain unchanged. It is, of course, that selection by race of original natures to be educated is nowhere nearly so effective as selections of individuals regardless of race. There is much overlapping, and the differences in original nature within the same race are, except in extreme cases, many times as great as the differences between races as wholes." No exception can be taken to these facts, nor to the general conclusion, if intelligence differences and questions of education are alone to be considered.

[2] There is to-day, a biological phenomenon which, inadequately comprehended might lead to the same view. This is the process which occurs in in-breeding, but is prevented by cross-breeding, whereby harmful recessive characteristics are brought to the surface. Under natural selection these genes are forthwith eliminated, so that in-breeding, though it produce at intervals obviously poor types, leads in the end to the removal of these recessives, whereas out-breeding merely masks them. The one is equivalent to treating an abscess by bringing it to the surface, the other seeks merely to hide it and its symptoms.

"Law and Eugenics":[1] "Should scientific research tend to show that there are no valid reasons against unions between certain races, physically different; should it go further and say that new unions are desirable and propitious; should it declare that certain stocks would be enriched and strengthened by infusion of blood of less advanced people; then the outlook for races now dying out brightens; then, perhaps, we should all be in a sense citizens of a better world; then the unity of mankind would have a new, and perhaps for the first time real, meaning."

Unfortunately for such a prospect, in all its attractive simplicity, science says none of these things. All the evidence goes to show that the capabilities of half-breeds are mid-way between those of the parental races; no more, no less. This is well brought out, for example, in the careful measurements and experiments on negro-white half-, quarter-, and three-quarter-breeds,[2] in all of which there is shown a gradation from the qualities of one race to that of the other through every degree of racial mixture.

But although there can now be no doubt of this simple averaging effect as far as abilities are concerned, there is still room for some slight variation from this rule when temperament and the innate bases of character are in question. On these matters there is a fairly general opinion that the character of the mixed breed is inferior to either race and frequently positively vicious. McDougall[3] quotes Shaler's views as a piece of intelligent lay opinion:

[1] *Eugenic Reform*, VII, 1915-1916, p. 245. This view, uncorrected by reference to the facts of mathematical probability, is found even in Barker who (p. 39) speaking of mixed stocks, says: "the children of such a union inherit the possibilities of both sides; the range of variation is wide; and new combinations of inherited qualities may produce new mental power and a richer civilisation. It is difficult to explain the origin of genius. But it is possible that there is a greater possibility of its occurrence in a blended strain." He cites the incidence of such ability in the offspring of English families with the Huguenots. Now notice (*a*) that the Huguenots were, according to the principle that Protestants are more Nordic than Catholics in France, and according to direct evidence, the same race as the English, there was no mixing of races; (*b*) they were highly selected by migration, hence the ability. Davenport, C. B., and Steggerda, M., *Race Crossing in Jamaica* state that there is no evidence of increased vigour, physically or mentally, in cross-breeds. *Psychological Abstracts*, "In twenty psychological tests in which the difference between whites and negroes was considered relatively significant, the 'browns' fell below the average of the other two groups in fifteen."

[2] See Gantle, T. R., "The Intelligence of Mixed-blood Indians," *Journal Applied Psychol.*, 1927, II, p. 268. Three-quarter-breeds, I.Q. 74.1; half-breeds, 75.3; quarter-breeds, 77.5; half-breeds midway between whites and Indians. Young, P. C., "Intelligence and Suggestibility in Whites and Negroes," *Journ. Comp. Psycholog.*, 1929, IX, p. 339. Average white, 72; negro, 40; "a noticeable decrease of intelligence as we go from white children to light negroes and then to dark negroes is apparent." Fleming, R. M., "Human Hybrids: Racial Crosses in Various Parts of the World," *Eugenic Review*, 1930, XXI, 257.

[3] *National Welfare and National Decay*. McDougall continues: "It is widely

"It is a common opinion held by the blacks as well as by the whites, that an infusion of white blood increases the intelligence of the negro, while at the same time lowering his moral qualities." The first part of this opinion we know to be true and there is evidence that the second is more than an opinion.[1] On the other hand, a great part of the anti-social and unstable character of the half-breed are undoubtedly the result of environment—the feeling of inferiority and neglect which his special social situation arouses. Yet the social situation cannot account for such characters in at least one definitely attested case—that of the Porto-Ricans, studied by Porteus and Babcock. For these hybrids of Spanish, negro and aboriginal Indian strain are in an environment where all are hybrids, and so incur no social cruelty. Yet they are "the most impulsive and excitable, and are conspicuously lacking in resolution and trustworthiness."[2] They also show the worst criminal record of any of the six national groups in Hawaii, though this must be offset against the equally high incidence of mental retardation among them—a feature favouring crime and not produced by crossing.

East discusses the possibility of producing entirely new desirable types by re-combinations of genes in races each having desirable and undesirable genes, and continues: "The problem then takes the form of whether there is a reasonable possibility of obtaining a combination of the good qualities of both types. The answer is, No!" Mathematical probabilities are too strongly against it, and selection is not sufficiently fine an instrument to universalise with certainty in historical times, the one chance individual in several million crosses who would possess those desirable qualities, even if they were compatible traits.

A second line of approach may help us to get our bearings in this matter of hybridisation and character.

It is argued on biological grounds that there must be "warring heredities" in the half-breed—a discord and conflict of impulses, and it is this psychic tension which, acting on moderately superior

asserted of some of the populations which have been formed by the blending of widely dissimilar races, that both the intellectual and moral development of the majority of the individuals among such populations is seriously defective in some obscure and ill-defined way. It is often alleged that such persons reveal a fundamental lack of harmony in their character, an abnormal liability to moral conflict and disorder." McDougall brings psychological evidence pointing the same way.

[1] Reuter, E. B., "The Personality of Mixed Bloods," *Publication of American Psychology* (America) 1927, XXII, 52: "The typical mixed blood is a person of conflicting desires and standards, largely through the influence of the social situation."

[2] Porteus and Babcock, op. cit., p. 107.

intelligence, produces genius[1] where there would otherwise be only a very intelligent man, or, acting on the dullard produces a criminal where there would otherwise be only a stupid and poorly-endowed type. In a pure race, adapted to its conditions by long ages of selection, the inheritance of impulses in each individual is bound to be well balanced. The innate forces which are the innate material of character-building must have reached a certain mutual compatibility and potential power of good integration. If two such races inter-breed, the resulting re-shuffling of impulses and psychic forces throws together in each individual a number of items which may or may not be compatible and capable of being organised into a stable unit.

Professor Mjöen, who has studied the Mongol-Nordic hybrids of Northern Norway, finds that the cross-breeding is unhappy from many points of view, and particularly with regard to the endocrine glands and temperament. He found, for example, a larger number of diabetics among the hybrids, and a diminished resistance to tuberculosis. "The glands of the offspring of parents of dissimilar race are more or less inharmoniously adapted to each other." From which cause also springs "the exaggerated growth of the hybrid and his disproportionately large extremities."

To sum up, we may say that inter-breeding gives an intelligence and ability midway between those of the two races, whilst there is at least a probability that, even given an environment free from that prejudice and character-undermining contempt which frequently meets the half-breed, it would lead to characteristics innately unstable and discordant.[2]

[1] Kretschmer in his *Psychology of Men of Genius* makes great use of the idea of the "luxuriation" of the hybrid without a shred of real evidence. Ultimately, his evidence for invoking this theory on every occasion appears to be that Reibmayr has already made it quite clear that whereas the crossing of talented, inbred stocks may lead to genius, the intermarriage of unselected currents of population, coming together by chance, as happens to a considerable extent in big, cosmopolitan cities, never does so, but leads in the opposite direction ("blood chaos") (p. 101). "Strange that a process should work now one way now another! Surely the fact that the hybrid tends to be a summation of its parents' tendencies is sufficient to account for the offspring of two talented people being a genius and the offspring of two decadent types a still more decadent being?" But Kretschmer invokes the principle on a racial plane also and informs us: "One thing is certain; the highest developments of civilisation have so far arisen in those realms of the Nordic race in which it has become mixed with other equally gifted races" (p. 85). Psychological measurement, as we have seen, does not confirm this view. And if our only way of producing great talent and ability were that of crossing pure racial strains, how soon we should come to an end of our possibilities of possessing genius!

[2] Widney has discussed the results at some length, where he brings evidence to show that much of the emotional instability, the social feuds, and the unstable governments of the so-called "Celtic" (mainly Alpine-Mediterranean) and Eastern European peoples are due to this mixed blood.

We have yet to face the argument that there is no object in drawing racial distinctions since measurements show that racial differences in average ability are quite small. Now Thorndike, who speaks of the "large, glaring differences of racial achievement," admits that "under the deliberate scrutiny of actual measurements, what seemed to be large differences, shrink to five or ten per cent., and what seemed to be large gaps are bridged."

This is tantamount to saying that small differences in mental test measurements result in great differences in cultural progress of whole groups. And this, I think, represents the truth.[1] Imagine a group of individuals occupied in some enterprise in which mutual co-operation, specialisation, and an efficient working of all parts is essential to the success of the whole. A group similarly organised but composed of individuals each a fraction less intelligent than those of the first group, may be supposed to compete with it. There can be little doubt that the success of the first group will be out of all proportion to the slight increment of intelligence possessed by its members. The difference in capacity will multiply itself in thousands of ways, most of which are unsuspected by casual examination. Every problem will be solved more aptly and quickly. The surplus energy released in this way will in turn be put to other uses and again be used more effectively. There will be less friction within the group through misunderstanding, stupid errors, or self-constructed obstacles. The slight differences of inborn intelligence will be augmented by a still greater difference in acquired cleverness for, as Professor Burt[2] has shown, the child who is a year above or below the average in mental age will tend, if educational organisation does not oppose him, to be more than a year in advance or behind in educational progress. And of course the time available for education will be greater in the superior group. The general tendency in a social group is for the less intelligent to be raised to a higher level of culture than his own unaided powers would permit, and for the more intelligent to be cramped by the burden of maintaining contact with smaller minds. This happens in the schools; it almost certainly happens in social life. Consequently the individuals who would be slightly above average intelligence in a poor

[1] McDougall cites Gehring, "La psychologie du peuple Anglais," *National Welfare*, p. 90: "It is conceivable that vast differences in national activities and institutions are the result of insignificant divergences of mental structure." In McDougall's own essay "The Group Mind," we have an exhaustive treatment of the problem of the creative synthesis of individual minds in a group mind which is more than the sum of its parts.

[2] *Mental and Scholastic Tests*, C. Burt.

group and be impeded by the drag of the average, would, in the second group, themselves be aided to superior performance.

A few well-planned experiments with measured group differences of this kind would be of infinitely greater value to social psychology than is the stream of non-experimental literary efforts in that subject which now appear. Such a mechanism may explain why slight differences in average ability between races are not to be ignored in political science, but still the question is unanswered as to why, even when dealing with individuals, one should take any note of racial origin. At this stage of our enquiry I propose only to give a partial answer.

First we must notice that although there is overlap of intelligence measurements, there is no evidence of overlap of temperament qualities. Probably such an overlap will be found, but I think that it will be less for temperament qualities than for pure abilities. An intelligent Jew, for example, may be the same in intellectual capacity as an intelligent Englishman or Norwegian, but his temperament, his way of thinking, his choice of amusement, and of ideals in art[1] and life will be radically different, and in these things the Englishman will be more at one with the less intelligent members of his own race than with his intellectual equal in a race of different temperamental constitution.

Moreover, it is not merely a question of overlap or absence of it in any single temperament quality; it is rather a matter of difference in shape, a difference in the pattern of the constellation of non-intellectual temperament and dispositional qualities. For each race there may well be a uniqueness in this constellation—a difference from other races which is not relative but absolute—a matter of quality, not of quantity. Such arguments are found in many writings, but I am inclined to believe that ultimately these differences will be expressed quantitatively, as the different shapes of two pieces of landscape could, by a sufficiently complicated formula, be expressed quantitatively. In these quantitative values expressing temperamental differences we shall, I think, find no overlap between races and discover that every individual

[1] In England at the moment we are tormented by a controversy as to whether certain new forms of art (notably that of Epstein) are to be regarded as good or bad. Now art, above all things, is rooted in the innate temperamental make-up. Might it not be that the whole misunderstanding is not a matter of intellectual differences—still less of high-brows and low-brows as some people imagine—but a consequence of temperamental differences? Our art, presumably, is seeking to advance, but is it an advance to change over to forms which are intrinsically satisfying only to the Hither-Asiatic and Oriental races of Poland? There must be new forms, such as are being experimented with in Germany, more in the direct line of our native temperamental strivings.

has closer resemblances to those individuals arising from his own stem than to members, however extreme and untypical, arising from other races.[1]

Now these differences are extremely important. There is no need to ask any question of superiority or inferiority: it is at present a simpler matter. Certain constellations, certain peculiarities of disposition and temperament, favour certain goals and determine in large measure the mode of life, the laws, the artistic ideals, the cultural interests, the religious ideals, and the direction of progress of the race possessing them. To treat alien individuals as if they belonged to the same race, simply because their intelligence is on the same high or low level, is a mistake, for constitutional differences of greater importance for practical life are being overlooked. An intelligent Italian peasant is not the equivalent of a moderately gifted Chinaman, neither could a less gifted Scot be replaced by an advanced member of the negro race. It is, we have said, not a question of superiority and inferiority of races, but of suitability to this purpose and to that. Yet, whilst keeping that matter clearly in mind, we must admit that for some purposes races must be summed up as a whole and judged as more or less superior. Nature, at least, makes such judgments herself. On the desirability of some characters, such as mental ability and vitality, all must agree; and when a universal objective standard is set, we are compelled to judge some races to be superior, some to be inferior. But to say that a race is superior is not to say that it has all the virtues or even that it will espouse the relatively correct views, ideals and movements. External factors—historical accidents, geographical position—may temporarily put inferior races in the position of maintaining cultures and ideas better than those of superior races, and the superior races may be nearly wiped out in consequence. For example, until recently we knew nothing about dysgenic birth-rates, and the Nordic race in England, in winning

[1] The point may be illustrated by the following hypothetical case: Let the Alpine and Mediterranean races have the following range of values in measurements for self-assertion and perseveration: Alpine, self-assertion, 80–90; perseveration, 90–100. Mediterranean, self-assertion, 75–85; perseveration, 95–105. In each trait singly, they overlap by a half, i.e. there will be 50 per cent. of the Alpines with the same measurements as 50 per cent. of the Mediterraneans. The median "gradient" between the two qualities, however, will be for the Alpine 85–95 and for the Mediterranean 80–100. Nevertheless, if the two qualities were perfectly correlated there would still be one half of the first race possessing the same gradient as one half of the second. But since, by hypothesis, they are not correlated, the overlapping of gradients will be somewhere between half and zero, depending upon the distribution curves. With more numerous temperament factors to consider the probable overlap of gradients or constellations would be still less, until at length no individual of the one race could be found with the same constellation as any member of the other.

the social struggle, was losing the more important birth-rate competition of which it and its conquerors were equally unaware.

Racial considerations are coming to be more, not less, important in the political ordering of civilisation.

X. Is Nationalism fulfilling the Evolutionary Purpose of Group Survival?

Up to this point we have been following a highly condensed review of the hereditary factors in mentality, of the facts known in regard to racial character, and of the considerations to be borne in mind when reasoning from racial differences. What is the bearing of all this on Nationalism?

Let it be emphasised again that nations are not races, as a glance at the map on page 37 will show. In Britain, the Nordic English shade off in the West into Mediterranean types until, in Wales, Cornwall, and the Irish Free State, the people become practically pure Mediterranean. Germany has a Nordic North and an Alpine South. France a slightly Nordic North, an extensive Alpine middle and an extensive Mediterranean South. Belgium is cut in two by the line between the Nordic Flemish and the Mediterranean-Alpine Walloons. And here the difference of type is maintained within the nation by a corresponding difference of language. There have been many attempts, in which probably the wish is father to the thought, to argue that national groups in time become racial groups, that in fact, new sub-races have been produced. There is no evidence for this, and we should hardly expect it, since nations are things of yesterday compared with old established races. Yet McDougall, as an Englishman, has spoken hopefully of a British sub-race, and Pearl, as an American, of an American sub-race. The latter remarks: "It seems to me, looking at the matter as a biologist that a real, distinct, unique *American* people has evolved in the course of the experiment and is still continuing to evolve." He adds that, although the original British stock will not be the dominant one in the new combination, he does not regret it, "though personally I am wholly of that stock." Is this a desirable form of modesty? To McDougall's contention and incidently to Pearl's, Barker's comment on the asserted sub-races is adequate: "To admit such a possibility is, however, to open the door to confusion; and we shall only darken counsel by talking of a French or English sub-race. A race is a physical fact marked by physical features; and we cannot find any physical features

which mark the French as a single and united sub-race distinct from the English."

Were nations composed of pure races, each under its own government, and enjoying its self-created institutions, the morality of national competition would be a plainer issue. Human progress, as we saw in Section III of the present chapter, is largely ensured by group competition taking place under normal conditions. If human evolution is our goal, if it is the true purpose of each manifestation of life to try itself in the fire of conflicting self-assertions, so that if it is bad it may be swallowed up and if good, multiplied, then it is desirable that homogeneous groups of men should continue to compete in some manner or other.

Moreover, to substitute individual struggle and survival for group survival, even if that were the object of those who now seek to condemn all forms of group competition, would be both historically retrograde and biologically perverse, for group survival ensures the selection of desirable qualities ignored by the selective processes of individual evolution.

Individual survival processes, in a state in which each man's hand was turned against his neighbour, conduced to the evolution of such features as intelligence, physical strength, a strong sexual instinct, etc.; but it would produce types with no natural tendency to co-operate. Unselfishness, human affection, honesty and disinterested courage, as far as they are resolvable into innate qualities, have been produced by the survival or downfall of whole groups, for the groups whose members possessed these qualities in the highest degree were, other things being equal, clearly more certain to survive.

Survival in social units will obviously favour the psychological qualities most needed for an effective social organisation, and it is in an effective social organisation that civilisation can best continue its scientific and cultural progress.

And in addition to the production of extended altruistic urges, there has taken place in the struggle of groups, as in the competition of individuals, a selective process in which the most intelligent, physically fit, and far-sighted types have been multiplied. In the course of ages, despite accidents and occasional reversals of evolution, the group whose members were on the whole more inventive, most capable of a high culture, most enterprising and with minds most adapted to perceiving reality, has flourished where less gifted tribes and peoples have failed. Even within each group, until recent historical times, there was probably an individual selective process aiding the group selective process in the improvement of the asocial traits.

It is clear, then, that the group with individuals best able to co-operate, with most affection for their fellows and with greater self-sacrifice, has always prevailed against the group which, owing to the unwillingness of the individuals to risk themselves for the group, has failed at a critical point to preserve itself. Group struggle is thus the cradle of all the social virtues which have an innate basis in the mind. And the existence of the group survival process renders possible many extreme altruistic modes of behaviour which are at first sight biologically perverse. For example, in every higher culture there are a considerable number of occupations essential to the success of the group, but leading to a greater likelihood of death or of childlessness among those who carry them on, e.g. the callings of soldiers, explorers, and priests. Yet we have seen that it is biologically desirable for each type to receive the benefits and penalties of its own capacities and shortcomings; how then can such loyalties be justified? In perishing himself, such an individual gains immortality, for in the group security and prosperity which his life tends to assure, two of his type—of the selected types constituting the group which produced him—spring up where one lived before. In addition to this physical increase of the stem to which such types belong, there is an indirect moulding of innate and acquired qualities of later individuals through the cultural ethos which the sterile individuals leave behind. Thus in the continuance in others of those thoughts, ideals and feelings which lived in the individual body, there is an immortality as biologically effective as a high reproduction rate of these sacrificed individuals.

Therefore, in a world of homogeneous groups, the true ethics are an utter loyalty to the group concerned and such regard for other groups as common humanity requires. By common humanity one means, of course, belonging to the human kind, as distinct from rival animal groups. This theoretical homogeneity is in practice never attained, for no group is composed of members exactly alike in inborn characters, so that the loyalties of the individual are properly divided between himself, his family, his nation, and humanity with the nation foremost[1] because it is the limit of inter-marriage and cultural homogeneity.

An abominable state of affairs arises, however, when unconsciously, men carry over these very sound age-old ethics to non-homogeneous groups (or to peoples of different groups), when two radically different peoples are bound together by violence under a single government into a single state. Suppose, as may well be the case, that one of these races is naturally courageous, self-

[1] This notion is not to be confused with Hegel's.

sacrificing and enterprising and the other less so. The group will continue to prosper owing to the activities of inventors and explorers of the first race, who, as is generally the rule, will not pass on the usual number of children to the next generation. The nation will be successful in war because the same race has actively responded to the call to arms and to self-sacrifice. Throughout these activities, this first race will on an average be giving more to the group than it can itself recoup. Eventually only the second race will inherit the group advantages acquired largely by the first racial compound. Then, like a huge parasite which has devoured its host, will the nation be bereft of all the qualities that gave it power, remain a monstrous frustration of evolution, a biological abortion, able in virtue of its inherited wealth, to do untold damage to neighbouring races naturally more capable.[1]

The hatred and abhorrence which many peoples feel for the Jewish (and to some extent Mongolian) practice of living in other nations instead of forming an independent, self-sustained group of their own, comes from a deep intuitive feeling that somehow it is not "playing the game." Because our unbiologically-minded civilisation cannot perceive or appreciate any intellectual causes for these feelings they are readily branded as "prejudice" by would-be intellectuals.

Even apart from evolutionary confusion, there results a profound cultural confusion in the national group composed of peoples with differing innate needs and ways of thinking. They mistake each other's motives, having different ways of adjusting themselves to the same environmental conditions. They go everywhere at a different pace. In England the Welshman sees in the self-assertion of the Northerner, often singularly devoted to group-service, only "egoism." The Northerner sees in the Welsh idealism only a blindness to material facts and a criminal muddling. In Russia the Slavs were no more able to understand the goals of the Nordic aristocracy than their Nordic governing class was able to understand them. Having exchanged a Nordic aristocracy for a (probably) more intelligent but less realistically-minded Jewish one, they imagine themselves to be nearer their true desires, but that can only be true in a small degree. McDougall remarks[2]: "It is probably also that racial differences so wide as to reveal themselves strikingly in the physical type are in all cases accompanied by differences of mental constitutions great enough to

[1] I set out to discuss a simplified hypothetical case, but the description might well apply to Rome.

[2] *The American Nation—its Problems and Psychology*, London, 1925.

militate against mutual understanding, sympathy and social harmony."

Evolutionary and survival confusion of the kind discussed above may also happen even when the races are not bound up within the same defensive and offensive group, but lie in groups between which there can be a free spread of culture. European mechanical inventions are increasing the wealth, the numbers and the power of Indians, Chinese and Japanese. European medical discoveries are saving millions of lives and giving rise to dense populations in Java, Africa, and India, which would never have existed otherwise. The introduction of modern machinery, etc., into Russia is making possible a relatively great increase in numbers in a relatively poor-grade Slav and Mongolian population. Carr Saunders gives the following figures for the rate of growth of the three great Western Asiatic races:

	1801	1850	1905	
Teutonic (Nordic) . .	375	369	273	Per 1,000 of present European population
Romance (Mediterranean) .	355	321	251	
Slav (Alpine) . . .	268	310	375	

The great Slav increase is largely due to increase in Russia.

The hard-won culture of Teutonic and Romance peoples is actually likely to be exploited against them economically and by population pressure. Professor Mjöen calculates that in the three years after the war some 600,000 Slav and Slav-Mongol people crossed the eastern frontiers of Germany and Austria into Europe proper.

A danger present in the slightest degree of miscegenation, which practical politicians have not yet seen, deserves careful consideration. Theoretically, when once a few individuals of one race have miscegenated with another race, the first race may come completely to supplement the second even though, immediately afterwards, the danger be perceived and possibilities of further breeding cut off. It requires only that the first race shall be naturally more prolific than the second. For the few half-breeds produced will then be relatively prolific relative to the remaining pure types. The half-breeds will increase in numbers and from them will separate out more and more pure blooded individuals of the first race. If the second race happens to be more prolific it is, of course, the intrusive blood that will be bred out. The latter appears to be happening in South African half-breed groups (the

whites being intrusive into a larger black group and the blacks more prolific). Major Darwin remarks (South Africa): "It may be that all the white blood which has been absorbed in miscegenation is in truth all the time slowly diminishing in quantity and may in time disappear entirely; a possible contingency which seems to make it all the more desirable to maintain the purity of the white race by the avoidance of race mixture."[1] With the methods of casual observation so far applied, and the short period of history concerned, it is impossible to say with certainty what is happening, but it would certainly appear that if the black race becomes intrusive into pure white groups the white strain will in time be bred out (failing any eugenic measures).

XI. Psychology and History: the Fate of Modern Nations

We have surveyed as much as psychology can at present offer towards establishing the mental differences of races. It is an exercise for the reader to elucidate for himself the part which these racial constitutions have played in history—a task which will present him with some surprising clarifications of apparently chance and purposeless historical happenings.

McDougall and Le Bon, among others, have already attracted considerable scientific interest by their demonstration of the psychological basis of history. Why did the movement of the Reformation come to rest at the boundaries it eventually assumed? That boundary shows no relation to nationality or language, or to geographical or economic frontiers. But, as McDougall has pointed out, if one superpose a racial-distribution map on the map of Protestantism and Catholicism, it will be seen at once that Protestantism is practically confined to the areas of the Nordic race, in Northern Germany, England, Scandinavia, and the Netherlands. Ireland, further than Germany from Rome, is yet Catholic, and there are many examples of Nordic patches which are Protestant although under political pressure to be Catholic. Not from any historical accident, but from the difference in temperament between the introvert, curious, independently-thinking Nordic, and the more submissive, gregarious, extraverted Alpine and Mediterranean types, arises this difference in religious allegiance.

Consider too how the various races, e.g. the negroes, have adapted Christianity to themselves in such a way that it is scarcely recognisable as such, except by its name, and evinces more

[1] *Eugenic Reform*, p. 97.

evidences of construction from the racial mind than traces of the original form. Owing to some feature of character, which we have not discussed in our racial sketch because of its uncertainty (possibly a strong sexual instinct or an instinct of helplessness), the Mediterranean man has almost invariably worshipped a female deity. When Christianity spread in Mediterranean race areas, we find that it became shaped to the racial desire by introducing a worship of the Virgin Mary. The same mental patterns crop up in each people's history, in spite of the imposition of other cultures. And so one could continue with the true analysis of cultural history.

Again, large centralised empires have been formed far more readily in Mediterranean than in Nordic areas, because of the greater self-submissive tendencies, the worship of power and certainty and the lesser individuality of Mediterranean types. Contrast the small principalities of North Germany and the small Scandinavian kingdoms with the empires of Caesar, the Mohammedan empire of the seventh century, and the empire of Napoleon.

For the same reason, added to reasons connected with class differences which we shall meet in the next chapter, these areas have always been the favourite regions where dictatorships spring up. Democracy was an invention of the Nordic peoples. It was, however, greeted as the political form of the future and widely applied as a detached "principle" during the first generations of enthusiasm. Yet its greatest success has always been in purely Nordic race areas, because it is best adapted to that self-reliant temperament, because the Nordic has a higher average of intelligence and a lesser variability of intelligence between one member and another, and because the aristocracies to be silenced, being largely Nordic in all countries, could be more readily checked by members of their own race differing little from them in ability.[1] Speaking of the fate of democracy in Continental nations, Barker remarks:[2] "They have multiplied their parties and theorised their principles, and discussion has tended to be too

[1] Günther (*Adel und Rasse*, p. 17) independently brings forward the view that there is a small scatter of ability and that all men are in fact more equal in Nordic areas, when he writes: "In einem rein Nordischen Gebiet, in einem Gebiet, wo zum mindesten der Freien fast rein nordisch war, waren ja alle Menschen eine Art." There are probably other differences to consider, e.g. what Günther calls the Nordic's greater sense of reality, i.e. the lesser susceptibility to being led astray by pure principles, concepts, and logical fictions which appeal to the mind, but which pay little respect to brute facts. There may also be a greater Nordic tendency to fair give and take. These qualities, of course, are not always virtues, being highly disadvantageous elsewhere.

[2] *National Character*, p. 171.

subtle to be practical, and too acrimonious to be fruitful of action. In the absence of these conditions, a system of government by discussion may fail to work, as appears from the three peninsular countries in the Mediterranean."

Post-war Europe has seen a recrudescence of dictatorships only in countries which are predominantly Alpine or Mediterranean—Russia, Italy, Spain, Southern Germany, and the Balkans.

Le Bon, thinking of uncivilised peoples, wrote: "Cet abîme entre la constitution mentale des diverses races nous explique pourquoi les peuples supérieurs n'ont jamais réussi à faire accepter leur civilisation par des peuples inférieurs." But the same applies to any attempt to shift cultural productions from one race to another regardless of inborn differences.

The history of colonisation would also have been highly predictable to one possessing adequate knowledge of racial psychology. McDougall asks us to compare the success in colonisation of English and French. The French, with a relatively strong Alpine and Mediterranean admixture and consequently more powerful gregarious impulses, tended, wherever they landed, to stay together in a town, whilst the relatively unsocial Englishman pushed out into fresh land until his nearest neighbour was left a comfortable distance behind. Economic factors and the fact that English shipping was naturally developed by our island position, doubtless played their part, but who can doubt, surveying historical happenings by and large, that McDougall's explanation in terms of racial psychology brings to light the most important and the most neglected historical factors?

The differences in average intelligence, too, have left their historical marks. A successful industrialisation demands a good level of intelligence, and low intelligence may well prevent the industrialisation of areas which we fondly hope so to develop, e.g. Mexico, India. Success in war, too, though depending much on the intelligence of a few leaders whose racial origin we do not know, and whose abilities cannot be indicated by the average, also derives much from the average intelligence of the nation. The defeat of the Spanish Armada, for example, was the result not of any difference of courage or martial spirit, but of intelligence, for it was the outcome of a difference in tactical resource and the frequency of tactical errors.

Again, how surprised was the world at the sudden and immense progress made by Japan! Yet the results of Porteus, showing the temperament qualities and high level of intelligence of this branch of the Mongolian race, would have enabled anyone to predict with confidence that the Japanese nation must soon

prove a rival to Northern European nations and a surpasser of Mediterranean and Slavic groups.

If psychological investigation of inborn characters shows such importance for history, it will have still greater importance for the unmade history that lies before us. The nations of the earth, we have seen, are in many instances racial mixtures, or rather, bundles of differing racial areas coupled together and as yet little intermixed. For that reason, careful statistical measurement is needed before accurate predictions can be made. For the same reason, further research into the interaction of racial mixtures in psychological heredity and social evolution, together with careful quantitative assessments, is necessary before one can predict whether the competition of nations as at present constituted is really furthering human evolution in inborn characters or not. In all probability, because in many nations good and bad are linked up to sink or swim together, the continuance of competition among these heterogeneous units will only lead to evolution accompanied by many setbacks and abortive movements in nature's plan of development. A deliberate reconstruction, or even minor pruning, of present national groups on the part of the people concerned might eventually save which countries sufficiently enlightened on racial matters to do such deliberate surgery well. But traditional and language differences practically remove the suggestion from the sphere of practical politics. In Chapter VIII I have indicated what should prove a practical and acceptable way out of this frustration.

The racial psychology, however, which will prove applicable to political problems and guide a wiser government, will be far more complex than that outlined here. The study of race is entering on a new phase of exactness and objectivity which will rapidly put present outlines out of date. These advances will be none too soon.

Every political problem of the present day would admit of far more certain settlement if we knew more of racial psychology and psychology in general. Many extremely foolish things have been done in the past, e.g. in the boundary settlements after the Great War, the futility of which an appreciation of racial psychology would have avoided, and which will only have to be put right at greater cost in the future. Galton asserted that all educated men should "urge inquiries into the historical fact whether legislation, which led to the substitution on a large scale of one race for another, has not often been the outcome of conflicting views into which the question of race hardly entered at all, and which were so nearly balanced that if the question of race had been

properly introduced into the discussion, the result might have been different."[1]

Graham Wallas reminds us: "Bismarck deliberately limited the area of his intended German empire by a quantitative calculation as to the possibility of assimilating other Germans into the Prussian type . . . opposed the inclusion of Austria and of Bavaria, on the ground that while the Prussian type was strong enough to assimilate the Saxons and Hanoverians, it would fail to assimilate Austrians and Bavarians." The racial implications here are extremely sound, and we may note to-day that the unity of North Germany with Bavaria-Austria is a very unhappy one.

Barker is also alive to racial determination of culture. He writes (p. 178): "It is possible that the racial basis of a people may act as a selective agency, and may help to determine the general form of religious belief by giving greatest power of survival to those ideas and practices which are most peculiarly congruous with the trend of its inner essence." But the trend of general opinion, influenced to some extent by modern psychological research, is bound to demand greater political attention to racial stock than is at present given. McDougall, noting that the negro stock in the U.S.A. has increased to one-tenth of the total population, suggests segregation of the race within its own state and adds, in reference to the U.S. immigration laws: "Economic considerations have, perhaps, been of wider influence than those of the kind previously mentioned (biological and racial realities) in producing a change of popular opinion and attitude towards the immigration process." As long as the conclusions of biological science can be set aside by temporary and unimportant economic conditions, mankind remains at the mercy of disaster. Our biological knowledge, however, needs assistance to make the necessary progress. As psychology advances, the purely descriptive psychology of to-day will resolve itself into a true science of mental abilities and psycho-spiritual factors interacting in so involved a way that a scientific presentation of the results, though possessing the certainty and reliability lacking in the present barely scientific presentation, will be comprehensible only to highly-trained minds. The application of such psychological data to social control, complicated further by its relations to quantitative sociological and economic surveys, will consequently be a very different matter from our present loose literary excursions in the relation of psychological facts to historical events. It will call for the labours of a department of political mathematics.

With this warning as to the limitations of construction with

[1] *Hereditary Genius.*

present materials, we may venture on a sketch of the future developments in civilisation which knowledge of racial mentality suggests as possible.

The character of a nation, like that of an individual, is partly to be determined by environmental forms and partly by innate constitution, and I have no intention here of completing anything like a complete picture of true national characters or of predicting national destinies. Those who wish to follow up this interesting line of enquiry and those who doubt the general conclusions can do no better than to follow up the works of Ripley, McDougall, Huntington, and other writers mentioned here.

The description of National Character seems to be the perennial occupation of the "literary critic" type of mentality, and the frequency with which airy, intuitive generalisations, unsmirched by any contacts with facts, are produced in face of the availability of better methods, is no credit to the importance of the subject.[1] A very representative and complete collection of the less futile among such generalisations has been made in Hurwicz's *Seelen der Völker* the material in which provides an interesting exercise for those approaching the subject from a more scientific direction.

Although the main application of racial psychology to national types and problems has already been very excellently worked out in some of the works mentioned above, we can take a momentary glance at the geographical indications for civilised evolution.

There is no reason to suppose that the centre of civilisation will shift appreciably from the Nordic areas—England, Germany, France, America, and their derivatives. In so far as political ascendancy depends on economic success founded in individual industry, we may expect the Alpine and Mongolian areas with their highly industrious populations to forge ahead. Russia, Germany, Italy, Switzerland, Japan, and perhaps France, might benefit relatively by conditions hinging on individual productivity. Germany particularly with its combination of Nordic brains and organising ability with Alpine energy, is bound to come to the fore in any race depending upon highly organised uniformity in which the individual willingly loses his individuality in submitting to regulation.

We may expect such advantages to be offset, however, by a continuance of the supremacy of Nordic areas in England, America,

[1] Even with the most careful attention to statistical material, it is extremely difficult, as Ripley has long shown, to be sure that one is isolating racial traits free from co-variant environmental conditions. The futility of such essayist approaches, as those of Keyserling's *Europa* and Buber's *Vom Geist des Judentums*, in which all national traits are reduced to some single "principle" is so absolute that one wonders that such views are entertained seriously.

Germany, and Scandinavia in original scientific advance, unless, as now, they continue to send out their trained specialist to give the benefit of technical knowledge to countries which cannot develop it themselves. Russia, therefore, in spite of her fine organisation, is not to be looked to for leadership in civilisation, neither need her large numbers and economic prosperity make her a danger to other nations, for the higher averages and higher upper limits of intelligence in Nordic countries will provide them with sufficient political skill to retain political leadership.

Up till the present the Nordic countries have always shown the most enlightened social welfare organisations. Indeed, East, after reviewing the evidence, remarks: "The grand prize for general healthfulness must go to the Scandinavian countries." It is most probable that they will be the first to adopt new measures of racial control and, by improving their native quality, produce such genius that they will be able to maintain economic leadership in spite of the greater machine-like industry of other countries.

A future storm-centre may well be developing in those Mediterranean lands which are practising no restriction of population. These teeming, low-grade populations,[1] failing to remedy the evils of their condition by those progressive tendencies to which, as we have seen, other nations are more constitutionally inclined, may be tempted to risk all in war.

The extravert temperament, the marked pugnacity, and the gregariousness which give such solidarity of national feeling in Mediterranean race groups, may easily compensate in some measure for the relatively low intelligence of the masses and cause these countries to become formidable military powers in warfare which has not become too highly technical. Unless considerable eugenic improvement is miraculously brought about in these nations, however, they cannot be expected to pass on with the rest of Europe to new phases of civilised development. On the

[1] Carr Saunders's figures from Stamp, show that in 1914 the average income in pounds sterling per head in various countries was as follows:

U.S.A.	72	Austria	21
United Kingdom	50	Spain	11
France	38	Australia	54
Germany	30	Canada	40
Italy	23	Japan	6

The tendency is very clearly for the standard of living to be highest in predominantly Nordic countries, lower in Alpine race areas and lower still in Mediterranean countries.

Historical accidents and economic factors of colonial possession and natural resources might be expected to throw out this correlation, but with the exception of the relatively low position of Germany and of Japan the positions are exactly those which would be deduced from the psychology of average innate character.

other hand, as Kretschmer shows (*Psychology of Men of Genius*), the centre of culture for plastic art is likely to remain where the Mediterranean race blends with the Alpine elements, just as a marked musical ability is bound by heredity to remain the possession of Alpine race areas.

France, possessed of considerable affinities with Mediterranean countries, has dangerously lowered her average inborn quality by allowing immigration of the dregs of Eastern Europe, coloured people, and other non-European races. Leonard Darwin remarks: "As these new-comers are often of a low type, that great nation must be continually injured by their entry." France, since her days of leadership of civilisation, has also lost considerably from among her finer strains by war and by the usual dysgenic drift, which presumably has been at least as marked in France as in other civilised countries. The popularity of Le Bon's writings in France has apparently not influenced popular thought to any real measures against degeneration. The breed which brought France her glory, is no longer a part of France. France bids fair to be a name, a label applied to a different population inhabiting the same geographical area.

Although the ideal of equality of opportunity must have a wide appeal wherever civilisation progresses, it is highly improbable that the caste system and the maintenances of class distinctions will readily break up in such countries as India, where it is based on real differences of inborn type and race between the castes. Here the assumption that "all men are born equal" will prove so far from the facts that its application is bound to prove unworkable. Even in Europe we may find in France and Italy countries where, owing to the conditions which we have studied, the persistence of marked class distinctions will continue in spite of outward semblances of true democratic measures. For India, in spite of the immense hopefulness of the present outlook superficially, the psychologist can see but little prospect of true development relative to the rest of the world.

Progress, on account of the immense numbers of temperamentally- and intelligently-dwarfed people in Southern India and in the lower castes of society, must remain extremely slow. The upper strata with considerable Nordic and Mongolian blood, by cutting itself free from the responsibilities to, or intermixture with, the less fortunate peoples, may make contributions to civilisation and culture, but its first duty would seem to lie in improving the type and environment in its domestic hearth. Apart from any innate differences, there is the further fact, as described by D. N. Bannerjea (*Padagog. Zeutralblatt*, 1930, x) that only 11,500,000

in India go to school and 229,000,000 are illiterate. It is doubtful whether India can produce the teachers or the surplus wealth necessary to educate its people. (See evidence in Catherine Mayo's *Mother India*.) Even having done this it may still find millions, owing to mental backwardness, uneducable. Yet Indians complain that the English attempts at education emphasise too much physical development and do not aim at sufficient "soul development." Also that they do not cater sufficiently for the Indian intuitive way of arriving at truth as distinct from the objective, analytical, scientific method so widespread in Europe.

Again, what can we expect for the future of the idea of political and social equality of men and women? Firstly, among some races the sex difference in intelligence and brain capacity is greater than in others. Among the Nordic peoples and the Japanese[1] the difference is relatively slight. Intelligence-test results show relatively greater differences in the Jewish peoples, and probably the same state of affairs exists in the Mediterranean peoples. Before even the modern manifestation of women's emancipation, appearing in female suffrage, and in the business and professional activities of women, there had long been in the Nordic countries a greater freedom allotted to, and respect for, women than could be found, for example, in Alpine, Mediterranean, and Semitic-speaking races. The contempt for women among Arabs, and to some extent among negroes, is marked even to-day.

Physical differences and temperament differences also play a part. Kretschmer[2] demonstrates a lesser sex difference in physique among his "athletic type" which is relatively very common in Nordic areas.

The strong sexuality of the Mediterranean type, combined with the readiness to the attitude of worship leads, on the sentimental plane, to the idolisation of women, and on the practical plane to a system of conventions which prevents a woman from developing herself as anything other than a love-object for man. So the resultant social outlook leads her to the secluded goods-and-chattels position which she occupies. How far this is the result of factors distinct from the racial constellation, it is difficult to say. We meet here, in every attempt to proceed to concise conclusions, the distracting necessity of discussing at length the uncertainties which cluster in the uninvestigated corners of the subject.

It is sufficient if, by these few examples of the bearing of psychological data on civilised development and by the more carefully demonstrated instances in the recommended literature, we have

[1] See, e.g. Porteus and Babcock, *Temperament and Race*.
[2] *Physique and Character*.

shown that the racial constellation and the quantitative distribution of inborn psychological traits within the organised group account, probably more than any other factors, for the ideals, the institutions, and the historical fate of nations.

It has been the thesis of this chapter that, in spite of the backwardness of psychological investigation, innate racial differences in emotional endowment and mental power are already recognisable which clearly account for many historical developments and which should receive far greater consideration in political counsels than they are now given relative to economic and cultural factors. True human progress—progress in inborn powers—has been ensured largely by the continual competition of racial groups. Many of the nations of the earth are at present crazy patterns of a few relatively pure races and until some order can be introduced by making pure racial groups relatively independent, national competition will be of very uncertain value to human progress.

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CHAPTER THREE

RICH AND POOR: THE BIOLOGY OF CLASS INTERACTION

"For unto everyone that hath shall be given, and he shall have abundance; but from him that hath not shall be taken away even that which he hath."
MATT. XXV, 29.

"Blessed are the meek; for they shall inherit the earth."
MATT. V, 5.

I. Rationalism and Class Distinctions

ONE of the most commonly lamented injustices of life is that each soul finds itself born into an immediate environment, more or less unfavourable, over the design of which it has had no control. A burdensome existence under physical, mental and economic disabilities is given to some, whilst others enjoy every advantage from the day that they are born, accepting, as a matter of course, privileges and opportunities which would dazzle their less fortunate neighbours.

In the attempts so far made to shape human destiny nearer to the heart's desire the removal of these apparent injustices has secured the greatest attention and concern. In every land a few men, altruistic above the average and gathering determination from the goodness of their purpose, have striven successfully towards the goal of equality of economic and social opportunity.

Because the struggle of purpose and ideas is still raging; because differences of class and economic success are constantly occupying every man's thoughts in daily life, one is bound to encounter at once the most vivid prejudice and counter-prejudice in investigating the origins, the resultants, and the morality of social differences.

The confused values in nationalism and social prejudices have already cleared themselves considerably through the psychological study of inborn differences and the application of evolutionary ethics. Similarly, if the study of the mechanisms within the nation is to be fruitful of understanding, we must begin by following the effects firstly of inborn mental and physical differences, and secondly of the acquired traits and attitudes derived from these differences and the further economic differences which they engender.

In national questions, in face of logical principles and moral codes, weighty prejudices have persisted which, in the light of fuller investigation, prove to be highly rational attitudes. Our instincts appear to have remained loyal to a purpose greater than could be grasped by our intellects. We can have too much "logic" and too insistent a "moral law," when that logic is of the sweeping philosophic kind which ignores the more subtle facts, and the moral law is merely a partial aspect of morality, handed down from the stress of early historical times when men were forced to compartmentalise their minds.

We must not be surprised if we find a similar state of affairs in the current arguments and attitudes concerning the structure of group life, but, ignoring all implications, our first step must be to see what structuration exists, to study classes, professional groups, aristocracies, etc., as they are; our second, to find out how the existing conditions arise; our third, to ask what are the more important consequences of various systems; and our last, to enquire what social design true morality demands.

II. Hereditary Aristocracies

Most societies exhibit some stratification into so-called upper and lower classes. Generally, but not always, the distinction is, to-day, primarily one of wealth, but the classes also distinguish themselves according to the amount and type of education accorded to their children, the nature of their occupations, and the fact that each class tends to associate with, and generally to marry within its own ranks. There are also special hereditary classes, hereditary aristocracies, hereditary priesthoods, and hereditary slaveries.

Sharpness of classification reaches its extreme form in the caste system of India, diminishes in Continental Europe, and almost vanishes in present-day England and America. We shall see later that each country tends to get the amount of classification that social life needs, and that, as we have indicated in the last chapter, a resistance to democratic ideas is not always to be labelled as stubborn prejudice against a progressive ideal.

Before dealing with the graded stratification of society, let us clear up the matter of hereditary aristocracies. It is a common error to suppose that these aristocracies are a more gifted section of the race of which the nation is composed. Most European aristocracies are not of the same race as the people who form the bulk of the nation which they govern—they are "foreigners."

This has long been realised, though often suppressed and veiled in the interests of nationalism. It was realised, for example, by that anthropologist among the French Revolutionaries who, in his oft-quoted appeal, urged the people to "fling the aristocrats back to their German marshes." One of the most able historians of Russian life has recently stressed the fact that the old Russian aristocracy was essentially a foreign body, totally distinct in blood, in ideals, in tradition, from the natives.

Throughout Europe the hereditary aristocracies have been almost purely of the Nordic race, in Spain and Italy ruling over Mediterranean races, in France over Alpine and Mediterranean, in Germany and Russia over Alpine types, and in England over a mixture of their own type with the Mediterranean.

It is unnecessary to dwell on the evidence here, for dozens of researches bear out the generalisation, neither is it necessary, after our account of the racial qualities, to explain how this result comes about. The whole subject has received popular and sound, though slightly exaggerated, treatment at the hands of Günther in his *Adel und Rasse* ("Nobility and Race"),[1] and was probably first systematically investigated by Count Gobineau in his *Inequality of the Races of Man* (1854).

In Africa, the same peculiar condition prevails, but here the kings of the negro tribes have more or less Oriental (Semitic) blood and are sometimes pure Arabs. There were fair-haired members of the Egyptian dynasties, though there is no evidence of such colouring among the native population. Again, in India the uppermost castes are of European or Mongolian origin, as opposed to the "outcast" native blacks and the lower castes which are constituted by various degrees of mixture of these two races with black Indonesians. The Indian word "caste" means colour. The upper castes are considerably taller and lighter in complexion than the lower castes or the outcastes.[2] Hereditary aristocracies have almost invariably originated in a conquering race and have maintained their ascendancy, if it persisted at all, by reason of a higher level of innate ability preserved by intermarriage with their own kind.[3]

[1] "Races of Europe," p. 469.

[2] Onslow in his above mentioned work says: "The aesthetic judgment that 'fair' is 'good' was originally caused by the fact that the fair were also the noble, the rich, the conquerors." Caste and colour are of common derivation in the Sanskrit language.

[3] Woods, who has perhaps made the most complete studies of the biology of aristocracy (*Mental and Moral Heredity in Royalty*, Holt, 1906) concludes: "Modern royalty as a whole has been distinctly superior to the average European in capacity, and we may say without danger of refutation that the royal breed, considered as a unit, has been superior to any other family, be it that of noble or commoner."

III. Social Status and Social Desirability

We may put aside now the study of hereditary aristocracies and deal merely with the range of social positions represented by the general classes according to wealth.

Social success and the acquisition of wealth have always tended to fall to those who show ability, enterprise, persistence of motive (i.e. "character"[1]), avariciousness, ability to forgo pleasures, unscrupulousness, material-mindedness, and other acquired or inborn traits. How important these traits may be separately we cannot decide *a priori*, but the slow extension of experimental work is bringing in results which, in deciding that matter, will decide many social questions depending upon it. It is obvious, however, how such factors work. No one needs to be persuaded that a group of men of high average intelligence will have higher salaries on an average than a group of lesser ability.[2] Common observation tells us the same in regard to persistence,[3] enterprise, and thrift. Consequently were no other factors concerned, we should have a perfect correspondence between wealth and worth.

Relatively little enquiry is here made into physical characters and social standing because their effects are comparatively obvious and because they are frequently bound up with mentality. Poor physique, which only disqualifies one from the coarsest manual work, is actually more common among those whose low intelligence only fits them for such work. Disease, however, is clearly a handicap in almost any occupation, and so likely to bring with it poverty. But most diseases are not hereditary and are almost equally liable to fall on all. Nevertheless some predispositions to disease are hereditary. Adami (*Inheritance and Disease*) remarks that "other conditions due, it would seem, to disturbances of metabolism, underlying which may very possibly be finer anatomical variations, have for long been noticed tending to be inherited; such as obesity, diabetes, gout, and chronic rheumatism."[4] Such physical weakness and inferiority of vital energy

[1] C. J. Webb's research *Character and Intelligence* (Camb. Univ. Press), shows "persistence of motive" to be the central trait in what we usually speak of as general excellence of character. I shall frequently refer to character by this single essential trait for the sake of precision.

[2] See evidence on page 92.

[3] Bartlett, F. C., "Temperament and Social Status," *Journ. Nat. Instit. Indus. Psychol.*, Vol. III, 26-27, p. 401, writes: "Relatively big intellectual differences appear to be of less social significance than slight diversities of temperament." Also "Temperament and Social Class," *Eug. Rev.*, XXVIII, 20, 25-28.

[4] Quoted, Carr Saunders, p. 360. See also Schuster, p. 162, on inheritance of susceptibility to consumption and other diseases.

are undoubtedly related to temperament differences which we have just discussed as determining the formation of character traits and thereby social economic success.

Moreover, since most of these character traits are handed on by inheritance, we have here a biological justification of the inheritance of wealth, that is, of wealth staying in the families which produce it. It proves to be, not the handing down of wealth to people who have no claim to deserve it, but rather a binding of wealth to certain innate characters of social worth which have a relatively permanent existence, living now in this individual, now in that.[1]

Unfortunately for such an absolute principle there are other factors which render it only approximately true. There are the factors of luck and chance opportunity in each generation; the tendency for wealth to be more easily acquired by those with certain undesirable psychological characteristics, e.g. selfishness, absence of social feeling, dishonesty, etc., and the fact that the inheritance of the good qualities which bring wealth is not absolute, for some are acquired skills gained through education. And even with the non-acquired traits there is not a perfect degree of inheritance.

Opportunity, however, can be readily over-estimated as to its effects. When opportunity means inherited wealth available for educational or business purposes, it largely resolves itself into ability and opportunity in near ancestors. Such opportunity will therefore tend to come only to those inheriting more than average ability. And if opportunity be of the other kind—90 per cent. luck—it will not keep a family permanently in a higher social class unless it be backed up by ability. Social enquiry shows that families of poor native ability lifted by chance success in one generation, are certain to fall back just as quickly when the lucky influence is passed.

Nowadays, too, there are opportunities both in education and business for ability and character to find its place and its deserts.

Opportunity other than in the forms just described is rare and is apt to resolve itself into enterprise, on closer examination; so that again the correlation of wealth with desirable qualities is supported.[2]

[1] Intelligence, we know, is largely inherited. Experiments with animals, e.g. with guinea pigs, at Cambridge laboratories, show temperamental traits also to be persistent over generations.

[2] At present, our newspapers and ballot-mongers are doing their best to upset the socially beneficial correlation of wealth and ability by collecting competition and ballot fees from many, mostly poor people, and giving the lump sum resulting, usually a considerable amount, to some individual who has done nothing to earn it.

But next we must recognise an opposing tendency—a tendency for wealth to associate itself with undesirable traits or at least with the absence of traits of immense social value in higher co-ordinations.

The man who becomes a missionary is going to return home on a very different social plane from that of his brother of equal ability and education who has become a trader. The man of more than average ability who works on the stock exchange, is going to have a vastly greater bank balance than if he had devoted those same abilities to developing science. The criminal, at least in America, seems to earn more than a welfare worker.

It is necessary to realise that there is at no point a sharp break where one can say "These qualities are socially desirable, whereas those bring good only to the individual at the cost of the community." There are all degrees of social worth between the full-blooded criminal, the man who just avoids law-breaking, and the man who gives all possible service to his fellows. For that reason it is futile to argue that because the criminal is just as likely to land in jail as to secure wealth, the social qualities such as honesty and unselfishness are the policies which will lead to success. The reply is that though police organisation prevents the criminal from becoming prosperous we take no trouble to detect or penalise all the degrees of social undesirability, so multitudinously exemplified, which lie between good citizenship and parasitism. We allow the publican, the bookmaker, the writer of trashy novels, the purveyor of trashy foods and the man who sits tight on valuable land to acquire far more wealth than those who have given us aeroplanes, means of combating disease, or improving education.

IV. Social Status and Intelligence

Social status is a thing which few would attempt to define. An exact definition, however, is not necessary to our discoveries, for we can simply relate particular occupations to intelligence, etc., and leave the reader to call these differences, differences of social status or otherwise, as he decides.

From the above discussion we might expect finally a low positive correlation of wealth or class with ability and a still lower positive association of wealth or class with the most highly desirable social character.

Let us sample some of the evidence. Duff and Thomson,[1]

[1] *British Journal of Psychology*, Vol. XIV, 1924, p. 192. *Ibid.*, *British Journal of Psychology*, Vol. XVII, 1692, p 23.

working on the results of mental testing with 13,000 children in Northumberland, and dividing other children into thirteen groups according to the social status of the parents, found variation of average intelligence quotient from 112.2 for "professional" classes to 96.0 for unskilled workers. A similar survey carried out by H. Macdonald, in the Isle of Wight, again showed a continuous decline in intelligence from the children of such parents as solicitors, house-agents, accountants, teachers, to those of unskilled labourers. Professor Terman in his intensive study[1] of exceptionally able children in America found that his cases derived their parentage from various occupational groups in the following proportions:

Professional	1,003
Public services	137
Commercial occupations . .	128
Industrial workers . . .	35

Here we have classes scarcely corresponding to pure social status classes, but certainly related to the demands on mental ability made in various occupations. There is indeed a conclusive array of evidence now confirming these earlier researches.[2]

Now, note that this is indirect evidence: it measures the child, not the parent. But it was one of the generalisations of the last section that inherited wealth tended to fall to children of more than average ability because their parents were of more than average ability in order to have acquired the wealth. We are now excused the necessity of proving this inheritance of ability, for we are shown a direct relationship between the inborn ability of the children and the social status of the parents. There remains, however, another link in our argument, the soundness of which has been questioned. Many critics who have not troubled to acquaint themselves with the technical aspects of mental testing have tried to assert that the children of the professional classes are more intelligent because they come from more educated homes. The argument vanishes because intelligence has proved to be insusceptible to training of any kind. Possibly some of the earlier tests of intelligence by which some of the above data was gathered tested more than intelligence and gave a very slight advantage to those of better education. For complete certainty

[1] *Mental and Physical Traits of a Thousand Gifted Children* (1924). See also Burt's *Mental and Physical Tests*, p. 190.

[2] See for example, Pressey, S. L., and Ralston, R., *Journ. Applied Psychology*, Vol. III, 1919. English, H. B., *Yale Psychological Studies*, II, 1917. Burt, C., *British Journ. Psychol.*, III, 1909.

it becomes necessary to test children who have been brought up in a uniform environment but whose parents were of differing social status. Carr Saunders supplied the evidence by testing children in orphan institutions. Adopting the usual five class division he found:

Average I.Q. for children of parents in classes 1 and 2	100.2
„ „ „ „ 3	98.3
„ „ „ „ 4 and 5	97.9

He concludes, "There appears to be a differentiation of intelligence according to class (of the deceased parents), a result possible only from an inheritance of the qualities which resulted in the parents being of different class."

Considerable direct evidence is now available. The following random sampling from results gathered by the present writer in preparing schemes for vocational guidance will illustrate the state of affairs:

	Intelligence Quotient Average
Journalists (Editorial Office) (4)	139
Secondary school teachers (36)	138
Physicians and Surgeons (25)	136
Managers in large businesses (15)	129
Elementary school teachers (91)	129
Commercial Travellers (24)	119
House Electricians, Typesetters, Motor Mechanics (16)	110
Shop Assistants (12)	99
Factory Workers (repetition work) (100)	92
Unemployed (21)	73

Professor Burt and Miss Spielman from similar studies arrived at the following rough relationship of I.Q. and type of occupation:[1]

		Intelligence Quotient
Class	I. Higher professional and administrative posts	Over 150
„	II. Lower professional technical and executive work	130–150
„	III. Clerical and highly skilled work	115–130
„	IV. Skilled work	85–100
„	V. Semi-skilled repetitive work	100–115
„	VI. Unskilled repetitive work	70–85
„	VII. Casual labour	50–70
„	VIII. Institutional	Under 50

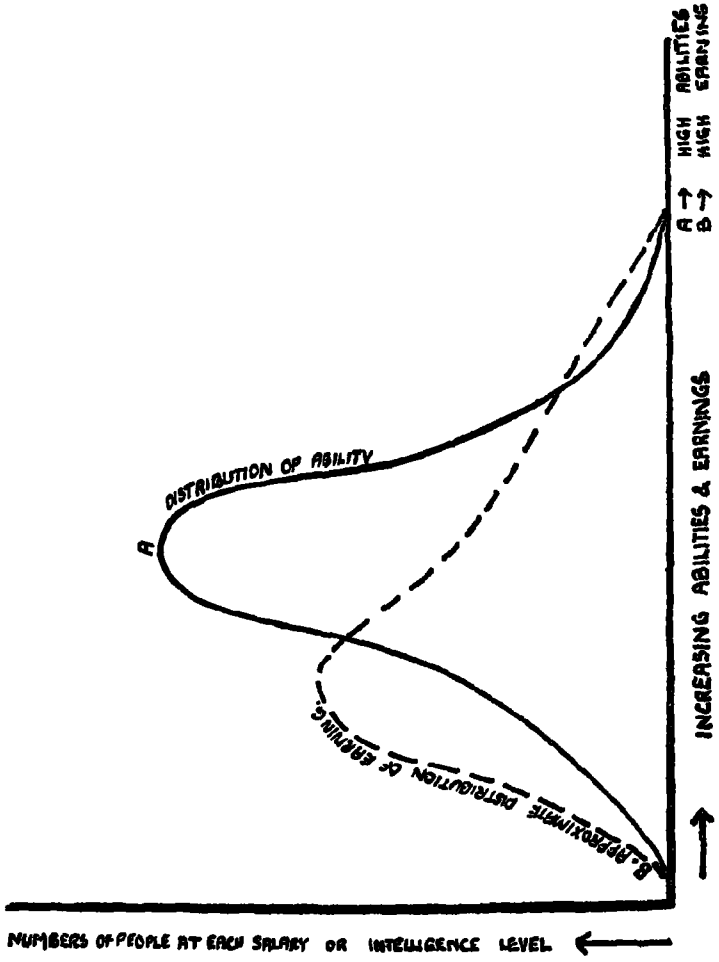
[1] *A Study in Vocational Guidance*, C. Burt and W. Spielman.

There is clearly a close relationship here between intelligence and what we call social status, though since these figures represent averages, the relationship for individuals would by no means be perfect. It would clearly be even less perfect for wealth and intelligence.

Now this discrepancy arises partly because success is also determined by other good and bad temperamental and character traits. But quite apart from that it is a necessary result of a difference in the distribution of natural ability on the one hand, and economic opportunity on the other. Reference to the histogram on page 52 (Chapter II) will show that ability tends to be distributed in accordance with the normal biological curve of distribution (A on p. 94). Earnings, on the other hand, are not normally distributed: the majority of people earn relatively small incomes, a few can earn even smaller ones, below a true living wage, a few again earn large incomes, and an extreme few earn very large incomes. (Hence the rashness of attempts to raise the wages of the poor by dividing up a few large incomes.) We thus get a curve of income distribution as shown in curve B on p. 94. Clearly a good deal of the lack of proportionality between ability and wealth arises from the way in which the curve of ability has to be forced into relation with the curve of available incomes. There are not enough opportunities for the man of average or slightly more than average ability. These individuals tend to be forced down among the numbers of lesser ability and lesser earning power or, less often, raised to much higher earning capacity.

It is at present a matter of speculation as to how far the lower tenth of population with regard to ability is identical with the lower tenth in economic matters—the "submerged tenth" of our slums. But it is certain that the last 1½ per cent., consisting of mentally defectives would, in the absence of institutional care, be unable to keep themselves in anything but the most abject poverty and, removed from civilisation, would instantly perish. Superficially these results suggest that a reform in our wage system is required, giving more opportunity to the man of average ability. However, it is possible—even probable—that temperament and character qualities are not normally distributed and, if that is so, there may not be so much discrepancy between the distribution of total ability (character plus intelligence) and the distribution of awards.

In discussing the relationship of social status, as determined by wealth, to ability, it is fitting to comment on the relation of fame to inherited ability. The researches of Galton, McKeen,


A
DISTRIBUTION OF ABILITY
B
APPROXIMATE DISTRIBUTION OF EARNINGS
INCREASING ABILITIES & EARNINGS
A → HIGH ABILITIES
B → HIGH EARNINGS
NUMBERS OF PEOPLE AT EACH SALARY OR INTELLIGENCE LEVEL

Cattell, Castle, Woods, and others, have proved beyond question that eminence is largely related to inherited ability and that eminent men and women, in whatever fields of endeavour they may be, prove to be much more closely related among themselves than they are to the rest of the community. In Woods' study of the 3,500 most eminent Americans, he showed that though the mathematical probability of any American citizen being related to one of these eminent men was only about 1 in 500, the actual statistical frequency of relatedness of these men to each other corresponded to a probability of 1 in 5. Similarly, Galton, studying the relations of 1,000 famous Englishmen, found that on an average 100 illustrious men had 31 eminent fathers, 41 eminent sons, 17 eminent grandparents, and 14 eminent grandchildren. In Germany, H. W. Rath has recently shown that a surprising blood kinship existed among a large section of German men of genius.

Social status, whether expressed in wealth or fame, has then a fairly close relationship to inheritable mental and physical powers.

V. Social Status and Racial Differences

Now it might be expected that in any nation not homogeneous, say composed of Nordic and Mediterranean types, there would be a tendency for the two races, in virtue of large inborn differences, to separate out into classes. We find that something of that kind does in fact occur.

The Nordic race, quite apart from the fact that historically it spread as a conquering race and thereby began hereditary aristocracies, would have in virtue of its higher intelligence, its greater energy and self-assertion, its introvert thrift and its freedom from the Mediterranean improvidence and easy-handedness with money, a tendency to form the upper class. And this is exactly what happens. We have, on the authority of Ripley, that, "were there space we might adduce abundant evidence to prove that the upper classes in France, Germany, Austria, and the British Isles are distinctly lighter in hair and eyes than the peasantry."[1] The upper classes have more nearly a Nordic stature, and the lower ones a Mediterranean one.[2] To this one might add

[1] "Races of Europe." p. 469,

[2] There is considerable and clear evidence here. One might note, for example, Armstrong in *The Survival of the Unfittest*, who quotes the report of the superintendent Inspector of Factories in Scotland that the average height and weight of recruits were for public school men, 5ft. 9ins. and 11st. 11lb.; for Glasgow unskilled labourers, 5ft. 2ins. and 8st. 11lb.

Russia, Italy and Spain with equal certainty. Curiously enough, the same tendency of the Nordic race to form the upper class existed in ancient Greece and Rome: "The classical Latin writers," writes Ripley, "abound in testimony to that effect."[1]

Professor Fleure[2] also notes the tendency of the Mediterranean type to make up the lower section of the social-class scale in the British Isles, but adds a very necessary reminder against assumption of inferiority. "These dark, long-heads nevertheless swarm in our cities, especially in their poorer quarters, and they are typical of our mining areas. They form a large proportion, both ways, of what a financial classification would call the less fit. In fact one hears them sometimes discussed as an inferior type. Surely fitness is relative to the kind of society under consideration and types of fitness need to be discriminated."

Bowen remarks:[3] "Short dark long-headed persons moved down from these areas (mountainous parts of Wales) in great numbers to the South Wales coalfield in the period following the industrial revolution. This type tends to become the typical collier." The Nordic type tends to stand in a better position in rural areas as well as in industrial. He adds: "The fair types under rural conditions till a better soil, and are generally supplied with sufficient produce for their own use and for market purposes. Many areas with a distinctly fair population, like south Pembrokeshire, have long had a reputation for good living."

This social tendency is, of course, only a tendency. In England the upper and middle classes will be naturally strongly Nordic; the lower classes relatively Mediterranean. In Germany and France there is a similar tendency though, owing to the Alpine type being practically as able as the Nordic and even more steady and careful in social life, the sifting according to race is much less marked. Indeed the middle class "rentier" of France is more often Alpine than not. It may, indeed, be the case that where the Nordic race intrudes on Alpine people it only maintains a superior social status as long as it keeps itself as a social separate aristocracy as formerly in France and Russia. Even then it is likely to be

[1] Of course, of the Nordic characteristics—blondness, tallness, long-headedness—tallness might conceivably be due to better nourishment. The upper classes might be taller because of better childhood environment. We know, however, that stature is relatively little affected by environment even within wide limits (was not this known in biblical times?) and that the environment of the poor child is frequently more healthy than that of the rich.

[2] "Some Aspects of Race Study," H. J. Fleure, D.Sc., F.R.G.S., *Eug. Rev.*, XIV, p. 93.

[3] E. G. Bowen, "The Incidence of Phthisis in Relation to Race Type and Social Environment in South Wales," p. E367, *J. Royal Anth. Inst.*, 1928, 57-351.

dislodged by economic pressure in the long run. In Italy the Alpine type constitutes an upper class over the heads of Mediterranean people; in Russia the governing class is largely Jewish; there are negroid communities with Mongolian masters in Malaya; and mixed races in Central America with the Mediterranean race predominating in the upper class.

Obviously the juxtaposition of classes composed of types differing considerably in temperamental make-up must have important consequences in keeping classes separate, in furnishing them with different ideas of civilised life, and in making sympathy between them difficult. These we can consider later.

VI. What is the Magnitude and Direction of Social Percolation?

The facts so far discovered give us a picture of society in a stratification conditioned according to wealth, with a general tendency for inheritable intellectual capacity to be more concentrated in the upper classes and to thin out progressively down the scale. When mixed races constitute a nation there will be a tendency for one race to occupy the upper classes and by its peculiarities to fix the tones and ideals of that class. But these considerations give us no indication as to the degree of permanence of those classes. Do the offspring of the upper class still constitute the upper class after several generations?

On general grounds we should expect that they would do so since we are dealing with inheritable superior qualities which are magnified and assisted in each generation by the advantages of education and a good start in life, so that there is little reason for any person to fall from his class to a lower one. But against this one must remember (*a*) that each child inherits its qualities as much from the mother as from the father, and the qualities that have led to the social position are those of the father only—the mother may be an utter incompetent. (*b*) Heredity is not absolute, there are constantly minor spontaneous variations causing one child to be more clever than the parents, another less so.

Of these factors tending to remove the basis of class distinction in the course of time, the first almost vanishes, when we remember that selective mating is an established fact. Not only does the father tend on an average to choose a wife from just the same class as himself but, on purely psychological grounds, he tends to choose a mate of the same sympathies and character and not too

different in ability. This will be doubted at once by popular opinion, but here, as is so often the case, popular opinion is wrong.[1]

The second factor remains, but its effect would be to cause a divergence of a class both above and below its original standard, not a constant drift in one direction.[2]

From such considerations, then, we might conclude that there is every reason to believe that the composition of the social classes remains much the same; that the same families and racial characters will continue to be maintained in each class.

But this belief will not stand in the light of the sociological force to which Galton drew attention in his pioneer work on innate ability, an investigation which led him, a generation ago, to the founding of the Eugenic Society.

The startling conclusions to which his and later researches have led, are now moderately well known among educated people but, in spite of the overwhelming completeness of the evidence, even the most advanced nations still fail to realise the full force of these conclusions; at least the principles have so far scarcely affected political practice.

All these researches lead to the conclusion that the upper classes have a much lower birth-rate than the lower classes. Within limits the higher the class, the smaller the family. There is some doubt as to how long this tendency has been operative, but the question is, from the survival standpoint, immaterial, for it is certain that in medieval times and probably even up to the middle of the last century the death-rate was also greater among the lower classes, so that the number of children actually reared was only equal to, or even less than, that of the upper classes. Medical science and humanitarian legislation have changed that, and though the death-rate is still slightly greater in the lower classes, their survival-rate is considerably higher.

Now we have seen that, on an average, the inborn qualities of the upper classes are in most respects better than those of the less successful classes. The reader must regard this fact as incontestable, though he may rightly stand on his guard against deductions rashly drawn from these premises—which may cause offence to his humanitarian feelings. It follows that all the immense in-

[1] See evidence in Chapter VI on mate selection.

[2] This is no denial of the law of regression. Regression to the mean is a fact of observation, observation on cases at random. The more the ancestry is selected, the less the regression; moreover, the greatest factor in regression is, of course, the second parent, not considered in simple regression observations, and we have already shown reason to believe that the second parent is not average in ability.

creases of population in the last half-century or so have arisen almost entirely from the poorest types among the population. The best types have diminished or disappeared, so that there has been an immense dilution of ability in the whole nation and a lowering of the average physical and mental fitness of the population.

Indeed, we do not need to argue from diminution of class to diminution of ability, for there is direct evidence to supplement the indirect argument. There is ample evidence that the upper classes are dying out relative to the lower classes[1] and there is independent evidence that the more intelligent children are born in smaller families than the feeble-minded. Let us glance at both kinds of evidence (p. 317). From Carr Saunders's authoritative work cited below, the following summarised figures are sufficiently final.

Births per 1,000 married males under fifty-five years of age:

Upper and middle classes . . .	119
Intermediate	132
Skilled workmen.	153
Intermediate	158
Unskilled workmen	213

According to these figures alone, the upper and middle classes are surviving at only about half the rate of the unskilled workmen. The surgeons, the professors and the lawyers of to-morrow will be derived from the bricklayers, the shop-assistants and the road-menders of to-day. At present the mortality rates are still in the same order, but they leave the effective survival-rate very little changed, namely at: 110, 118, 136, 139, 181. All this, says Carr Saunders, is a "relatively recent phenomenon."[2]

Some indirect evidence comes from the research of Newsholme and Stevenson (quoted by Schuster, "Enquiries") who tried to relate birth-rate to social status by relating it to the numbers

[1] An authoritative treatment of the issue will be found in Carr Saunders, A. M., "Differential Fertility," *Proc. World. Pop. Confer.*, Arnold, 1927. He concludes that there is "A firmly established correspondence of high social status and low effective fertility," and points out that if fuller understanding, as a basis for action, is to be achieved, the Government must co-operate in future to gain fuller information from all areas. He notes that population is being unduly recruited from country districts to the towns, from Wales more than England, from the Midlands more than the North and South. Observe how this agrees with the notion that Mediterranean types (most dense in Wales and certain Midland areas) constitute a more prolific lower class. See also *Fertility of Social Classes*, Dr. Stevenson, Royal Statistical Society, 1920.

[2] i.e. the last century. Dr. Heron concluded from his studies, which were some of the earliest, that a dysgenic process was fairly under way in 1850.

of servants in the families concerned. He found the following figures (among London boroughs) :

	Birth-Rate
10 domestic servants for 100 families . .	31.56
10–20 „ „ „ „ . .	25.82
20–30 „ „ „ „ . .	25.63
30–40 „ „ „ „ . .	25.50
40–60 „ „ „ „ . .	25.36
Over 60 „ „ „ „ . .	20.45

A collection of further independent evidence will be found in an article "Occupational Differential Fecundity" by H. Hart, *The Scientific Monthly*, Nov., 1924.

Now to the evidence of birth-rates and innate mental capacity. Green[1] has shown that the birth-rate for feeble-minded women is two and a half times as great as that of the married alumni of Universities and that, since the death-rate among the feeble-minded proves to be no higher than for the general population, the feeble-minded are far more than maintaining their numbers at each generation. Dayton,[2] enquiring into the history of 10,455 mentally-retarded children, found that children at the lower levels came on an average from families twice as great as those in the upper level, confirming that retarded and mentally-deficient parents are more than maintaining their numbers. Terman and others, studying 1,400 highly gifted children, falling well within the highest 1 per cent. of the school population (*Genetic Studies of Genius*, Vol. I,) found that they came from families whose fertility was far below the level necessary even to keep their numbers constant.

Researches in Britain reveal exactly the same state of affairs. Leonard Darwin remarks that in this country families which include mentally-defective children are on an average about half as large again as the families only including normal children. Sutherland and Thomson[3] found on 2,800 English and Scotch children an appreciable negative correlation (–0.25 –0.02) between intelligence and size of family. A similar result was obtained by Lenz[4] on 4,330 cases. He found correlations varying from –0.095

[1] "Birth and Death Rate of the Feeble Minded," *J. Juv. Res.*, 1928, XII, 244.

[2] Dayton, N. A., "Intelligence and Size of Family," *J. Hered*, 1929., XX, 365.

[3] Sutherland, H. E. G., and Thomson, H. G., "The Correlation Between Intelligence and Size of Family," *British Journal of Psychology*, 1926, XVII, 81.

[4] Lenz. J., "Relation of I.Q. to Size of Family," *J. Ed. Psych.*, 1927, XVIII, 486.

in one district to –0.41 in another. The present effect of the increasing number of relatively unintelligent children in our schools has been well investigated in an article "Can present scholastic standards be maintained?" *Forum of Education*, 1925.

The effect is present at all levels of society. Willoughby[1] found a correlation of –0.3 between fertility and intelligence among college students. The evidence of a wholesale dysgenic national career, taking place in most civilised nations, unknown to the common people and unheeded by politicians, is as complete and overwhelmingly convincing as ever it was.

Evidence in regard to mental instability, a very different thing from low intelligence, is on the same lines. Patients in mental hospitals increased between 1880 and 1923 from 40,942 to 267,617 (533.6 per cent.) which means a rise from 81.6 to 245 per 100,000 of the total population.[2] This in itself is not direct evidence, since other causes—increased accommodation and more exacting environment—are not eliminated. Nevertheless there is good evidence that despite the special obstacles to parentage which insanity involves, and despite the more educated public opinion on the marriage of the unstable-minded, such people are still not only holding their own in the population, but increasing.[3] Major Darwin[4] remarks, "The facts before us indicate that mental illness is more likely now to be increasing than decreasing." The last report of the Board of Control of Lunacy (1930) shows an increase for 1929-30 of 1,774 persons notified as insane, whilst the average annual increase of the preceding five years was 2,056. The report adds, "we can find no justification for the pessimistic suggestions so commonly made that the pace of modern life conduces to mental breakdown." The emotional strains of modern life are almost certainly less than those of earlier eras: the increase of insanity is almost solely due to the dysgenic increase of those with weak temperamental stability.

It has long been known that men of outstanding ability tend to be unmarried, childless, or fathers of very small families.[5] This dysgenic effect alone, acting on a few families of the utmost social value, must have an appreciable effect in arresting in

[1] Willoughby, R. R., "The Survival of Intelligence," *Proc. Nat. Acad. Sci.*, 1928, XIV, 892.

[2] *Eugenic Review*, XVIII, 1, 26-27, p. 253.

[3] It must be remembered that some forms of insanity are hereditary, some are not, but that a great number of insane persons are sprung from parents mentally abnormal and neurotic, though not abnormal enough themselves to be classified as insane.

[4] *Eugenic Reform.*

[5] Evidence in Kretschmer's *Psychology of Men of Genius*, and Herzberg's *The Psychology of the Philosopher* (Kegan Paul).

America the progress of civilisation. The number of insane has increased steadily from 67.3 per 100,000 in 1850 to 245.0 per 100,000 in 1923. Psychologically, we are inclined to regard the increase of insanity as less lamentable than that of mental-deficiency, a view which Tansley[1] shares. It may be the unfortunate by-product of a general increase in plasticity of mind which would in some respects be desirable. This, however, is pure conjecture, whilst the increase in insanity is a fact. The early eugenists were much concerned with the decay of physical traits, the tendency of the weakly-constituted to have more children than the robust. To-day we are more impressed with the mental decline, but we must not, on that account, overlook the former problem. Professor Jennings[2] has recently issued a reminder of the importance of this factor. We may turn for further evidence to Eldon Moore's[3] collation of results, which show that between 1883 and 1919 there was an average decline for the whole country from 67.4 to 65.7 inches in stature, from 36.4 to 32.75 inches of chest girth, and of 148.7 to 128.4 pounds in body weight.

Armstrong[4] in his vigorous treatment of the situation quotes the report of the Ministry of National Service as follows:

	1883	1917–19
Height in inches . . .	66.9	65.1
Chest girth in inches . . .	34.2	32.2
Weight in pounds . . .	131	116.5

for this country. Such a change may be partly due to real degeneration and partly to the supplanting of a larger race by a small one. It is partly an additional proof of the tendency for the Nordic race in England, happening to fall more in the upper classes, to be outbred by the Mediterranean (particularly Welsh) elements. Two minor points must be noticed if we are to gain a true picture of the situation.

Firstly, although the general tendency is strongly dysgenic, i.e.

[1] *The New Psychology.*

[2] Jennings, H. L., "Health Progress and Race Progress," *J. Hered.*, 1927, XVIII, 271, reminds us of the earlier *a priori* argument, that with the removal of natural selection, there is the opportunity for all sorts of physical inferiorities to appear. Modern medical and scientific skill have made possible the survival of harmful and degenerate genes, which, under primitive conditions would rapidly have been eliminated. The race must be defended not by neglecting protection of sickly individuals, but by refusing them the right to propagate.

[3] *Eugenic Review*, XVIII, 26-27, p. 124, "Social Progress and Racial Decline."

[4] *The Survival of the Unfittest*, London, 1929.

towards racial decay, there are here and there small currents still maintaining the opposite direction. In any single stratum it appears that the most "fit" are the most fertile. Woods has shown that among Harvard graduates and English peers the most outstandingly successful individuals have the largest families, and that unmarried members of these groups are less distinguished than the married ones.[1] Secondly, there is a tendency for infertility to be associated, over and above class, with those rising in the social scale. The notion of such an effect was perhaps first developed by Arsène Dumont[2] when he pointed out that, with the removal of the privileged classes, there began a competition on a wide basis to rise in the social scale. The success in rising, the "social capillarity," he believed to be inversely related to the birth-rate. The evidence is now pretty complete that the effect of rising in the social scale is to reduce the size of the family. It may in most cases be assumed that the family is severely limited in order to assist in social penetration—to get better education and opportunities for the children.[3]

Equal opportunity for all, therefore, has the unexpected effect of reducing national effectiveness in the long run, unless eugenic measures are taken at the same time. The man of energy and ability who now rises socially and neglects to produce a family, was originally tied down to a position which gave him little scope, so that he was more likely to express his energies in a home and a relatively large family.

Now if there is a constant "dying-out" at the top, accompanied by an increase in numbers of the lower classes, we should expect that in the flux of classes there would be far more upward than downward movement. This would apply to the great body of the nation, not so much to the small percentage of aristocracy and royalty, where aristocracy still exists; for, as Woods has shown, aristocracies, owing to their privileged and relatively sheltered position, generally maintain their numbers.[4]

Such a movement has been detected and roughly estimated

[1] Woods, F. A., "Survival of Ability," *Science* 1927, LXVI, 429.

[2] *Dépopulation et Civilization.*

[3] *Eugenics*, 1928, i (positive correlation between fertility and success as between members of same class, negative between classes); and in Woods, F. A., "Is the Human Mind still Evolving?" *J. Hered.* 1917, XVIII, 305, evidence that within each class better intellects have larger families. See Fisher, R. A., "The Differential Birth Rate," *Eug. Rev.*, 1928, XX, 183 (evidence that families showing rapid promotion are smaller than those showing small promotion).

[4] Woods, F. A., "Perpetuation of Old Families," *J. Hered.*, 1928, XIX, 38, and "Aristocracies and Mental Evolution a Social 'Conification.'"

in an enquiry by Ginsberg,[1] who found a continuous drift from lower to upper classes with scarcely any movement in the opposite direction. The upward movement in comparison with the slight downward one was especially great in the present generation, i.e. the effect of the dysgenic process is now beginning to be strongly felt. The questionnaire method which he used is not entirely sound. Those replying were apt to depict their grandparents and parents on a somewhat higher social plane than that to which they actually belonged. (The writer was one of a group to which these questionnaires were sent and was able to observe these effects.) This would affect the quantitative results, causing the upward drift to appear less than is really the case.[2] Other investigators, however, have obtained equally clear evidence of this drift. R. G. Fisher estimates that the upward social drift across the median (mid-social line) is from a quarter to half a million annually.

Such a result can be confirmed indirectly in a variety of ways. Beckmann, for example, has found that of 750 applicants for employment in Cincinnati, a large percentage were following occupations generally considered superior to those of their fathers.[3] We may speak of these new-comers as replacing those whose family lines have petered out, but a little thought on the facts already given will show that that is a very misleading description. "Replacing" is an inaccurate expression. There is, of course, owing to spontaneous variation, a constant production of new gifted strains in small numbers among the less gifted classes, but this is balanced by an equal production of less gifted numbers, with the result that the upward trickle would be balanced by a downward one, if the pressure on both sides of a social division were the same. No such downward movement is detectable, therefore the general upward trend of individuals in society is in truth only a downward trend of the standards of intelligence and enterprise which are traditional in the various professions and occupations. The magnitude of the dysgenic process can be judged in many respects from the figures already given. Its full enormity can be best appreciated, however, if one looks at Professor Karl Pearson's statistics, which tell us that approximately one-quarter of the present generation is producing one-half of the next. That quarter is, all things considered, the least desirable quarter.

[1] Ginsberg, Morris, "Interchange between Social Classes," *Econ. J.*, XXXIX, 1929.

[2] *Eugenic Review*, 24-25, XVI, p. 302.

[3] Beckmann, R. O., *Vocational Guidance Mag.*, 1929, 89.

VII. Fools, Rogues, and Eugenists

Here we have a situation that anyone with an ounce of imagination can only regard with the gravest concern. It has been perceived by a few thinkers, well in advance of their age for over thirty years. An organised society, the Eugenic Society, has been striving to educate public opinion and has been measuring the rising tide of social deadweight with more precision and completeness for the last twenty-five years. Men like Darwin, McDougall, Huxley, Inge and Wells have sought to catch the public ear. They are voices crying in the wilderness. Politicians and the press, knowing no future and no past, superbly ignorant of biology, go busily on their way, arranging vastly important matters of to-day, unable to pause long enough to give ear to anything so complicated as the theses which these unimportant scientific bodies propose.

Let us face the implications of the situation. The inheritable physical and mental qualities of most civilised nations have begun to degenerate at an alarming rate. No pressure of education can postpone collapse more than a few generations, indeed it can only make the collapse more sudden and complete when it arrives. Greater wealth, greater supply of mental equipment, greater freeing of mental energy by organisation and mechanical aid, merely hide from our eyes the steady decay of real ability. A stiffening growth of social conservatism, like the hardening of arteries in the aged, will herald the end in an attempt to preserve what is left.

Already the cost of mental-deficiency in education alone is very great. Hollingworth[1] reminds us that "the cost of educating a feeble-minded child (one falling into the lowest one or two per cent. in the distribution of general intelligence) in a special class, is over twice as great per annum as is the cost of educating an average child in the regular grades." The cost of maintaining an increasing number of institutions for the mentally-defective and insane adults must be still greater. And out of institutions the cost can be no less, for the accidents, the wastage of time and material, the inefficiency through illness, etc., avoided by more intelligent people, must be an immense burden on the rest of the community. A large percentage of our unemployed fall into the lowest group as regards general intelligence. An industrial civilisation as organised at present demands a certain reserve of unemployed to meet industrial demands, but we have far more unem-

[1] *Special Talents and Defects*, p. 207.

ployed than would normally meet that demand, and the excess is largely built up of true unemployables. The connection between the great increases in low-grade intelligence in the last generation and the increase in unemployment over the same period has quite escaped the popular mind. In general we bully, ill-treat, and penalise the inferior and the feeble-minded in every way, almost as if they were responsible for their presence. A person of inferior intelligence, under the slings and arrows of his outrageous fortunes, indeed needs a greater character than does a more intelligent person, to enable him to escape a criminal, anti-social attitude to society. That is why so many criminals are recruited from the feeble-minded. Only recently have we housed the feeble-minded by themselves and still we goad the unemployed. Let us house them palatially, let us give them every comfort and diversion, but, for the sake of the future and the avoidance of greater cost to come, let us ensure, by enlisting their co-operation, that they do not beget still larger numbers of their kind.

Those who have been left in charge of national affairs may be ignorant of science and unable to appreciate the convincingness of predictive biological reasoning, but their training usually gives them a lively respect for history. History confirms by innumerable examples the suddenness of the cultural collapse which follows a few generations of dysgenic social change.

Since psychologists and sociologists have drawn the attention of historians to the fact that such a dying out of the better strains of innate ability may explain the fall of earlier empires and civilisations, the view has received substantiation and general acceptance.

The civilisations of Central America, of Burma and Egypt, no less than those of Greece and Rome became "thin on top," lost the powerful personalities and classes that were holding them together and guiding their enterprise. Then, after enduring for awhile as a hollow mask of tradition, pomp and wealth, bereft of all vital human qualities, they collapsed.

It so happens that in Greece and Rome, as in the more northerly nations of Europe to-day, the upper classes and at one time most of the free citizens, were mainly Nordic and Alpine-Mediterranean-Nordic respectively, so that some anthropologists have seen that collapse as a "denordisation" of these populations.

Thus Günther remarks,[1] "The decline of Rome, like that of Sparta and Athens, can only be regarded by European race

[1] *Adel und Rasse*, p. 13: "Wie den Untergang Spartas und Athens, so musste die 'Rassen Kunde Europas' auch den Untergang Rome als einen vorgang der Entnordung beschrieben."

science as a process of denordisation"; and Barker, not partial to racial explanation, remarks, "A disturbance of the racial composition of the effective core of the Roman Empire was one great cause of its fall."[1] Such a tangible sociological process, and no mythical and mysterious "history cycle" such as Spengler and others love to imagine, has caused the rise and fall of empires.

By an anthropological coincidence Britain[2] has the same general racial constitution as ancient Greece, and precisely the same process of replacement of Nordics by Mediterraneans is going on as led to the substitution of present-day Greece for ancient Greece.

And it is a mistake to imagine that because a minority in our civilisation has become clearly aware of the situation, we have turned the corner. Some of the classical writers of Rome were clearly awake to the danger, and Plato, though he showed no knowledge of a dysgenic process going on around him—it is difficult to see how he could in the absences of population censuses and measurements—sketched the first (and quaintly immoral!) eugenic community.

That these civilisations collapsed and left the world to struggle out of its ignorance afresh, was a tragedy on an immense scale, but it is not to be compared with the final night of humanity which would ensue if Western civilisation collapsed. For with Rome there were always barbarians—gifted and enterprising barbarians, beyond the walls. But beyond our present civilisation are no untouched hordes to draw upon, nothing but peoples, millennia behind ourselves in the evolution of innate capacity.

Some eugenists have been accused of exaggerating.[3] Certain sections of the community have become irritated at having their eyes opened to problems beyond the petty troubles of their times. Alas, it is difficult to anyone who has studied with an open mind all the data now available, to see how there could be any exaggeration. And if here and there over-emphasis occurs, it is a very rational over-emphasis in a world rendered deaf by the blare

[1] *National Character*, p. 47.

[2] See, e. g. Barker, "Records of the past suggest we were fairer." It is, of course, immaterial what racial origin the superior and inferior strains have. Eugenically it is only important that the types with greatest ability, of whatever race or mixture of race, shall contribute most towards the next generation. It merely happens that superior and inferior corresponded to some extent to racial differences.

[3] Certain critics of some eugenic assertions are doing good work from the scientific standpoint, but exercising an unnecessarily harsh and hypercritical reaction to popular exposition. Professor Pearl, for example, goes too far in denying eugenists the use of every fact that is not proved up to the hilt, and in some cases he has disregarded considerable evidence. The wholesale rejection of psychological evidence by Duncan, who is apparently an anthropologist, renders much of his discussion worthless.

of newspapers, advertisements, and politicians dealing with superficial things.

The eugenist occasionally over-emphasises for exactly the same reason that an engineer over-emphasises the loads that are ever likely to pass over his bridge: the chances of collapse may be relatively remote, but the dire tragedy and loss resulting from such a collapse are scarcely to be contemplated.

Without a doubt the first item in any political programme, outweighing all other economic and political problems in importance, is that of stemming this tide of mental and physical defect, of holding it and rolling it back upon itself.

Eugenic endeavour faces unnecessary obstacles through the prevalence of the ignorant and irresponsible. Occasionally it faces real opposition from financial and religious institutions interested in an increase of the financially dependent and the unaspiring. Always it is battling with the hydra of stupidity in those who are supposed to lead.

VIII. From Racial Degeneration to True Racial Progress

What steps can be taken to arrest the downhill course of dysgenic processes? Any attack on the problem bristles with difficulties, for though we have ample evidence as to the nature and amplitude of the effect, we have little knowledge of its true social causes, which are subtle and difficult to track down. Unequal birth-control by artificial means is clearly one factor. A fairly general knowledge of birth-control methods has existed in the upper classes for over a century and has gradually spread to the lower classes. This greater knowledge of birth-control in the upper classes in itself might account for the increasing restriction of births as we pass upward from the lowest classes (whose members being ignorant of birth-control, and in any case careless of the birth-rate since they do not bear the burden of educating their children, have large families) to the classes which have both the means and the will to restrict births.[1]

It has sometimes been debated whether a low birth-rate goes with social position as such (whatever that may be), with wealth,[2]

[1] A fourth factor of poor fecundity, i.e. physical disability to procreate, has sometimes been asserted of the upper classes. There is no evidence for it.

[2] Raymond Pearl believes that the evidence shows (*The Biology of Death*) that: "it is apparently the *poor* and *not merely* morons and defectives, that have a high birth-rate" (p. 169). (He overlooks the fact that the poor may be somewhat less intelligent than the rich—and looks at psychology as if there were only morons and normals without any intermediates.) Looking at

or with education. Certainly education is one of the most powerful sterilising agents, and it acts most on the people whose children would be especially valuable.[1]

Rollins, W. A.,[2] found that college graduates were less fertile than their less educated brothers and cousins, and that they married later.

The restriction of family seems in this case to be deliberate. Rice, collecting the views of undergraduates on prospective families, found that 75 per cent. of the women and 83 per cent. of the men desired families containing fewer than three children, and that their prospective families were too small to preserve their group at a constant number. Both Inge and Leonard Darwin, who have done so much for the eugenic movement, seem to think that all this restriction of births among more educated people is to be solved by financial legislation.[3]

In spite of the fact that wealth correlates positively with infertility, Inge would lessen the burden of taxation on the middle classes in order to increase their fertility. The scheme of contributory allowances[4] proposed by Darwin, whereby each class or profession supports its own children as a whole (making allowances to parents according to family size), but makes no contribution to those of other classes, points the same way. Both would work the same way, stopping wealth now deflected to the lower classes, and so plunging into the pit of carelessness many who now stand on the border-line of destitution. Thereby the birth-rate of the lower classes would be increased, while it is doubtful whether the desired effect on the middle classes would be produced. Terman, *Genetic Studies of Genius*, p. 116, "the fertility index" (of the families of 100 gifted children) has decreased by 50 per cent. in a single generation and is far too low to maintain the stock. This points

the matter merely from the point of view of numbers, he adds, "it is equally desirable because of the menacing pressure of world population to reduce the birth-rate of the poor, even though this unfortunate moiety of humanity be in every way sound and fit" (p. 171).

[1] Hooper, R. M., *J. Hered.*, XXI, 1930, found, on an average, about 70 per cent. of non-graduates of university women of more than ten years standing are married, whereas only 60 per cent. of the graduates had married.

[2] *J. Hered.*, 1929.

[3] Darwin, *Eugenic Reform*, p. 164, remarks: "Several arguments may be brought forward to show that it would be advantageous if the birth-rate of the different sections of the nation were to become proportionate to the average incomes earned." This may be readily granted in view of the facts already encountered. The birth-rate is, of course, exactly the other way round, and it is difficult to see how an increase of wealth gradient would reverse it again.

[4] *Eugenic Reform*, p. 134: "Contributory schemes should therefore be introduced by the Government into all public services, and should be privately organised in all professions and well-paid employments."

to dysgenic practice being naturally on the increase and as yet unaffected by propaganda. Notice that this agrees with Ginsberg's results that social capillarity has been rising *a fortissimo* in the last generation.

That financial factors are important cannot be denied. Professor Karl Pearson, whose opinion must carry great weight, has remarked that "the economic value of the child will in the long run govern its production" (*The Problems of Practical Eugenics*, K. Pearson.) This may indeed apply to the self-supporting classes, but what of others ?

W. C. Marshall ("The Effect of Economic Conditions on the Birth Rate," *Eugenic Review*, V, 1913-1914, p. 119) remarks: "The repeal of the old Poor Law in 1834, which abolished the bonus given for each child born, whether legitimate or illegitimate, was followed by a drop in the rate of increase of the population."

On the other hand, as Dr. Heron's thorough enquiries clearly show, extreme poverty raises the birth-rate considerably. The effect of economic conditions is therefore not by any means simple and uniform. In certain classes increase or decrease of available wealth will cause respectively an increase or decrease in the number of children ; in classes at a lower level it will have the reverse effect. Even in upper classes the stimulating effect of wealth is probably only momentary ; as soon as the new generation accustoms itself to the new standard of living there will again be a restriction of birth in order to maintain the inflated standard.

It is probable that the low birth-rate of the middle and upper classes, in so far as it persists after these classes have become aware of the danger their practice is causing to posterity, is due mainly to false standards of living. A desire on the part of the womenfolk to avoid parentage (Inge himself has called this class of woman "the largest and most irresponsible leisured class the world has ever seen"),[1] the attempt to maintain standards of comfort, leisure and amusement which the present stage of our civilisation cannot maintain on anything less than slavery of other individuals, and an attempt to provide expensive education for its children instead of allowing them to enter the free competition of the state schools.

With the increasing education of the lower classes and a free propagation of birth-control knowledge, the writer believes that the lowest classes would, within a generation, cut down their birth-rate to one compatible with their incomes. Granted such education, he agrees with Darwin that parents who are unable to support the

[1] Inge, p. 7.

expense of their children, and who persist in breeding, should be segregated.

Actually within the classes that are aware of birth-control possibilities, that is among the increasing population which has children or does not have them according to deliberate intention, there is now going on a positive eugenic process with regard to at least one highly desirable set of character features: the people with the greatest sense of duty, of self-sacrifice, and love of children are having the largest families. In so far as these qualities hinge on heritable dispositions we shall be breeding a nation innately better fitted to sympathy with true life values, to social co-operation, and to concern for the future.

It should be our aim to spread this effect by awakening the upper classes to the falsity of their outlook, acquainting all classes with birth-control, and educating the whole nation to eugenic facts. At the present juncture a strong educational drive on the part of the Ministry of Health to leave no one, however poor and ignorant, unfamiliar with birth-control or unable to reach a birth-control clinic, would do more than anything else to raise the cultural and economic level of the nation in the next generation. In addition it will be necessary to prevent the propagation of the ½ per cent. of the population composed of extreme and dangerous defectives by methods of sterilisation and segregation. All the steps suggested in this section are steps immediately possible, and possible without any great access of wisdom or imagination among our legislators. With more positive and constructive movements which could be realised, granted such an awakening of popular opinion to the possibilities of scientific control, we shall deal in the final chapters of this work.

Some of the very forces which should be educating the nation to realise the extension of moral responsibility to this new sphere, indeed the very institutions which were endowed in the past to fulfil functions of moral education, are most remiss. Inge remarks:[1] "Very little interest is taken in the subject in religious circles, and the notion that it is part of our duty to our neighbours to think of the physical, intellectual, and moral improvement of our human stock is still strange to the vast majority."

We have seen that the surest way to arrest the worst streams of the dysgenic process would be to spread the knowledge of birth-control to the lower classes. Such a movement thoroughly carried out would arrest dysgenic processes at their swiftest point. The general in war is always looking for a flank which he may turn. He seeks for the ultimate end of a long line, as the

[1] "Eugenics and Religion," *Eug. Rev.*, XII, p. 257.

point at which pressure is to be placed for a most effective attack. In the great war of peace against the forces of misery, poverty, ignorance, and vice, there is no point at which one could better start than by efficiently spreading birth-control facts[1] among the poorer classes. Yet religious institutions are the chief obstacles to that step.

To demonstrate the immense social, economic, and cultural advantages which would inevitably arise from eugenic measures is too extensive a sociological calculation to present here, and is, indeed, unnecessary, for the general effects of eugenic and dysgenic processes are written large in history in terms which all can understand. One argument of convinced eugenists, however, requires discussion, for it presents some startling features which have met with abrupt criticism from economists. According to their argument, wealth-earning capacity is inherited. Breeding from a heavily-earning section of the community would produce a new community possessing the average (real) wealth previously restricted only to this section. An increase in birth-rate among the easily self-supporting classes and a diminution in the poorly self-supporting, would therefore have, as Major Darwin has said, the beneficial effect of an increase of capital in the community. *This idea of wealth adhering, as it were, to psychological qualities,* independently of the presence or absence of other strata of the community, may appear absurd, and doubtless it is only an approximately true statement, but further investigation, we are convinced, will show that it is not so absurd as it looks. We shall discuss this notion more fully in the last section of this chapter.

IX. War and Progress

To discuss the biology of war would have perhaps seemed most appropriate in the previous chapter during the investigation of

[1] In Holland contraceptives have been available by Royal Decree since 1888, and in an article quoted by Darwin (op. cit., p. 346) from the *Medical Times*, April, 1917, p. 6, we read: "According to the official statistical year book of the Netherlands the proportion of young men drawn for the army over 5ft. 7in. has increased from 24½ per cent. to 47½ per cent. since 1865, while the proportion below 5ft. 2½in. in height has fallen from 25 per cent. to under 8 per cent." This is a remarkable tribute in view of the falling stature in other countries, especially those with large Catholic control. Armstrong remarks: "In nearly every 'Christian' country, including our own, the stature exacted for military service has to be constantly lowered of late. In Spain it has been lowered four times in the last forty years." I take stature as an easily movable quantitative index of physique (and incidentally of intelligence, since a low positive correlation has frequently been established between stature and intelligence).

the interaction of races and national groups. But since a full appreciation of the main issues is dependent on a knowledge of the processes within the nation which we have discussed in this chapter, we can only now profitably start a searching examination of the claims of Armageddon to aid in human progress. Since the international and economic effects of war are well understood to-day, it is mainly the intra-national effects which we shall elucidate. On the stimulating, vitalising effect of war on national life, there have been pæans without number. They turn out to be sad evidence of human delusion. Cramb, echoing the challenge of German writers, such as Treitschke and Bernhardi, proceeds eloquently: "I suggest to you . . . that in war and the right of war, man has a possession which he values above religion, above industry, and above social comforts; that in war man values the power which it affords to life of rising above life, the power which the spirit of man possesses to pursue the Ideal."[1] Surely it is more than chance that all the great disciples of war—from Churchill to Bernhardi—are masters of rhetoric? Where the cold factual evidence is lacking or adverse the attention must be distracted by a fine blaze of oratory. A certain flash of truth there is in Cramb's remark above. War is an earnest of man's spiritual power, as are all adventures where man's purpose triumphs over bodily pain, horror, and beastliness. But whereas of old, when war was eugenic, the seers were morally right in inflaming their emotions to extol the glory—the invisible glory—of war that meant progress, they are perverse atavistic minds who persist in doing so to-day. "Freedom from war brings national decay," declares the orator in face of the evidence of history that decay supervenes on great activity in war. But history is an uncertain indicator, a mere second-hand sociology. Let us turn to the direct sociological study.

It is necessary to notice that, in the phase of complete loathing of war which the shambles of 1914-1918 have left in all civilised hearts, warlike views are bound for a time to receive little entertainment and no support in popular thought. But when the emotional reaction of the present has passed, jingoists are just as likely to raise their heads again and obtain a following, for the literary men who are the chief purveyors of pacifist sentiments in numerous novels and plays, have provided no facts on which the war-mongers may stumble in rational argument.

At first sight it would seem that the ethics of evolution, in sanctioning inter-group competition, provided the groups are

[1] *Germany and England*, J. A. Cramb, published June, 1914. How different do these words sound in the post-war atmosphere!

of different race and culture, would sanction war if the capabilities that win in war are those which win in culture and peace.

In the latter part of this book, we show that evolution, greater and more effective evolution, is possible by survival processes other than those thrust upon us by warfare. We may therefore ask whether war aids evolution at all, and if so under what conditions. War truly receives its death-blow among rational peoples if, possessing no other advantages, it is demonstrated even to have lost its action of natural selection.

It is impressive to dwell on the horror of war, but one will never dissuade a religious, patriotic man by emphasising the suffering or the colossal wastage of energy and material that war involves. Nature has always demanded a tremendous price, in the suffering and the wastage of life and time, for a minute step of genuine progress. That price has always been paid in animal species and it was paid by primitive man. Perhaps the modern cry is due to an unconscious awareness that we are not receiving our return for the expenditure demanded—though it is doubtful if any such perception is really involved, for all life cries for the easy and soft paths as if it had expected to get them.

There is every reason to believe that primitive wars were eugenic in their racial effects. The group with greater average courage, enterprise, and intelligence would tend to win providing the groups were of approximately the same size, a condition likely to be present more often than not.

Moreover, the likelihood of a large group being opposed to a smaller and more able group is less than that of the converse arrangement. For largeness in the group betokens greater success in the battle with nature and in getting ample provision of food. From considerations of social psychology, too, the larger group is likely to contain individuals with the more extensive powers of loyalty, of imagination and of co-operation. Victory, of course, would always be attended by loss—frequently of the best, though not of the physically-strongest types, but it would be followed by wholesale slaughter of the opposing tribes, extending frequently also to the women and children. More extensive territory and the opportunities for a larger population are now given to the victors, who in a generation could more than recoup their losses in war. Evolution was assured by such relative and absolute increase in the distribution of more able types.

Such matters should, I am convinced, as a matter of natural history be demonstrated in much greater detail and with actual evidence, but I think that those who have carried out such a

step in anthropological investigations will agree that my outline does very little damage to the truth.

Now modern warfare has none of these essential features of tribal warfare. Let us for a moment overlook the division of the nation into classes and suppose that each member of the nation is as innately capable as any other, but different in biological type from the members of other nations. Victory in warfare between two such nations may be accompanied by an indemnity which does little or nothing towards producing economic conditions which would favour an increase of population in the winning groups. Or again, the victors may annex land *with the inhabitants*, into which a mere sprinkling of its own population may spread.

In any case neither the gains in wealth nor the increase in population are equal to the losses. We have learnt that in modern war all are losers. It might still be urged in regard to the survival effects that so long as the innately better group has emerged *relatively* well off, evolution is satisfied. This is fallacious. Nation A may issue victorious from a war with nation B and accept enough land as an indemnity to enable her to produce population almost to the extent necessary to make good her losses. The loser, meanwhile, would be checked both in power and in population increase. In the long run both would recoup their actual losses, but the victor would now have a more extended basis on which to continue evolving his own type. So far the results are fruitful of greater survival of the more capable A type. But actually both groups would be thrown back eugenically and economically in relation to the rest of the world. Providing the rest of the world also indulged in equally frequent assays of strength in war, the A type would retain its relative advantages. In short, progress of innate powers would be proceeding, though less steadily and swiftly than under the more thorough-going condition of primitive tribal ethics. Now this theorem was based on the assumption that nations were simply groups of equally endowed and similar individuals; that, in short, they were homogeneous, structureless bodies. Of course, nations are not so constructed, and with the removal of this simplified assumption and a return to the real complexity of the facts, falls the whole support for modern war.

We shall see that modern warfare results in a loss of life in each nation of the best types, and so precludes the possibility of the losses ever being made good, apart from specially introduced eugenic measures. War reverses evolution instead of furthering it. Where is the evidence? It lies firstly in the opinions of men who have studied past wars in historical records and present wars in statistical observations. Though no statistical observations have

yet been complete, we can rightly heed these opinions for, as Milton recognised, "Opinion in good men, is but knowledge in the making."

Chancellor D. S. Jordan, of Stanford University, has attributed the decline of Rome, Greece, Spain, Korea and possibly Italy, to the dysgenic effect of war far more than to the slower dysgenic process of peace. In certain of these countries the same change would be produced by a diminution of the Nordic or Alpine upper classes relative to other types, and it is interesting to find that anthropologists proceeding independently on racial investigations have come to the conclusion that such a process actually took place. But Dr. Jordan does not hesitate to apply his conclusions nearer home. He believes that the dysgenic change is already far advanced in England. "In the breeding from poorer stock in a land from which the best has been sent forth, we find an efficient cause of the poverty and weakness in the London slums, and in the hopelessness of the poor throughout England,"[1] and continues :[2] "Why is it that three or four—some say eleven millions of Englishmen are unable to earn a decent living, or any living at all, in England to-day? Why is it that these same unemployed are found unemployable in Canada, in Australia or wherever they may go?"[3] The reversed selection of war has much to account for.

It may be incorrect to ascribe this particular condition to the destructive action of war on the better types, but there is widespread belief that war is now acting as a reversal of the survival of the fittest. "Beyond all question," says Ross,[4] "the World War caused a vaster destruction of the superior and entails a graver decline in innate human quality than any happening in all the previous history of man."

The same view is expressed by writers so diverse as Dean Inge, H. G. Wells, Principal Barker, McDougall, and many other serious social students. Here we have the warning cries of men who see a great danger. What further evidence have we as to whether it is an imaginary or a real one?

We know that the men who fight a country's wars are its finest physical specimens. They leave behind a section relatively weak in health, diseased and undersized. On the other hand, we have

[1] *The Eugenics of War*, p. 207. *Eug. Rev.*, V, 1913, p. 197.

[2] Ibid., p. 208.

[3] Let newspaper editors and those who imagine that our present conditions are due to temporary trade depression note that these words were written in 1913.

[4] *Principles of Sociology*, p. 386. Quoted by Duncan op. cit., X, 87.

no direct evidence that the men who are called to the war are also above the mental average of the nation; though it is true that an army cannot include in its ranks the insane, the neurotic, and the feeble-minded. But there is indirect evidence of a very reliable nature. Professor Spearman in his monumental work *The Abilities of Man* draws attention to the fact that many investigators have found that in any two groups physical defects and diseases appear to be more common in the one of lesser average intelligence.[1]

Terman in his study of children of genius remarks: "The (intellectually) gifted children as a group are above the best standards for American-born children in physical growth, for average height and weight."[2] They also exceeded the normal control group in arm-span, width of shoulder, width of hip, and grip.

In making a selection according to physique we are therefore selecting at the same time according to mental fitness. Remove for slaughter the nation's finest physical manhood, and you remove at the same time the more intelligent section of the nation, leaving behind the dull, the unbalanced, and the slow-witted. War is thus, in both physical and mental evolution, highly dysgenic.

There remains the possibility that war readjusts the balance by killing off in the actual fighting forces a highly disproportionate number of less able-minded and able-bodied. To readjust by such a compensating mechanism would in truth require a highly disproportionate death-rate of the less desirable relative to the more desirable in the fighting arms. It amounts almost to taking away a man's gold and silver coinage leaving him the copper and then hoping to make him better off than before by throwing away more silver than gold before handing the money back to him. Without such a compensating mechanism, the wars of history must have played havoc with innate qualities of the people concerned and put them one step further away from the attainment of a high culture. It may be a modicum of comfort to the eugenist to contemplate the probability that future wars, if any, will be no more deadly to the fighting services than to the civil population. This last remote possibility of a wholly or partially compensating eugenic re-adjustment in the actual fighting forces is, however, removed at the first examination for, apparently

[1] *Abilities of Man*, McMillan, 1927, p. 399. It is immaterial at the moment whether physical defect causes low intelligence or low intelligence leads to physical defect. See also Sandwick, *Journ. Educ. Psych.*, 1920.

[2] *Gen. Ste. Gen.*, Vol. I, p. 169.

within the groups that go to fight, death lays its hands selectively on the high in spirit and the strong.

Dr. Jordan has given, as an example of his evidence, that "from the University of Lexington, Virginia, there went out under 'Stone-Wall' Jackson a company made up partly of University graduates and partly of men from the town. Of the University graduates 40 per cent. were killed in battle, and of the men of the town 20 per cent."[1]

It is, probably safe to argue too, that other things being equal, it is the most idealistic, the most loyal, the most courageous, and the most determined, who run the greatest chance of perishing for their country. Varying conditions of war may modify that argument, but on the whole I think it remains true that those bearing highly desirable innate character foundations are the least likely to return home to create the next generation.

As regards physique alone it is interesting to notice the change that must have come about through substituting the bullet for the sword. In hand to hand fighting, the big man is in the first place likely to be avoided, in the second place he is more likely to be successful if engaged in conflict. The bullet reverses this. Galton made an elaborate calculation on size as a result of which he concluded that "where a man 16 stone in weight and 6ft. 2½in. high will escape from chance shots for two years, a man of 8 stone and 5ft. 6in. high will escape for three."[2]

We can get further evidence by comparing the mortalities of various ranks during the late war. It is unnecessary to prove that higher ranks are, on the whole, of greater mental calibre than lower ranks. In physical attributes they are generally bigger—the stature for commissioned officers averages well above that for men—whilst in intellectual ability they are on an average necessarily so. (The American recruits were actually graded, of course, into officers and men, by intelligence tests.)

Our own casualty lists for the Great War show almost exactly the same percentage of officers as men victims. As far as I know the casualties of other combatant nations revealed nothing strikingly different. There is certainly no sign of any effect through selective casualties which would even begin to compensate the nation for the removal of its best men into the fighting forces. War, certainly the last war, was as dysgenic as possible and wrought greater havoc to human evolution in four years than the influences of peace would have done in a hundred.

Moreover, it is probable that in any future war, the combatant

[1] *Eugenic Review*, V, 13, p. 211.
[2] *Hereditary Genius.*

nation will deliberately set out to inflict relatively permanent injuries on its antagonists by endeavouring to destroy principally the more able individuals. In any case apart from more far-sighted eugenic considerations, that is a sound war policy, for it most effectively destroys the aggression of the opposing nation. Thus in the last war, picked marksmen were invariably placed in positions of vantage to sight and shoot down the officers of the enemy infantry.

Against the clear and highly dysgenic effects of war so far recounted we may offset the following: War removes a number of excessively pugnacious types and those disposed to war and leaves a greater number of relatively peaceful individuals. The fighting force also does not absorb into itself an upper one per cent. of able political and industrial leaders. Even its own upper section is usually clear of danger.

Deaths due to disease were, in former wars, more frequent than those in battle, and always the famine conditions of war caused a great increase of deaths in the general civil populations. Facts such as these have caused some, e.g. Sir Ronald Ross, to question the conclusions of such writers as Dr. Jordan,[1] for death from disease selects the weakest. The reply to this is that it selects the weakest only in regard to germ resistance, and that with the growth of scientific microbe destruction, a natural immunity to disease is of little value in civilisation compared with other qualities.

Finally, the economic adversity following a war seems to impair particularly the fertility of the middle classes and to leave the lowest class untouched, so that once more the quality of the succeeding generations is impaired.

So far from war being the racial benefit that some foolish orators have claimed it to be, it is, as an instrument of evolution under modern conditions, an utter failure, and one of the worst curses that has ever sought to dwarf humanity.

A special committee of eugenists under Professor Corado Gini is now investigating the eugenic balance of the last war. It is to be hoped that the nationalist spirit prevalent in the country in which Professor Gini resides will not prevent his coming to true conclusions. Our line of argument has not been a direct one, but its result is quite unambiguous and fully in accord with the con-

[1] Thus the former shows casualties in two wars of the last century were as follows:

	Killed	*Wounded*	*Died of Sickness*
Crimea . . .	52,000	66,000	491,000
Franco-Prussian .	61,000	47,000	59,000

clusion of Major Darwin when he says: "It seems to me certain that the men who were killed in the Great War were decidedly above the average of the nation in many great qualities, both inborn and acquired, and that, consequently, its results have already been disastrously dysgenic."

X. Other Socio-psychological Mechanisms: Differences of Town and Country Populations

We have followed the innate differences of mentality as they lead to structuration of the body of a nation.

Gross differences of mentality and type have led to relations of aristocracies, freemen and serfs, lesser differences or changing social ideals, cause a much less defined splitting into classes with fairly great economic differences.

These economic differences lead to differences in state of life, ideals, and education which in turn lead to differential fertility and the passing away of the most socially successful strains.

In the clash of nation with nation there is a rough sifting of the population into the more and less fit, and in the reckless fever and desperation of war the former are flung into the fire, in order that the nation as a whole may be spared.

Thus far has our study led us. But even now the sociological effects of innate differences are not yet exhausted. It is possible that to some extent they determine the proportions of population adapted to particular occupations in each nation; the types of recreation, of artistic expression and amusement; the nature of communal settlement and the general mode of life adopted in various classes. And, if so, are the changes in innate type which are going on destined to lead the cultural life of the nation in any particular direction?

Intelligence is an endowment, which, quite apart from temperament or racial character, decides roughly the degree of complexity of the occupations which can be followed. And we have seen that the present dysgenic changes are leaving us with fewer and fewer men of high ability to carry on the most exacting professions and administrative leaderships. It may not be correct to say that there is a minimum intelligence for the performance of each higher professional occupation, but obviously the occupation becomes a different thing according to whether it is carried on by men of great or little capacity, and we may expect marked changes in the effectiveness, e.g. of medical work, if marked dysgenic or eugenic changes occur.

However, we have already examined occupational differences of intelligence: let us turn to more subtle effects of temperamental differences in social life. The Nordic race of Europe remained longer than the Mediterranean or Alpine in the hunting phase of existence. It is possible that some inborn tendency to hunting is more strongly developed in them, but it is certain that such a tradition, such a social inheritance persists among them. In Europe they became the dominant class—nobilities and royal families—and thus we have the spectacle of the upper classes persisting at the hunting stage of culture with all the moral ideals which hang around it, whilst the lower classes have passed on to the agricultural and industrial outlook on the world.[1] That opens an interesting line of thought—but one which, like many others of considerable social significance, we cannot follow here, because we should quickly leave the all too limited ground of psychological research and emerge on to a wild and useless tangle of psychological speculation.

Political differences, since they involve so much that is acquired, must properly be left till further research shall have shown how political opinions originate in inborn temperament and early educational influences and change under the influence of group suggestion, nationalisation, and the habits developed with age.

A man attempting to cross an unknown area of marsh or fen is tempted to follow always the firm ground, even though it lead him somewhat from the course he intended to follow. In studying social mechanisms the psychologist is at present impelled to confine himself largely to the effects of innate differences and of abilities rather than temperament effects, because even though he leave out many social effects that are of interest and importance in our immediate social problems he feels himself to be travelling over ground which psychological investigation has already made relatively secure.

But it is when we come to working out the interactions of classes and groups of people united in beliefs, notably indeed when we come to political events, that we are faced with the greater importance of psychological environment. The effects of the herd instinct have been followed out at length by Trotter in his well-known work (at a time, however, when the evidence was very limited).[2] General group suggestion effects have received much clarification from the work of F. C. Bartlett.[3] Psycho-

[1] Some discussion of these effects is found in Veblen's *Theory of Leisured Class.*

[2] *The Instincts of the Herd in Peace and War*, London, 1916.

[3] *Psychology and Primitive Culture.*

analytic effects have been widely discussed in works more noted for fluency than scientific character. Nevertheless, the mechanisms studied in psycho-analysis are of great importance in social life. As a result of childhood situations in which a boy is put in a state of hidden revolt against the father, we have many adult individuals who are continually opposed to whatever authorities they perceive. These inverted Vicars of Bray, always "agin the government," become communists, or enemies of current sentiments, or hypercritical, outlaw scientists. Such individuals have great value in certain places and in certain numbers. Psychological theory suggests that any considerable change in home or educational customs as they affect the child might considerably increase or decrease their numbers with far-reaching social effects.

A second process exemplifying the importance of psycho-analytic considerations in sociology is the mechanism of transference. Here we have a tendency, very marked in abnormal personalities, to shift emotional reactions from their true cause to some other object. The myriad annoyances encountered by a man in his daily round are projected on to some habitual scapegoat. It may be his unfortunate wife, but more frequently it is some abstract and less real entity—Foreigners, Baptists, Jews, Free Trade, Capitalism. In any case the result is a stronger reaction to this vulnerable object than circumstances really require. Whole nations by suitable newspaper suggestion, can frequently be brought to react in this way, canalising the everyday nervous irritation upon innocent political objects.

Most of these interesting psychological effects, however, are at present not susceptible to precise definition and measurement, and are thus removed from a purposeful analysis if they should be matters which it is necessary to control at the present social juncture.

We will therefore turn to a question which is bound in the near future to invite administrative action and which has some psycho-sociological values already clearly discernible: the question of the division of population into city and rural elements. In the first place, are there any systematic differences of city and country populations?

Cities are a recent phenomenon. The careful reader of history will be astounded at the smallness of medieval and ancient cities and their relative unimportance in accounting for the population of a country. Agricultural occupations, the absence of mechanised industries, and the inability to prevent a large city from becoming a plague spot were the causes of this smallness.

The vastness of the modern city and its tendency to grow

without stopping are matters for amazement and, for those who perceive the effects on population, matters for concern.

But what do we know about city and country populations as to psychological type ?

The birth-rate of cities is less than that of the country districts, sometimes considerably so. There is thus a continuous flow of population to cities with very little backwash to the country even though the cities only remain constant in size.

It has long been observed that the most adventurous, capable, and healthy tend to migrate to a city to struggle for its more attractive prizes. Thus we might expect the city population to contain the best specimens and the countryside to be relatively depleted of good types.

There is some evidence for this. A study of the production of outstanding men in America shows that "large cities yielded 2.1 times as many notables as the average for the nation, the small cities 2.3 times as many, and the suburbs 4 times as many, villages 3 times as many, but the strictly rural sections (farms) yield only about one-third the nation's average."[1] The facts may be interpreted in several ways, but let us leave them awhile and turn to the evidence on physical differences.

As Ripley points out[2] the early anthropologists discovered in Germany and Belgium that the cities have a population taller in stature than the country. They argued that this was due to the attraction that city life had for the Nordic elements of the population. Later work in other countries and in different towns has shown that this stature relationship is by no means the rule. Indeed the reverse seems to hold for large towns in Britain.

Dr. Beddoe,[3] the great authority on British anthropology, discovered a remarkably smaller stature of city populations. "The townsmen of Glasgow and Edinburgh are four inches or more shorter than the country folk round about, and thirty-six pounds, on an average lighter in weight." Ripley finally remarks :[4] "In other words, compared with the rural districts where all men are subject to the same conditions of life, we discover in the city that the population has differentiated into the very tall and the very short." He ascribes this largely to environment, overlooking that fact that (*a*) stature is little affected by such variations of nourishment as exist to-day and (*b*) country conditions can be quite as bad as town.

[1] S. S. Vischer *Who's Who in America*, 1924, 25, p. 29. Quoted by Duncan.
[2] p. 551.
[3] Ripley, p. 552.
[4] Ibid., p. 553.

Yet still Ripley fails to see the way out of his tangle of evidence, possibly because much evidence was not available then that is available now.

It appears that the main cause of this disposition of population is the much greater preference of the Mediterranean type for town life. (See, e.g., Professor Fleure's remark, p. 19.)

So far from the Nordic naturally liking town life, he seems to shun it. The larger prizes which fall more easily to him, the position for capacity and organising power, attract him. We might thus expect to find the masses of a town, especially of industrial towns, to be relatively Mediterranean and the upper classes who hold the better positions in the town and escape into the country whenever they can, to be relatively Nordic. Thereby, unlike the country, the groups fall into two fairly clear-cut stature levels.[1] East (op. cit., p. 189) notes in regard to America that "higher average intelligence of country men over city dwellers is revealed by the Army tests. Of the 44 million people making up the white rural population in 1920 nearly 34 millions were native born of native parentage, and almost entirely Nordic. This is in marked contrast to the urban population, where there were only 24 million native whites of native parentage out of 50 millions."

Our general conclusions as to the national effects of town and country life must therefore be: (1) Towns have a greater scatter of ability, attracting the best types from the country—a few outstanding men—and breeding larger numbers of low-grade types than would be tolerated in the country. (2) Where foreign immigration into the country as a whole is going on, the immigrant elements—often below average—tend to congregate in the cities. (3) Where there are Nordic and Mediterranean racial elements the latter swell the cities to a size making city life unattractive to Nordic types. The Alpine types seem even less fitted for city life than Nordics, but perhaps for different reasons.

Confirmation is ready to hand in the many results which Ripley has summarised, showing that town populations tend to be much darker than country ones. The vastly preponderating Mediterranean elements in towns would swamp the Nordic section and give a very high average "brunetteness." There is thus no need to invoke Lapouges' "foreordained urban type" which, following the bare averages, is a new product "tall and dark," a product which has no existence, but is an artificially created type of uncritically examined averages.

Professor Fleure in observing these facts has remarked, "those darker long-heads swarm in our cities" and "the shorter, darker

[1] A selection, non-racial, is partly to account for this.

long-heads . . . seem to have considerable ability, given a supply of food, to resist the diseases connected with overcrowding and even dirt, so that they survive in slums" ;[1] and later, "Let us turn to the men who are described as tall, fair long-heads, idealised by so many writers from antiquity onwards and condemned so bluntly of late (Great War) as the Blond Beasts . . . enterprise is a feature here, there is less of the fear of criticism that holds back the others. . . . There are certain tendencies to degeneration which one seems to find especially among people of this type whose opportunities are limited by circumstances, and some doctors think them especially liable to certain diseases, at any rate in towns."[2]

The slight tendency of Nordic types to prevail in samples of the upper class is therefore increased in the city by the inability of the Nordic to survive in anything but the more favoured situations.[3] The Nordic either succeeds in the city upper classes or is swallowed up.

It seems from the racial point of view that the Alpine types[4] are the most averse to town life and the most persistent in their clinging to agriculture and the out-of-doors. We can follow this in the results gathered by Ripley, e.g. those of Ammon showing a tendency for slightly greater town stature in areas where Nordic and Alpine mingle, whilst in Switzerland, a country mainly Alpine but slightly Nordic, the evidence for greater "brunetteness" in cities is very "conflicting." Nordic types resemble the Alpines closely in their comparative aversion for cities, though they are no lovers of agriculture, but it is the Mediterranean types for whom the city has an overwhelming fascination.

It may be that a partial explanation lies in the extraversion of the Mediterranean, his love of constant movement, social happenings, life and colour, and the absence of any inner mental life such as is cherished by the introvert and which tends to be destroyed by the constant external stimulation of the city environment.

Cities, we saw at first sight, were the great swallowers of selected population. A closer view has revealed a more complicated picture. They attract Nordic elements, producing total degeneration in the less gifted or lucky, and exercising an immense sterilising influence on those which develop into an upper class. Secondly, they attract still more strongly the Mediterranean elements which,

[1] *Some Aspects of Race Study*, p. 98.
[2] Ch. cit., p. 101.
[3] I use "survive" here in the simple sense—a failure to survive in the simple social sense often means a greater reproductive activity and greater biological survival.
[4] See Ripley.

however, make the city an immense breeding-ground.[1] Cities, like warfare, are therefore at present, concentrated spots of national decay.

XI. Biological Trends and Economic Reform

Although these selective effects of city and rural life are of more lasting importance, there are effects on the general mental life of each generation which are bound to influence the course of history. As yet the evidence as to the true nature of these effects is hidden under a more massive growth of popular conjecture. Cyril Burt in his study of child crime, has shown that the crowded city environment is one of the important causes of child delinquency.[2] Barker,[3] regarding cities from a sociological standpoint and speaking from the resources of his historical knowledge, concludes that city life is causing deterioration in individual character from its excess of external stimulation, its unstable employment, its lack of social recognition of individuals, and absence of social responsibilities.

There can be no doubt that in so far as temperament qualities are susceptible to change by environmental influences, the city, by removing opportunities for meditation, curtailing individual thought, and imposing mass opinions, is shifting temperament strongly towards the extravert extreme. That means a reduction of the numbers of men with truly original minds, a diminution of every individual's power of individual judgment, and a greater susceptibility to the effects of mass emotion.

In Chapter IX, in discussing practical proposals, we have dealt with the still more intangible effect of city life on mental serenity by means of its absence of beauty, of simple contact with nature, and the quiet interests of country life. It is argued there that a mild form of mental instability is set up by such conditions. An American investigator, Pollock,[4] observes that not in any one type of mental disease, but in all, the urban rate for both males and females is considerably higher than the rural rate. Trotter has asked, in view of the strength of the gregarious impulse,

[1] A comparison of the birth-rate of Berlin—a comparatively Nordic city—with say, Glasgow—a city with a very extensive imported Mediterranean element—will show, I think, that the city has a relatively great sterilising influence on Nordic and little or none on the Mediterranean.

[2] *The Young Delinquent.*

[3] *National Character.*

[4] Pollock, H. M., "Mental Disease in the U.S.A. in Relation to Environment, Sex and Age," *Amer. J. Psychial.*, 1925, V, 318.

whether we ought not to put some check upon it as we do with other instincts which conflict with social welfare.

It would cost relatively little to investigate the effects of city environment and so put individual lives on a new plane of happiness and effectiveness.

To reveal the social mechanisms which exist is not necessarily to agree with them, indeed apart from such obvious matters as the dysgenic trend in society we have, in this investigating stage, withheld all comment. Nevertheless, it is perhaps best to follow up here and now some of the broader implications lest false implications be unconsciously carried on by the reader to further chapters.

Firstly, the greater intelligence of the upper classes will always enable them, as a unit, to emerge victorious from any conflict with the lower classes except where any mechanism exists which gives importance to sheer numbers. Democracy and mob rule are the two conditions giving weight to actual numbers. The two notable occasions on which mob force has succeeded against upper class resources—namely in the French and Russian revolutions—have been characterised by unusual conditions. In both cases the discrepancy in numbers between possessed and dispossessed had been allowed to reach a dangerous degree (with hardly any middle class).

Secondly, the injustices were so flagrant according to ethics of the times that the revolutionaries were led by many highly able people from the upper classes attracted to their cause. Thirdly, the class differences in ability were not really so great as might have been the case, because systems of privilege prevented ability from rising from the lower classes: there was not the broad highway by scholarships and business opportunities which now leads most of the ability in the lower classes to awards better fitted to its merits. If force, and the pitting of skill against skill, are not likely under reformed conditions, ever to lead to a reversal of classes and the placing of power in the hands of the less intelligent is democracy likely to do so? By democracy I mean, for the moment, simply any system which, by counting heads or other artificial means, gives greater weight to a group than it would be able to assert in biological struggle by reason of total brain power and physical energy. The question is perhaps impossible of decision without detailed investigation, but in general there are so many indirect mechanisms, notably suitable codes of education, the press, and financial manipulations, open to use by the more intelligent group, that there can be little doubt as to its relative success. At the present moment, for example, when a financial

crisis exists of greater national urgency than any situation since 1914, and a dispute arises as to whether money shall be raised by cutting down unemployment benefit and those salaries within the government control or cutting down all salaries indiscriminately by increased taxation, there is virtually a class struggle going on, the upper classes calling for economy and the lower for taxation. By manipulation of newspaper opinion the possessing classes are enabled to give such an impression of impending calamity and dire necessity that in panic the lower classes will be stampeded into the acceptance of great economy cuts and the great increase of taxation will be avoided.

Even so, it is doubtful whether the more able sections of a community can be said to be exploiting the lower sections. We have no easy means of determining what would be the status of prosperity of the one without the other. Imagine, however, the situation of a group of highly capable and enterprising men landed among savages. They would organise agriculture and general production more effectively, take advantage of every opportunity to obtain natural wealth at present overlooked by the savage, and introduce customs and medical aids making life more vigorous and more tolerable. At the same time, in virtue of the same ability, they would succeed in virtually enslaving the savages to their will, by forcing them to work for any small wage, and constraining them to minister to a high standard of life on the part of their governors. Now, have these men exploited the natives? Have they lowered the natives' standard of living? Have they raised their own? They have, in spite of a main concern for their own prosperity, raised somewhat the natives' prosperity and well-being. Indeed, they have probably raised their own standard of living by no more. We can see this example in real life if we study the white man's occupation of Africa and other parts inhabited by races of smaller innate ability. But it lies even nearer home, in our European nations, if we can step out of our usual points of view in order to see it. The fact that the situation was brought about gradually and that we are not used to applying the term savage to ourselves, should not blind us to the existence of the same form of symbiosis. It is unlikely that, even in the complete absence of a spirit of national unity and co-operation between the classes, the poor would be less well off than if bereft from the beginning of the organising power, the foresight, the inventiveness, the benevolence and the selfishness of the class of greater average capacity.

At present the world believes itself to be suffering from economic disease. There is over-production and underconsumption. There

is a vicious circle of bad trade, reduced wages, reduced spending power, reduced sales, bad trade. Economists busy themselves to find a cure, and various credit schemes are suggested such as the Douglas Social Credit proposal which, by making credit a thing to be disposed of by the community instead of by the big banks, would "raise, continuously and progressively, the *purchasing power* of all existing wages, salaries, and dividends," and "increase the relative prosperity of the poor."[1] All such schemes seem reasonable enough, for, as Professor Soddy has argued again and again, there are enough goods in the world for all to have provision, so great is our productive power. But the distribution of wealth is such that half the world is kept in want from lack of power to buy. Whence the opposition of the bankers, and the conservative members of the community, to such reasonable schemes ?

Whence, for that matter, the opposition to the still more complete emancipation of the individual from economic difficulties as propounded in communistic schemes ? To say that communistic societies are impossible is nonsense, for they have existed from time to time. Economically they are easy to arrange ; it is in the psychological demands that they so frequently conflict with realities.

And what are these realities ? Firstly the acquisitive instinct evolved in man and other animals over tens of thousands of years by the necessity of providing for each family against inclement times. One of a man's happinesses is to have about him things that belong to him, and to watch the accumulation of his own store of good things. This instinct and other irrational inborn drives which would, unless painfully sublimated, find no satisfaction in communist life, are, however, only minor obstacles compared with the self-assertive instinct itself. The self-assertive instinct demands excellence of performance relative to the success of others. It leads a man to desire wealth not for any comforts or luxuries which it can purchase, but for its value as a token of success. This same self-assertion finds satisfaction in the attempt to give one's own children the best possible start in life. In this biologically dual aim—the success of the individual and the successful survival of his offspring—we see the subjective aspect of nature's plan to ensure the survival of the fittest by implanting a boundless competitive and self-expressive urge in all forms of life. The irrational tendency to make economic existence difficult for others even when one's own daily wants are satisfied, instead of adopting a plan which will make life comfortable for all, is but the expression in civilised, economic life of the age-old plan of nature.

[1] *Social Credit in Summary*, Credit Research Library.

What is more, it is a plan which we are bound to maintain until some artificial means is obtained of securing differential survival of the fit and unfit without actually penalising the living individual. The unemployed, as a whole, are below the level of ability of the employed part of the nation. Quite a large number are mentally backward and unemployable. They stand, as it were, outside a circle of employed people who can get on quite well without them. Although only a section of the total population is employed, it is able, by reason of intelligent methods, to produce enough to supply itself and the unemployed too. But the latter are earning no wage, so something must be given them in order that they may avail themselves of supplies which, in their absence, would be added to the wealth of the people employed. Our social advance is, therefore, such that already we want more high-class brains and fewer manual workers. The enterprise and intelligence of a few has already created a world fit for a much improved average level of innate ability. But nothing has been done to eliminate low intelligence levels in the general population: social science has done nothing to take advantage of the opportunity which mechanical science has presented. When we can control social life to the extent of inaugurating a scheme of constructive eugenics within the group we shall be able at least to do away with the major part of the individual competitive system. Then, perhaps, when the individual birth-rates are regulated by a constructive eugenic policy and all children, in consequence, equally cared for by the state, it will be possible to obviate also that part of self-assertion which expresses itself in the individual's own personal economic success. Our instincts are the only things that give meaning to life, but they are highly plastic, and doubtless there will be invented forms of communistic life which will provide socially desirable satisfactions for sublimated forms of the self-assertive instinct. However, this is the beginning of speculation, for it is impossible yet to say what social forms, combining the greatest group welfare with the maximum psychological expression, will be derived from the social engineering of the future. The present conceptions behind Communism, Socialism, and Conservatism are not so much wrong as beside the point. They lead to programmes of reform which are internally inconsistent when related to biological trends. They are chance crystallisations out of the last legacy of intellectual, political, and religious beliefs. Consequently, for the biologist, the social future would be uncertain even if the political future were clear. Two things are certain: That no group will long exist which removes economic competition and provides no artificial and humane selective process in its

stead; and that, even when such means have been provided, the ancient build of our emotional constitutions, particularly the acquisitive and self-assertive drives, will offer immense resistances to the humanity of the new possibilities just as it now offers great resistance to false substitutes for evolutionary systems.

. . . . .

The thesis of this chapter concludes that class distinctions arise whenever there are sufficiently great differences of innate ability and temperament qualities to require and produce them. The innate qualities (not all of which are desirable) leading to success are magnified by added differences of education and opportunity. In almost all parts of the world class differences in innate powers—especially where aristocracies are concerned—are partly racial differences. Owing to false conceptions of life engendered by class differences, and owing to humanitarian sentiments which exist in every unified group, the upper classes, containing greater innate ability, die out, and are replaced by greater numbers of less capable types. An upward social drift begins and is followed eventually by a collapse of civilisation within the group. Wars and large cities are added dysgenic influences. Historically, dysgenic tendencies went on only in patches of highly civilised life; now they are universal with the spread of civilisation. Consequently, eugenic efforts are now essential if evolution is to continue. Constructive eugenic systems, too, are necessary if there is to be any interference with the normal social differentiation in financial success.

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CHAPTER FOUR

ULTIMATE MORALITY AND NATURAL SCIENCE

"Ich lehre euch den Ubermenschen. Der mensch ist etwas das uberwunden werden soll. Was habt ihr getan, ihn zu uberwinden ?"

NIETZSCHE.

I. A Contradiction of Moral Laws

"GREATER love hath no man than this ; that he lay down his life for a friend." Surely according to the teachings of this great character, it would be still nobler love and higher ethical performance to lay down one's life for an enemy ? Yet our instincts go out willingly to the first proposition and stand aghast at the second.

Kindliness, unselfishness, self-sacrifice have been taught by all religions as universally good attitudes. "An eye for an eye and a tooth for a tooth," on the other hand, has remained an unwritten law obeyed in certain circumstances by all with the same sense of righteousness as belongs to the accepted ethical conduct.

Throughout the preceding chapters we have proceeded to apply an ethical standard according to which the fullest self-interest and self-expression of each life-form is the highest moral duty, because in that way only can new values enter into life through the evolutionary process. How is such a standpoint to be reconciled with the ethical systems that have been and are universally taught, if not universally heeded ?

The goal of progress applied as a plummet-line to the uprightness of national courses and the structure of class life, has led to judgments which must sound strange to many people accustomed to accept the current ready-made ethical beliefs without enquiry. At many points, the reader who permits no inconsistencies to mar his thought, will have been perturbed by sharp differences between his accepted, habitual standards of right and wrong and the moral values implicit or clearly expressed in those viewpoints. True, if he cares to examine the world and his own heart, he will find similar systems of belief, radically opposed to universal ethics, playing no minor part in action, but he will not find them boldly set out in text-books of ethics or ever preached as ethics by religious organisations.

Throughout this work we have proceeded with, on the one hand, a set of facts revealed by investigation, and on the other, an ethical measuring-rod to apply to those facts. Both of these are necessary in offering any effective guidance in social affairs, precisely as for the shipmaster both a map and a compass are essentials. With such confusion of compass indications as we are now facing it behoves us to make a thorough search for the true criteria of moral direction before continuing our journey.

II. Why Moral Confusion has so long Persisted Unresolved

Although every man is keenly interested in the right and wrong of individual and public actions, both because of his own inner conflicts and because of his interests in justice, and although he spends much time in discussing daily occurrences from this point of view, the subject of ethics has been allowed to become a notoriously dull one.

The causes are many, but one is undoubtedly the low standard of ability of writers on this subject. Nordau has asserted that of all philosophic fields the ethical one attracts the most dull and prosy writers. To this one can cite some outstanding exceptions, but its general truth should justify an enquiry into the psychological make-up of those who are impelled to write and preach on the subject.

Another cause is that it has become the tourney ground of dry-as-dust logicians interested in ethics only as a field for mental gymnastics, and of academic men who have tried to fence in, for their own amusement, a science of ethics remote from popular concerns.

There is no place for a "science of ethics" walled off in this way. In the first place, the subjects are too vital to everyday life to be left in the hands of the few ; and in the second place morality has no methods or materials different from those of sociology.

The writer on ethics may lay down a certain goal which he can define in a few words. Thereafter, nothing is left but to work out, according to the science of sociology, the customs and moral codes which it is necessary to adopt if society is to shape itself to that goal. Thus if the growth of mankind in power, in knowledge, and in happiness is our goal, we may wish to decide whether universal love and the sharing of all worldly goods is good or bad, i.e. is favourable to that goal or unfavourable. If we believe that the greatest happiness of all people is the proper goal, we may want to know whether indiscriminate sex-relations will in the

end be a greater help than a hindrance in attaining that state; and so on.

Even the shaping of this first goal, as we have seen, cannot be, as most writers imagine, a purely *a priori* construction, an aim chosen or invented at the will of the writer. It is a goal already given in the facts of nature and to be extracted from them like any other scientific generalisations.[1]

However, it is unnecessary at this point to insist on the immanence of the ultimate goal. Biological variability and the vagaries of cultural psychology have, in actual fact, led men to posit the most diverse ideal states. But even the more scientifically inclined seekers of moral law, of the type of John Stuart Mill, might disagree, between narrower limits, because of slightly differing scientific interpretations of nature. A sufficient step forward would be made, however, and morals would become a discussable subject, if one could but get rid of those moralists who imagine that they can posit any goal entirely "out of their heads" or who imagine that, a universal goal being agreed upon, it necessarily implies universal standards of behaviour, independently of the real psychological nature and situations of different peoples. Morality, in short, must be treated as a science both in itself and in its application.

If, as many psychologists assert, the tendency to moralise springs in most cases from the self-assertive instinct, from the will to power over others, or even from the sublimation of sadistic elements of character, which urge their possessors to interfere with the happiness of others, to persecute and harry them in the name of goodness, then it is not surprising that ethics has been so jealously guarded from scientific treatment. This psychological make-up, so differently orientated from the particular instinctive integration of the naturalist, whose field of study ought properly to have included ethics, is doubtless responsible, equally with stupidity and other causes, for the vast collection of unread literature which obscures the vital issues of moral life. This is not said in reproach of the moralist, who doubtless made the best solution of the emotional conflicts which environment thrust upon him, and who certainly had a useful function, through his interfering sadistic urges, in checking crude instinctive expressions in other members of society. But in this unconscious twist of the moralist away from the simple investigatory and constructive attitude of natural science lies a partial explanation of the com-

[1] Professor Julian Huxley in his *Essays of a Biologist* (p. 87) comes also to this view when he remarks: "The direction in which he (man) desires to go, coincides with the resultant, the main direction of organic evolution."

plete inability of mankind right up to the present time to avoid confusion and conflicting values or to see moral law as a natural entity. The complementary factor in the morally-led, aiding and abetting these weaknesses in the moral leader, is the tendency for the rank and file of humanity to demand solutions which obviate the effort of finer discrimination or integration and permit a free expression, e.g. of murderous impulses, in one direction, and a complete repression of them, in favour of sentimental feelings, in another.

III. Supernatural Ethics, Utilitarianism, and the Ethics of Progress

The opening chapter has seen a sufficiently full presentation of the reasons for regarding progress as the true fundamental ideal for humanity. Moral laws are therefore the conditions in society necessary to attain the state of greatest progress. We need substantiate that ideal no further, but can proceed to follow out its interpretation in moral law and to enquire as to the relationship of its moral consequences to existing moralities.

Already there may be those who are a little astonished at the separation of moral law from religion. "What," they will ask, "is the relation of this ethical construction to religious feeling?" What, for that matter, is the relationship of any ethical system to religious systems?

Ethics and religion, we find, on examining the anthropological evidence, are bound together at the earliest stages of culture, where various moral taboos are connected with ancestor worship in primitive social life (though there are many magico-religious practices which extend beyond ethical matters). Again, ethics and religion are related by various ties throughout the course of history, but the connections here, as in primitive society, are in all points but one not necessary, logical connections. Nothing but the will to goodness, which we may regard as common to all interpretations of religion, is a logical connection with ethics. All other connections, e.g. the right action through fear of ancestors or the demons guarding primitive taboos; the regulation of conduct by compensation in after life for good behaviour in this one; the constraint to goodness from the existence of an all-knowing Deity who is displeased or pleased according to the badness or goodness of our actions; the assertion of a divine origin of ethical laws—are associations with religion which certainly aid society in its attempt to ensure good conduct, but which are not really essential to

moral intention and do not arise from the true core of religious feeling.

In the next chapter the support which religion can offer to right conduct can be studied more fully. Here we shall simply adopt the naturalists' position, that in the past, ethical laws—from the taboos of primitive people to the latest act of parliament—have arisen in the first place as natural social resultants in the group mind of the people in their attempt to live amicably together in societies whilst striving effectively for certain goals. The actual moral systems, that is to say, arose from social necessities and were strengthened in certain cases by a religious aftergrowth of supernatural connections. In many instances the ethical regulations, born of the complex restraint of circumstances, appeared intuitively in individual minds and with "divine" connection from the moment of their birth. Both ethical and religious practices, that is to say, are natural growths appearing long before anyone is capable of reasoning logically about them. In practice they have frequently intertwined, but logically they can be regarded in complete separation.

Ethical systems without the usual religious connections have existed, however, at several points in history. In recent times and in the theoretical field, Hobbes derived laws in a naturalistic way from the supposed nature and natural goals of man, but it was Bentham and Mill who shaped a system which, without much alteration, can properly serve as a basis for all the later attempts at an enlightened system of ethics. They bore the brunt of the struggle with religious authority which had no desire to see ethical laws revealed as having no divine origin. At the same time as they cleared away such obstacles to this new approach, they overcame the initial methodological difficulties. Mill's essay on Utilitarianism could still be read to-day by most people with immense profit to their clarity of thought on ethical matters. It erred only in seeing as the final goal of all ethical systems, "the greatest happiness of the greatest number." And such a definition was, in any case, a tolerably close description of a truer biological goal. Certainly it is an exact formulation of the implicit goal of much legislation taking place then and now.

By far the greater part of the criticism which the theory received was futile stuff, easily dismissed by the thorough argument of Bentham and Mill. But psychological criticism, which defied the authors' attempt to draw the line between happiness, the goal which was most accepted, and pleasure, a goal which few would accept, pierced the system at its weakest point and left it crippled, though still possessed of great vitality.

Utilitarianism, as judged by philosophers, foundered on a rock of falsely simplified psychology, but it had succeeded in freeing the seas from the tyranny of divinely revealed ethics, from the emptiness of Rousseau's *Natural Morality* and the blind "practicalness" of the sacred traditions of the lawyers.

Plato had long ago rejected the ideal of happiness for all, only to fall into a circular definition of social good, which logically or illogically, led him to project the quaintest of social structures. Of other attempts, from that of Epicurus onwards, to found ethical principles on common-sense observations, none approaches the Utilitarian system in breadth of vision and soundness of detail. We shall do well to examine it a little more closely, for we are building essentially on the same plan.

The last generation's discussions of psychological hedonism have done much to clarify the source of dissatisfaction with Mill's doctrine. Psychological hedonism attempts to assert that our moral actions, along with all other actions, have the common feature of being done because our greatest pleasure is in doing them. The child who steals jam finds the greater source of pleasure in that action. The child who does not steal jam obtains greater pleasure from the approval of his parents than he would from eating jam in forbidden circumstances, so he refrains from the theft. The portrayal of such addition sums in pleasure and unhappiness is possible only because our language does not provide sufficient descriptive power to cover the range of subjective feelings evident to real psychological enquiry.

The work of Phelan, Wohlgemuth, Paul, and Nafe has done much to clear up the psychological problems of feeling quality and it is now clear that there are many distinct forms of subjective pleasure not to be equated to one another. In addition to subjective feeling (as when we feel that we have pleasure in eating jam) there is objective feeling (as when we merely feel that the taste is pleasurable). Then again there is a different pleasure in the satisfaction that is experienced at the successful conclusion of a train of instinctive strivings, and a more complete happiness resulting from the balanced and harmonious satisfaction of all instincts within the self-regarding sentiment. When an action is derived directly from an instinct, to say that it is performed because it is pleasurable, is rather less accurate than to say that it removes a state of conative tension, which might be described as unhappiness or displeasure but which is really best described as unsatisfied instinctive urge.

Consequently to say, as psychological hedonists do, that we invariably aim at our own greatest happiness, is only another and

roundabout way of saying that we always act in accordance with the strongest resultant of an instinctive compromise. There is therefore no problem other than a wordy one, and no reproach attached to psychological hedonism other than that of psychological inexactitude, for to do what our happiness demands is to express the completest integration of our instincts, which is again to act in the best way that society has taught us to act. Consequently there is no reproach attached to "the greatest happiness of the greatest number"—for that happiness might, and generally does, arise from performing the noblest actions. But "happiness" leaves the real moral goal undefined, for society can teach us to find "happiness" in almost anything.

The upshot of the discussions on Utilitarianism and the entangled idea of hedonism (which was frequently confused with it) was to reveal a certain indeterminateness in the ethical goal of Bentham's system. Those who confused Utilitarianism with the lowest sensualism throughout society were as correct as those who identified it with the greatest self-sacrifice. Now it might be thought that Mill's doctrine would be safe from criticism on the grounds of ethical hedonism if it were framed as "the greatest expression of libido for the greatest number," for the social expression of the libido in society is only possible on higher, integrated levels. But this begs the question of the goal of social organisation. Again, the definition is vulnerable, for a society might arise which would devise a system whereby all might achieve emotional expression in the lowest plane.

Indeed, those who will carefully examine their feeling of dissatisfaction with Utilitarian ethics will find that it is this possibility which revolts them. And it is precisely in the goal of progress that we find salvation from the hedonistic outlook against which our natures urge us to protest.

The notion of progress is not liable to this form of indeterminateness, though it may be subject to others. We can express that goal, if we wish so to express it, in a phrase analogous to the Utilitarian formula, by saying that the goal which regulates our laws of right and wrong, is to bring about "the greatest progress of the greatest number."

But if, as we have argued, progress is the necessary result of all vigorous striving among living things, then the normal expression of libido, the natural quest for happiness, will itself bring about progress. Why then bother about any regulating mechanism and why not adopt simply the goal of greatest happiness which we have just rejected as the social ethical ideal?

Philosophical argument too readily takes words at their face

value, neglecting slight, but highly significant qualifying conditions. Firstly we are not sure, biologically, that the energy of all forms of life is such as to urge them to further progress. Secondly, the newer and higher forms of human conquest are only to be attained by group evolution, not by individual selection in a state of anarchy; so that all necessities of group life, of which social regulation is one, must be provided. Thirdly, it is possible for highly conscious beings like men, so to pervert their impulses, or to have them perverted by environment, that they might, in the absence of the ideal of progress, frame laws for other and purely sensual ends. Individuals are capable of perversions of eating which bring about their death, and perversion of self-assertion which lead them to commit suicide, and perversions of sex which bring about racial death. It is theoretically possible for these things to happen to whole groups, though thorough-going examples are rare historically.

In short, to adopt the goal of happiness or satisfaction is not enough. It will probably lead to progress, but it may not. And it may lead—as it has through the course of history—to slow fluctuating progress, often postponed. Conscious adoption of the goal of progress as the objective of moral laws is the only way to ensure human progress and to produce a system of moral laws compatible with the real nature of ourselves and the universe.

IV. Has the Ideal of Progress a Precise Meaning?

Is, then, progress a permanent ideal—we so long for permanence and finality in our guiding stars—or is not possible that progress will come to an insuperable wall in its path? We do not know. We may know when we have progressed a little farther and have gained greater knowledge and powers of understanding. Here is the place for faith, to which we must grant a place in many fields of endeavour stretching beyond the bounds of knowledge and reasoning. Perhaps progress will show its own insufficiency. Perhaps with Bury we may ask: "Will not the process of change for which progress is the optimistic name, compel 'Progress' too, to fall from the commanding position in which it is now with apparent security enthroned?"[1] We do not know. But the logical course for those who do not know whether progress is the correct ideal is to assist progress in order that we may one day know.

Now to agree to progress as a goal, may mean to agree to the greatest progress or to any slow and fluctuating forward steps.

[1] *The Idea of Progress*, p. 352.

Surely we are under no logical necessity of postulating that the progress be the swiftest progress ?

Let us remember that since our very security in the face of natural calamities, yet unknown to us, depends on greater power and knowledge, it is desirable that the speed of progress be the greatest possible. For as Diderot wrote : "If ever man disappears as the thinking and contemplative being, from above the surface of the earth, this pathetic and sublime spectacle of nature becomes no more than a scene of melancholy and silence." Astronomers, to the best of their knowledge, can give us millions of years of uninterrupted security in which to gain control of our material environment and attain racial immortality. One speaks with diffidence on these matters because their immensity and the possibilities of change of our present emotional values and desires readily surpass our powers of conception. But we know that man has staggered and slipped on the upward path of progress, and has made circuits again and again to the same spot. His time is inconceivably long, but he cannot afford to squander it indefinitely when the control of destiny is almost within his grasp.

But the *tempo* of progress is in part determined for us : the life urge within us will always drive us on along the fastest routes that our guiding intelligences can shape for us. The speed of progress subjectively cannot vary ; objectively it can, according to the direction we take. For example, we may permit ourselves as nations to become victims of overcrowding and so be forced to progress only on the plane of adapting ourselves to limited space and food. On the other hand, we may boldly decide to control our numbers and achieve survival in face of greater competing numbers by breeding for ability and character. East, for example, warns us of an immediate danger, in his study of population and natural resources (p. 80). "Either population must be consciously restricted at a point where individual happiness throughout a long life is possible, or civilised man will be no better off than the man of the Stone Age, for he will be repressed in exactly the same way."

Our objective progress can vary immensely according to the amount of foresight which, with our limited intelligences, we prefer to act upon. For that reason, foresight, persistent consideration, and the accumulation of knowledge are the virtues which need the greatest emphasis in our time. "Nothing in the affairs of men," said Plato, "is worthy of great anxiety." But there he voices the attitude of a confident civilisation which, neglecting anxious forethought, neglecting to put into practical effect the steps known to its intelligence, reaped the reward of its attitude.

V. The Interpretation of Progress in Terms of Morality

Let us now examine the difficulties which confront our existing ethical customs when they are brought into conjunction with the consequences of the evolutionary ideal. Any action whatsoever is to be regarded as good or bad according to whether it conduces towards or thwarts human progress.

In deciding the morality of any particular course of action there are in general three aspects to be considered: (1) The effects of the action directly on the material and psychological welfare of others. (2) The effect on the efficiency and integrity of the individual acting. (3) The suggestive effect on other minds, especially ignorant and immature minds, of a bad action or of a good action which could be misconstrued. Naturally the effects of the first class are generally most massive and important; those of the second class of more occasional importance; and those of the last type merely subsidiary effects which, however, it is unwise to overlook.

Thus we forbid murder and theft within a nation, largely because of the first class of effects—the damaging and unsettling influences on that community life and vitality which is an absolute essential to social progress. We encourage murder and theft at certain times outside the group because we believe (unconsciously) that survival through warfare is productive of racial evolution.

We forbid adultery and sexual promiscuity partly because of social effects of the first class, but undoubtedly largely because of the undesirable effects of dissipation on the individual mind. Probably for the same reason (unknown, however, to the people themselves) savages have taboos on sexual intercourse even within wedlock in times of tribal warfare and in the days preceding a hunting expedition. The celibacy of priests in certain religions falls in the same category. There is a host of minor sins in our present moral outlook which are condemned almost entirely because of this second class of effect. The action does no direct harm to anyone else, but by decreasing the effectiveness of the mind of the individual, by employing his mental energy in a less positively desirable form than is possible, it introduces effects contrary to the second principle above, i.e. it deals with effects detracting from, though not positively contrary to, the social well-being considered in the first principle. Here, indeed, "Le mieux est l'ennemi du bien."

Lastly we exercise a slight reproach and repression on conduct not undesirable in either of these first two ways, but capable of

lowering the social tone by being unsuitably suggestive to those who perceive it. We refrain from sexual expression before children; from extravagance before people of small means, and from laughing at the quaint beliefs of primitive religions before those people who hold them. This last type of reaction may spring from other and non-moral motives, as when we refrain from a clash of opinion for the sake of comfort, and from sexual expression because of our own modesty.

Everywhere this triple aspect (for most practical purposes a dual one: objective social results, subjective energy effects) is to be borne in mind in estimating the morality of any practice.

VI. The Ethics of Evolution Related to Present Religious Ethics

Let us now ask what are the essential tenets of existing ethical ideas consciously professed in religious teachings and social discussions, in order that we may perceive their true relationship to evolutionary ethics.

Such existing ethics we find in Mohammedanism, Christianity, Buddhism, the English idea of sportsmanship and the behaviour of a gentleman, Confucianism, and a number of less widely known moral-religious systems scattered about the globe. To the philosophical essence of Buddhism, asserting that all living is in itself evil, the doctrine of progress stands in complete opposition, and if both systems were consistently expressed in moral laws, these laws would be completely contradictory in their demands.

The two religions which remain widely entangled with civilised progress—Mohammedanism and Christianity—are sufficiently alike in the general direction of their moral recommendations to be considered ethically as one. Christianity as an ethical system —and it is only in regard to its moral injunctions, in abstraction from religious beliefs, that we are now considering it—has always proved highly elusive as to the philosophical bases of its principles. There are many, who, dazzled by the epic life and death of Jesus, are content to say that his personality is their ethical guide. They aim at nobility of character and are not concerned to analyse nobility, or to say in what generalised attitudes it consists and in what parliamentary laws it should express itself. Unfortunately, though this attitude may be satisfying to the emotional life, it remains, like all perceptions at the intuitive level, incapable of application to real social problems and policies, being evasive to precise reasoning and impossible of philosophic formulation.

Admirable as its effects sometimes are in personal life, it yet leads to situations such as the one happening this week, in which the priests in one area are forming a league against all war, whilst a bishop elsewhere is fulminating against decrease in armaments.

Probably all would agree, however, that universal love is the one clear teaching of Christianity and all allied religions. It is amazing, in view of the possible criticisms of this standpoint, that it has so seldom been criticised. Nietzsche, having absorbed the Darwinian discovery of evolution through struggle and survival, saw in Christianity a wicked perversion of the scheme of life and wore away his own life in exasperated remonstration with those who were not intellectually honest enough to face his logic and combat his errors by sincere reasoning. This spectacle of the poet crying out, in a wilderness of cold disapproval, an obvious truth, which every one practised but no one admitted, is one of the most astonishing things in history.

Was he an honest but naïve man shouting out a painful secret in a world of shocked, hypocritical individuals under a conspiracy of silence? Or was he essentially a sane individual in a world of madmen?

Certainly the sharp contradiction which he perceived, does in truth exist between evolutionary ethics and most existing moral ideas; and we must now examine the claims of each to the position of ultimate morality.

It is clear that universal love means a cessation of group competition and of competition among individuals. As such it would mean a negation of the doctrine of progress, not because of the (questionable) fact that we put forward our best efforts under the spur of competitive conditions, but because evolution can only continue by selection acting upon a great number of experimented variations of living forms. And because the urge to progress is rooted in mankind, because evolutionary ethics have always really directed our actions, the Christian doctrine has nowhere and at no time been put into practice. People who have tried to bring about a state of communism, of universal love and peace, like Tomasso of Spain who was reprimanded by the Pope for his plan of a Holy Communist Republic, or Lenin, or Bernard Shaw to-day, have met with as much ridicule and astonished offence as Nietzsche at the opposite pole, who blurted out just why Christian ethics could not be put into practice. This hypocrisy, unconscious in a great number of people, is one of the saddest reflections on the present evolution of the human mind, but at the same time, reassuring evidence that the instinctive nature of man can stubbornly resist perversion by the blandishments of "reasoning."

An unbiassed survey of history can only conclude that the Christian principle of Universal Love has essentially played the part of antidote to the excessive and cruder forms of competitiveness in man. Perhaps it was part of the great genius of Christ to see that the principle would never be accepted in its entirety, but only as a compensating force to forces already in existence.

So far we have brought out nothing but an apparently complete opposition to these principles and the fact that human nature, in welcoming the universal ethics of love, has never, for one moment, accepted it unreservedly. A little closer attention to historical aspects—to the social evolution of moral ideas—will show us the root connection beneath the apparent antagonism of Christianity and evolutionary ethics.

VII. Evolutionary Ethics the True Universal Ethics

We have seen in a previous chapter that the evolution of inborn qualities in man has been largely ensured in recent geological times by the selective survival of groups in competition. Individual struggle and survival has played some part within society, but as Professor Huxley reminds us, "Natural selection in man has fallen chiefly on groups, not upon individuals."

In a previous discussion (p. 69) we have realised that the natural selection of groups has bred just those virtues—unselfishness, honesty, altruistic devotion to the common good, and self-sacrifice—which we particularly prize as valuable to civilised evolution. Why has it done so ?

When the struggle for survival was transferred largely from the individual to the group, there arose a sudden demand in the interest of group safety, for cohesion, mutual help, self-sacrifice and kindliness among its members, in place of the general ruthless anarchic competition which was alone appropriate before individuals became united in a group. The primitive tribes which survived, were those which most successfully acquired customs, conventions and moral ideas fitted to the demands of these new conditions. Everywhere those cultures were favoured which possessed individuals capable of spreading with conviction these ethics of mutual help among their fellows in the tribe. Thus a long stage of evolution went on during which the virtues which we now associate with such universal ethics as Christianity were preached in embryonic forms within each group to all men, along with the older virtues of courage, strength, and parental devotion.

But the process went too far. The seers and sages had no

notion of the relation of their intuitive ethical scheme to the plan of group survival, and soon there arose religious enthusiasts of still keener quality who, perceiving the happiness brought by the ethics of love within a large group, proceeded to extend them to the whole world—to proclaim them as the universal ethics which must lead to a brotherhood of man. With an increasing power of generalisation they had stepped beyond the tribal boundary. Religious progress, the increasingly clear expression and organisation of emotional and ethical tendencies forced on society by biological conditions, has been the accumulated result of feats of intuition by inspired individuals, generally psychologically abnormal and sometimes mentally diseased. Such leadership, which is essentially a mere midwifery of ideas germinating in the group mind, is far more likely to lead to extravagance of viewpoint than is the less powerful leadership of objective reasoning. In this case, the false extension outside the group of what had developed as a necessary, intensive ethics of altruism within the group, was aided by the association of the ethical ideas with religious emotions which, like all emotions, were of universal validity. Thus the impetus of altruistic ethics augmented by the force which had been necessary to impose them with sufficient effectiveness on the resistant primitive nature of individuals forming the group, caused them to burst the limits of their true biological usefulness and become universalised. This movement reached its climax with the so-called universal ethics of which Christianity is the finest example. We live at a moment in history in which the excessive, uncritical application of this principle has, through the excessive efficiency of means of education in comparison with means of understanding, reached its high-water mark.

That universalising step, as we have seen, was resented by minds less susceptible to general principles and was never allowed to become entirely effective. Probably much of the opposition rendering it ineffective came from unconscious processes in the minds of the priests themselves, who dimly perceived that a mistake had been made and who, when group emergencies arose, "turned their churches into recruiting stations," to use the words of a pacifist critic during the late war.

In this tendency for universal ethics to spread, there is, however, more than this transfer of socially conditioned ethics in the hands of a few erratic geniuses. Something in the psychological constitution of each individual favours his conscious adherence to the idea of universal love and kindliness. It promises greater ease and safety, and a relaxation from always putting forth one's

utmost, which is a highly acceptable promise to everyone, but particularly to the man who finds passivity more attractive than the satisfaction of mastering the external world. It gains support, too, from a purely subjective feeling of profundity and poignancy in the impulse of kindness. How that feeling arises and how far it should be obeyed, it is difficult to say. Probably it has a purely psychological origin in the strong linking of the profound parental impulse with all aspects of our general idealistic sentiments. Acquiescence in universal ethics probably has another psychological root in a herd instinct not completely satisfied with the spiritual unity of the group in which it is exercised, and so seeking a new satisfaction in a sense of unity with all mankind. That unity of the individual with his group can never be complete, but it can be more complete than in our present complex and erring civilisation.

Universal ethics, then, are a developed branch of a more profound natural ethics, and a branch which has got loose and threatened to wreck the whole tree of life. Evolutionary ethics provide the true universal morality which prescribes different reactions in different situations: namely, "universal" ethics within the group; a modified competitiveness without. Evolutionary ethics demands a nice adjustment of emotional attitudes which is always more difficult than an emotional extreme. According to the teaching of these new biological ethics the teachings of the "universal" ethics within the group need still more to predominate over an ancient emotional inheritance of individualism. Outside the group, "universal" ethics, as such, cease, and a mode of behaviour combining toleration with competition, as indicated by the demands of progress, must be introduced. Evolutionary ethics, requiring as they do a co-operation of divergent groups in a plan of evolution, will certainly demand greater extensions of international goodwill and forbearance in certain directions than "universal" ethics have yet attempted.

VIII. Evolutionary Ethics and the Reign of Natural Law

Before proceeding to examine in more detail and in closer relation to current events the prescriptions of evolutionary ethics in each of these two spheres of human endeavour, we shall put evolutionary ethics more firmly in their true setting by examining their relationship to man's interaction with the forces of nature.

There has always been a marked tendency to suppose that moral laws are what we or our benevolent gods like to make them.

Largely because we are not taught to perceive that our moral laws must at some point have a reckoning with vaster and impersonal laws of the universe, there has arisen a widespread civilised outlook which supposes that we can go on evolving our moral law according to the spontaneous urges of our own emotional development.

Popular thought often proceeds on the assumption that if all individuals were ready to adopt an attitude of complete kindliness, of selfless devotion to the common good, we could create for ourselves a completely comfortable and indulgent environment. This reasoning proceeds as if we ourselves were the only consideration and could make any laws or social structures we pleased to suit our convenience. A wider adoption of the reverent attitude of science would save us from that error.[1]

We are bound in all our actions by the immutable natural laws of the universe. A true ethical system is but a secondary structure built by man within the framework of physical and biological laws. Evolutionary ethics is a system of conditions which fit mankind's desire to progress to the given facts of the universe which environs him.

A failure of mankind as a whole, in inter-group dealings, to act on a suitably modified code of evolutionary ethics would obviously, under present conditions, produce universal stagnation. A failure of the individual within a group to have some competitive life and enjoy some process of natural selection among themselves, would, however, only lead to the destruction of that particular group after a period of evolution in which it had fallen behind the rest of the world. But in either case the continuation of the living group concerned depends upon their following laws which fit in suitably with the real demands of their own environment.

We are like people who have gathered themselves together out of the sea, and have built themselves a raft in the midst of hostile waves. From this they have gradually constructed a boat in which they live in comfort, hardly aware of the savage forces with which they previously struggled in individual isolation. Within, they can make whatever private arrangements they please, for the common comfort and happiness, providing always

[1] Russell, whose subjectivism too frequently leads him into untenable positions, has been led by his pessimism of science to accept the usual view that science and morality are poles asunder instead of regarding morality as the profoundest branch of science. In his latest book, *The Scientific Outlook*, he writes: "If . . . scientific civilisation is to be a good civilisation it is necessary that increase of knowledge should be accompanied by increase of wisdom." This wisdom is "a right conception of the ends of life" . . . "something which science in itself does not provide." On the contrary this true aim of life is only to be appreciated correctly by a study of biological science.

that those arrangements fit in with the fact that they live in a boat and that it has to be navigated in the same original tempest as that from which they saved themselves.

Those inclement seas are the anarchic world of man and beast and nature, whilst the boat is the organised society and the conventions of kindliness and mutual help which each group can practise within itself. With other branches of mankind, the other ships upon that ocean, we can, if we wish, call a truce, but we shall only have lost one of the most bracing of our opponents and still have left the greater part of the hostile world unaffected—the world in which wanders the poisonous reptile, the microbe, storm, earthquake and the hard economic demands of the material world. In these we face an ultimate "discipline of natural consequences" which Herbert Spencer brought to light, though he remained unclear as to its true relationship to the discipline of "universal" ethics.

Whatever discipline of our own we invent, it must square up at its boundaries with this immutable discipline of natural consequences. The dwellers in that storm-tossed vessel may make what regulations they like among themselves, but those rules must always be consistent with the look-out being at his post, with the efficient behaviour of the crew, and with capable navigation. In the last resource they must all be prepared to come on deck and struggle with brutal, primitive forces under little better conditions than they originally knew, if the ship of society is to be saved. To-day we are in danger of making economic and other regulations within the group which will not meet external reality. We are liberal to each other with gifts which we do not possess. The spread of a benevolent spirit without sufficient attention to natural consequences threatens us with disaster. Charity has rightly abolished the checks which poverty and disease presented to increase of population, but this has been unaccompanied by the wisdom which would command us to restrict our population. The partial vision of "universal" ethics has blinded us to the discipline of natural consequences which is integral in evolutionary ethics. Every national calamity is in truth a reward of sin, though unfortunately only the scientist, and not the Church supposed to govern the public conscience, is clearly aware of this conception of sin. For example, we are at present exploiting wholesale all our natural resources in fuels, metals and fertilisers, without any anxiety or public sense of responsibility. If this should lead to war, famine, or other acute evils in which the lives of millions are rendered miserable and brief, the thing will be regarded as a misfortune for which no one is to blame. Tragedy can readily arise from people of conscience following fundamentally false ethics.

The greater natural ethics from which we have extracted our more trivial social ethics, makes no distinction of intention or capacity. It presents inexorable laws which have to be met, and we cannot plead ignorance, good intentions, or stupidity when a mistake has been made. The contemplation of this fact is the greatest producer of sincerity and maturity in the minds of men, and it is one reason why those who deal with things—the engineers—can never become such humbugs as those who deal with human beings and ideas—the administrators, educators and priests.

Our salvation lies in bringing our social ethics appropriately into conformity with the demands of reality by stigmatising especially ignorance, lack of foresight, intellectual insincerity, mental defect, and carelessness.

The attempt to enforce a wholesale and sincere adoption of universal ethics would be equivalent to persuading the crew of our allegorical ship, now long untouched by serious disaster, to throw away anxiety and enjoy themselves together in the security of their cabin.

Political and intellectual leaders must realise that universal ethics are, in truth, only a secondary and partial principle, working within a more fundamental principle.

Indeed the next step consists in accurately delimiting the field of this subordinate principle. Since mankind is but a species among many, we owe a large measure of love and loyalty to every member of all branches of mankind; and our enmities should properly work within a circle of fundamental love.

The promulgation of the attitudes of Christian ethics must not be weakened, but strengthened. But they must be taught in conjunction with a truer perception of nature which will reveal them as a natural development of evolutionary ethics, and so enable each individual to realise where self-sacrifice for others is desirable and where it is frustrating true idealism.

The first duty of each individual is to struggle for the maintenance of the best forms of life and in so far as there is doubt as to whether he or another is the better type, to struggle for his own survival. Most natural selection now takes place as a selection of groups, hence the most moral action is to strive by service and self-sacrifice for the success of one's group.[1] The easy assumption

[1] In a recent article "The Myth of Western Supremacy," *The Rotarian*, Feb., 1930, the President of a Rotary Club has written: "Nationalism and race-prejudice appeal to one of the meanest and most contemptible traits in the human mind. 'I thank thee, O Lord that I am not as other men are.'" This bedevilment and confusion of morality in the minds of ordinary men results from the growing tendency (due to school education or to Church

of racial superiority by the white races, for example, is a stupid blindness to the need for research, but the white race, and every other, is entitled to strive to the utmost for its own relative and absolute advancement. Evolutionist ethics command races to love each other as members of the common stock of man, to respect each other's differences, to co-operate in perfectly fair competition in which every step is taken to avoid wasteful methods of competition and the danger of mutual annihilation. Evolutionary ethics are strongly in accord with all steps towards international organisation. For such goodwill and co-operation eliminates wasteful and primitive forms of conflict or competition which, by deflecting energy into lower channels, prevent competition taking place at, and producing evolution in, higher cultural levels. To the complete world commonwealth projected by would-be idealists it presents only three modifications: (1) That there shall be no miscegenation; (2) that there shall never be closer links between people of dissimilar race than between similar races; (3) that competition shall take place at *some* level. . . . International co-operation to prevent war, to avoid economic waste, to advance science and education and to control and compare eugenic progress along agreed divergent lines, are certainly indicated by those very evolutionary ethics which some would merely paint as "red in tooth and claw."

With our attitude to other races developed and explicitly determined in this way, we could develop the internal group-life on lines permitting expression of the fullest amount of love and kindliness consistent with remaining true to the "discipline of natural consequences" and the ethics of progress.

Within the group it may appear at first sight as if complete benevolence and brotherly co-operation are desirable, for these will increase the strength of the group relative to others. But a

principles) to take in all seriousness the partial principles of Christian ethics. Before education pressure became so effective, the good sense of the average man sufficed to throw off this perverse teaching. Now that education is really moulding the minds of the people, it becomes increasingly important to ensure that a complete ethics showing the part which universalistic ethics play within the greater principle of evolutionist ethics, be taught in a new biological educational background. The above writer goes on to say (p. 63): "Although the white man to-day is only half as numerous as the coloured man, he is settled on a gross area of land more than twice as large as that owned by his poorer coloured brother, and unless there is a total reversal of certain well-accepted principles, it is impossible to see how any permanent solution can be reached."

East well reminds us that "race pride is not limited to blonde peoples. The Japanese and the Chinese despise each other, and both feel superior to the black and the brown, and the Hindoo has more caste taboos than either." Let us accept this pride in others as we value it in ourselves: it is one of nature's great barriers against universal stagnation.

moment's consideration will show that such a procedure, carried beyond a certain point, would not increase the competitive strength of the group, neither would it allow the race to continue to improve its average inborn powers or to grapple most successfully with the forces of nature.

Already there are many manifestations of charity in civilised countries which go too far for the safety of the group and sin against evolutionary morality. (The state support of a large number of workless men is clearly contrary to the economic welfare of the group and might in certain circumstances give an irreparable set-back to social survival.) Now, in most of these instances, although the immediate and material effects of benevolence are bad, the psychological effects on all minds are such that the group is richly compensated in the long run. An apparently excessive benevolence on the part of society is really in accordance with the demands of evolutionary ethics, when psychological as well as material facts are taken into consideration.

Society succours its sick and wounded that its own strength of numbers may not be impaired; but it looks after the aged; permits the ailing and defective new-born infant to live; gives monetary aid to bring up the large families of incapables instead of allowing them to starve; and in all these things it is damaging its own chances of survival simply in order that no individual shall feel that he is denied the promise of unremitting kindness, shelter and security from the society in which he lives. The damage which society does to its resources of energy and its racial quality by these actions is generally more than balanced by the increased devotion which it gathers from its members and the greater cultural progress possible among tranquil minds.

An entirely confident and willing service to society is only possible in those who feel that society will succour them in need. Socrates, Christ, Galileo, and a few great souls in every age will devote themselves to the service even of a society which abuses them, but these are extraordinary exceptions. Men living in fear, in poverty, in acute competitive striving and anguish of soul, can never give the fineness and trueness of service which would be possible if their lives were secure and ordered. Inclement social life will always produce a large crop of definitely anti-social individuals, just as conditions in which men are able to think and plan ahead in peace and security will always produce a fine crop of men devoting their lives to social and cultural improvements.

In the first situation men will become anti-social, planless, casual, dishonest, lazy, callous and suspicious. In the second, they will become enterprising, and enthusiastic individuals,

naturally devoting themselves to a common constructive programme.

There is a second psychological consideration which justifies an emphasis on the teaching of the secondary principle of evolutionary ethics, i.e. of "universal" ethics of which Christianity is an example. All evolution of the human mind, as Sir Arthur Keith has reminded us, involves an increasing sensitiveness of the whole nervous organism. If we wish to pass to greater and greater discriminative powers we must provide conditions of evolution which preserve mankind in security from the rudest and most primitive shocks and jars of physical and emotional life. Sparta produced fewer geniuses than Athens. A great function of the secondary principle of benevolence both within the group and without is to produce conditions in which the cruder forms of competition are suppressed and competition extends itself into ever more complex creative work.

Similarly, when the full complexity of nature and human nature is taken into account, many of the gentler virtues which superficial thought imagines to be derivable only from Christian and other universalistic ethics, are seen to be founded on evolutionary ethics. Evolutionary ethics does not prescribe, at least where human societies are concerned, a constant economic warfare, a restless, fearful striving for existence, carried to a ruthless extreme where leisure is utterly sacrificed and where art and beauty are foolish distractions to be avoided by a determined man. Industrial psychologists have shown, in the narrow compass of the factory, that rest pauses result in a better quality and quantity of output than does a longer period of uninterrupted labour. Almost certainly the same holds in a broader fashion and to even a greater extent for cultural life and advance. And the time and energy which we give to art and beauty and to the mystical, unpractical contemplation of life and nature are not unwisely wasted or out of keeping with evolutionary ethics. They are investments which a fuller understanding of human psychology would perceive to be entirely in accord with that broader efficiency on which we are assessed by Nature. A struggle exists, but it is to be decided, not on an hysterical conscious striving, but rather on the normal living out of the life of each organism. If our mentalities develop on their present lines such apparent irrelevancies as art, drama and mystical religion will always be essential forms of expression for a successful and prevailing culture and human type. And this is the answer to an oft-repeated objection to competition, encountered principally in industry and education, to the effect that "though it begins by stimulating, it

ends by reducing all to the same dull, if not brutish, level." Admittedly, competition, in the grip of the herd instinct, occasionally balks progress by keeping our energies bound up in old obsessions—in competition to be the most expensively-dressed, the most able bridge player, the most heavily-armed nation, or any other vulgar, futile or out-of-date excellence. The fault lies rather with our excessive susceptibility to the herd instinct and with the conception of competition as something taking place feverishly at a conscious level and in the service of agreed goals. Competition in nature, and as reflected in the Evolutionary Ethics which we discover from nature, invites us rather to desist from such frittering away of energy and rewards us most royally for originality, bold variation and creative individuality.

For the present we will pass over the question as to whether kindly impulses and a spirit of brotherhood are best fostered by historical religious teachings, or newer educational approaches. It suffices to conclude that benevolent social ethos is essential to a positive, vital social attitude in individuals, to the development of more sensitive mentalities and to society's need of a sense of spiritual unity.

Whilst summing up on the desirable psychological effects of the doctrine of love which compensate for its material drawbacks, we must not pass over the undesirable psychological effects which ensue from too complete an abnegation of individual assertion. Here it is necessary to combat the excessive generalisations of Adler's school of psycho-analysis—of "individual psychology." Adler has attempted to extend his psycho-analytic system into a system of philosophy and ethics. The "inferiority complex" is a product of a fierce competitive civilisation, says Adler, so let us avoid neurotics by doing away with self-assertion and competition; let us have universal security and brotherly love in its place. Let us, in fact, have communism. In the first place Adler's much elaborated psycho-analysis has not yet received the proof required by scientific method. Secondly, it may be possible, without such wholesale revision of society itself, to educate the neurotic differently, so that he participates healthily in normal competition. Thirdly, we are not called upon to readjust the course of a civilisation because it produces a small percentage of neurotics. A physician with Adler's mentality in the time of Francis Drake would, instead of searching for a cure for scurvy, have called for the forbidding of all the long ocean voyages to which it was incidental!

At the present day, however, the extension of the social atmosphere of benevolence and group solidarity has by no means satu-

rated our mental life even to the point which would give us the full psychological advantages of its presence. On the other hand the unchecked and unheeded material damage has reached dangerous proportions. The more difficult path of evolutionary ethics demands not an all-or-none emotional reaction of benevolence, but an adjustment of emotion to the objective situation, and undoubtedly our unchecked benevolence, passing into uncontrolled sentimentality, is unnecessarily wreaking such damage that the above discussed psychological advantages cannot repay society for what it is losing.

Principally this benevolence is astray in supporting the poor or the incapable whilst allowing them at the same time to breed. Whilst seeing that no defective person suffers for his defects, we ought at least to ensure that he brings no more defective types into the world. The real objection to a great deal of present-day socialist and Christian legislation would disappear for rational folk if this aspect were corrected.

This discussion should clarify the limits of the secondary principle of love and kindliness within the social body. Our earlier discussion indicates that outside any given society the secondary principle must go far enough to ensure the fullest co-operation in fair competition and must be limited by the conditions: (*a*) that there is no mixture of bloods between racial groups; (*b*) that each nation continues to reap benefits and possibilities of expansion roughly in proportion to its own contributions to progress; (*c*) that, in the greatly-to-be-avoided ultimate disagreement, every one of the bonds can be broken in succession to leave the two groups in undamaged independence.

IX. How shall Society Translate Moral Rules into Practice?

A handful of philosophers, even a single religious leader, can devise a system of morality: it requires the combined and constant efforts of a whole nation to put into practice.

The problem of ensuring a conformity to the ethics which society has adopted is a vast psychological riddle in itself, to which no better answer is available to-day than in the earliest civilisations.

Primitive societies regulate conduct largely by a number of customs and taboos which draw their force from the gregarious instinct and the fear of supernatural dangers. These preventative measures are eked out by a corrective mechanism consisting of a

rough and erratic justice based upon magic and the moral obligation of relatives to avenge murder and other crimes in kind. This superstitious justice develops historically through "trial by ordeal" of the middle ages to the justice of to-day, in which we aim at scientifically-examined evidence brought into conjunction with expressly stated laws. These statutes embody the substance of the old taboos and religious commandments together with a certain amount of independent legislation in modern times.

The whole picture of conduct regulation to-day is a composite one, consisting of older and newer patterns of social action inextricably woven together.

We have tried to bring an exact justice to the fore in civilised life, which offers rewards and punishments for good and evil actions and works through an efficient system of detection. This physical control is set off by a psychological control in the conscience which we attempt to foster in educating every individual. Besides these two main regulators persist older methods of regulation: firstly, the encouragement of belief in supernatural powers and of a second life infallibly rewarding and punishing virtuous and sinful behaviour in this one; secondly, the application of the force of custom, convention, public opinion, and taboo, which persists little changed from its primitive forms in regard to the less important half of moral behaviour. We discuss and sometimes question the more important statutes which govern our lives but, like primitive peoples, we face society's massive injunction "It isn't done" without daring to question or investigate. Indeed, such is the force of the herd instinct, with its powers of deprivation, behind these minor regulations, that most people would shrink more from breaking a taboo than from breaking a commandment expressed in a law of the land. What man would not rather be fined for dangerous driving than be seen keeping his hat on in a lady's drawing-room? What fashionable woman would not rather be convicted of illegal betting than appear at Ascot wearing evening dress?

Of the four aspects of conduct regulation which are of importance to-day, legal questions and crime detection are of no immediate psychological interest, whilst regulation by belief in the supernatural can be left until we have discussed religious beliefs more fully in the next chapter.

We are left with the maintenance of morality by conscience and by public opinion of which the former is of more acute importance.

Conscience we now realise to be no more and no less of divine origin than the sex instinct or the reflex of swallowing food. It is a normal artefact in the mind, produced in every individual

by the agency of society. The fuller psychological discussion of the origin of conscience will be found in McDougall's *Outline of Psychology* or any modern textbook of psychology. A boy meets with his mother's approval when he wipes his feet on the mat. He feels himself to be a "good boy." His self-assertive instinct, his pride in himself, gives him satisfaction in this piece of behaviour. If he fails to wipe his feet, he incurs his mother's displeasure and possibly his father's slipper. His gregarious impulse is unsatisfied by this cutting-off of sympathy ; he feels lonely and miserable. His fear instinct and his self-submissive impulses are also called into play. It needs but a few repetitions of either situation for these instincts to become integrated in such a way that the boy feels a pleasant exhilaration when he remembers to wipe his feet and a queer mixture of anxiety, self-condemnation, miserable humiliation, and lonely isolation when he attempts to shirk what he knows to be the correct action.

On this plan all the more important reactions of conscience are built up. Certain correct patterns of behaviour are bound up with the boy's complex self-regarding sentiment (or "super ego," if one prefers psycho-analytic terminology) which education in home, school and society has built up out of the original instincts.

In the end conscience is a more or less accurate reflection in the individual mind of the ethical sanctions—the ideals, restrictions and taboos—maintained by society.

Max Nordau has illustrated the whole psychology of the moral sense in man by a simple experiment in animal (or should one say "fish" ?) psychology. If a pike is placed in a tank of water with a minnow, but with a glass plate shutting off the minnow from his rapacious attacks, he will continue for some time to make rushes at the minnow only to stub his nose against the invisible barrier on each occasion. After this has gone on for a while he will become quite indifferent to the minnow and the glass plate can be removed without his making any further attempts to swallow it. In man this simplified process is complicated by the pain being largely mental and capable of reference to imagined situations.

Thus a man may remain obstinately unmoulded by the rewards and punishments, physical and mental, which his immediate society thrusts upon him. His conscience is determined by his vivid imagination of the approval and disapproval of other societies and individuals, far away in space or time and perhaps never existing. Thus the martyr's conscience, shaped by his own conception of heaven's injunctions or by thoughts of the reverence

of more enlightened people yet unborn, enables him to resist alike the temptations and the fiery threats of those in his immediate environment.

The admitted ideal of civilisation—and it is one with such obvious advantages that I do not propose to argue them—is to shift regulation entirely to the individual and to hold the policeman, the judge, and the harsh hissing of public opinion in leash for use only as a measure of safety. It has long been one of the partially-realised aims of education to produce this state. Unfortunately the first "educators" brought to their children the methods of animal psychology, which had proved effective with the horse and the dog, but which really required certain subtle though not fundamental revisions to match the evolutionary gap which separates the child from the animal. In short the untutored parent beat the child when it was caught doing wrong and rewarded it when it did rightly—a method which still exists in its original crudity, though attracting little comment, in all sorts of civilised regulation.

As to the correct methods of building sound character and effective conscience we remain ignorant. Although this understanding is of such immense importance to all aspects of social welfare, the lack of support for careful and intensive psychological investigation in this most difficult field leaves us with very little advance in applicable principles. What little psychological understanding has been gained makes us more acutely aware of the damage done by crude methods. It also helps us a little in the cure of delinquency.

One major result of the crude punishment and reward treatment is to produce wholesale repression of the undesirable tendencies instead of a gradual process of sublimation. Here arises the most interesting and important connection of psycho-analysis with society, a connection which Freud himself has investigated at length. If civilisation demands of its members too great a control of the instinctive drives and if it enforces this repressive control by crude educational methods a point is eventually reached where, at one end of the line, many individuals will become criminal, and at the other end many will become neurotics collapsing under the conflicts engendered by their own repressions. Like Adler, Freud indicates that society may need to modify its demands and its methods in accordance with the findings of the psycho-analyst, but unlike Adler he does not appeal for a wholesale readjustment of social structure. He watches with interest the delicate balance between repression and revolt which exists in the less stable minds that are scattered throughout society and

warns us to keep a watchful eye on the intensity of social repression.[1]

The degree of suppression which society must maintain is determined in the first place by the urgency of the necessity of putting forth its utmost in inter-group competition. Even those who do not feel disposed to welcome this conception of competition must face the fact that even under the urge of simple unconstrained desire for cultural advance society would enforce an equally rigorous interdiction of low and direct forms of instinctive expression. Thus the degree of suppression required is fixed by external and unalterable conditions, but the manner in which that degree of sublimation shall be attained is left to the free choice of society and it is of the utmost importance for society to discover the best means of education which science can provide.

The ideal of educating every individual to a state in which he can be left entirely to the guidance of his own conscience under the influence of the mental food which society provides for him, admittedly has its dangers. It could be more easily attained with some inborn constitutions than with others (thus it is also a eugenic concern) and consequently will appeal to some races more than others. (In Chapter II we have shown that it is through no accident that the Protestant ideal of submitting all to the individual conscience received such a warm reception only in Nordic areas.)

Progress toward that ideal, as towards so many others, waits upon advance in psychological science.

An examination of the social effects of the second force which actualises moral law—mainly public opinion—is particularly called for at the present time because it has become increasingly popular for reformers to demand that legal compulsions should be relinquished in favour of a more elastic regulation by public opinion. The requisite constraint to good conduct, say these reformers, is better applied by the force of public opinion alone, which is more reformatory than the law and touches offenders whom the law cannot reach. To first inspection we have here a liberal and progressive suggestion which captures our minds easily enough. But the man trained in social psychology will regard it with suspicion and examine it with care. The crowd, by the mechanism of the gregarious instinct and the emotional force of primitive passive sympathy, tends to lose the critical

[1] Hadfield's *Psychology and Morals* elucidates most clearly this relationship and the alternative paths of sublimation available, but even with the sublimation of which Hadfield speaks there is a limit to the denial of direct expression which various minds can suffer.

and inhibitory powers possessed by the normal individual, and become nothing but a powerful primitive beast. In society, it is true, we are not dealing with a crowd but with an organised group, stabilised by the atmosphere of a living group tradition and the superstructure of education. In an organised social group the worst dangers of mob "justice" are avoided. Nevertheless, although public opinion is saved from the crudest manifestation of crowd mentality and disarmed of much of its executive power, its functioning in a society already possessing legal machinery is fraught with danger, and for the following reasons: (*a*) In condemning any persons for an alleged offence, e.g. a sex delinquency, or the betrayal of a popular cause, the crowd has no proper access to the evidence and no means of weighing the evidence in the judicial manner of a court. Christ, for example, was found guiltless by a magistrate, but guilty by public opinion.

(*b*) Group disapproval offers a permitted outlet in "righteous indignation" for the repressed sadism, the envy and *schadenfreude* of the individuals composing it. Owing to the opportunity for inflicting damage from a position of security, that outlet will be readily seized upon.

(*c*) The same amount of public disapproval means much to one man, nothing to another, because of difference of temperament and of social vulnerability, e.g. the social disapproval accompanying divorce in those countries where divorce is not entirely approved falls more heavily on a man in public office, a clergyman, a university teacher, a major, or a well-known scientist, than on a bookmaker, a salesman, or a member of the stock exchange.

(*d*) Public opinion, because of its working within the mechanism of the gregarious instinct, is fundamentally set to oppose, not any criminal action, but any marked departure from the normal. Dishonest practises of great antiquity it will fiercely defend.

But are not all departures from the normal in some measure undesirable? Russell says emphatically, No! He reminds us of the social hostility to intelligent men like Galileo and Kepler who have "dangerous thoughts," and adds: "What is desirable is to find ways of making this hostility as slight and ineffective as possible."[1] That is to say, cripple public opinion entirely. Principal Barker, too, seems alive to the blindness of those reformers who would place so much in the hands of indiscriminating, gossip-fattened, public opinion. But for Barker all that seems necessary is to leaven public opinion with education. "Education," he writes, "can refine social opinion until no man need fear its pressure."[2]

[1] *The Conquest of Happiness*, p. 133. [2] *National Character*, p. 104.

There are clear objections to the unchecked action of public opinion but, whatever our feelings on this question, let us admit that public opinion has its uses. Among herd animals it is well-nigh absolute in its power, because the safety of the whole herd depends on complete unanimity of all members. In primitive tribes it still holds everyone in a vice-like grip of traditional custom, for in that way alone can extravert, relatively-unthinking people be preserved from extinction. In civilisation, when dangers begin to threaten and more primitive conditions return, the gregarious impulse, with its demand for conformity, strengthens tremendously until all those holding unusual and discordant opinions, e.g. conscientious objectors in time of war, are treated more harshly than criminals.

Now it is right that society should demand of the individuals whom it protects that degree of conformity necessary (1) to group safety in times of emergency, and (2) to the most effective prosecution of serious undertakings. But at the same time it is to society's disadvantage to suppress variations of thought and conduct, for out of those variations will appear the progressive ideas which are to take society on to new and superior forms of organisation and cultural life.

Any decision on a particular variation is therefore most difficult, for it is essentially a calculating of the equilibrium between two opposing principles. Conformity spells safety and permanence. It also means a complete arrest of progress. Variation means improvement and unprecedented success, but it may also invoke disaster.

But to put the decision on such matters in the hands of a public opinion primarily motivated by an unconscious demand for complete conformity, and blind to larger issues, is obviously completely wrong. We need a social organisation not nearer to, but more remote from, the undifferentiated crowd psychology. We need to put all decisions on such matters in the hands of sociologists capable of making some approximate calculation of the results of new movements.

Concerning Barker's suggestion for an improved public opinion, let us note that education cannot increase intelligence—the power of discerning the indications of new situations—which is the essential power required here. Indeed many forms of conservatism are direct functions of lack of intelligence: the group with a lower average "g" is bound to be the more conservative one. Education can increase the spirit of toleration; but that is nothing more than the weakening of public opinion desired by Russell. It can also, by giving the requisite breadth of general

knowledge and the habits of scientific methods, assist the powers of discrimination—a less dangerous procedure than that of producing a spirit of indefinite toleration.

To approximate to a solution within the space at our command we may conclude:

(1) Decisions of right and wrong should, wherever possible, be left to special bodies—royal commissions, law courts, social research groups—and public opinion should not be allowed to play Caliban by kicking the prostrated offender or attempting to influence the specialist body. For example, it should emphatically not be the task of business heads, town councils, and universities to add material deprivations to the discomforts of those who find it necessary to disagree with generally accepted conventions.

(2) Society should discriminate between variations likely seriously to affect its material welfare and, on the other hand, those moral and other equally glaring eccentricities which have no such effects, but are yet important to individual satisfaction. In the latter class are differences of taste in dress, food, art, modes of recreation, and manners. Here we may truly aim to engender in the rising generation that toleration which will enable them to greet the widest variations in a friendly spirit.

(3) In matters more important to group welfare—religious beliefs, moral practices, hygienic practices—pending investigation by specialist bodies, the individual differences should be met by forming well-defined groups, dissoluble in such emergencies as demand national unity, to cater for all varieties of belief and practice which exist, so that the unity of the larger group, the nation, is not endangered by constant friction or wavering of front, whilst the movements concerned are given a fair trial.

When people of good intention preach toleration it is some mechanism of this kind which alone can satisfy their real intentions, for an increase of simple toleration beyond a certain point would be as disastrous as no toleration at all. Human nature urges society in most things to intolerance. Therefore, moral leaders are right in fighting for an extension of tolerance and implying that it is a virtue. But in fact, as we can see, it is a tendency which, for the good of the social body, should reach a certain degree and go no further. The tolerance of many citizens to-day is nothing but an indifference to social welfare, the tolerance of others is the attempt of those with many weaknesses in their armour to come to an arrangement with neighbours similarly inclined. True tolerance is the willingness to examine closely differences of viewpoint and conduct, but to express no disapproval of dissident standards until there is objective proof of

their being faulty. This is the toleration which is aimed at in the world of science and which is implied in Professor A. V. Hill's remarks, when he says, as a liberal scientist: "It is possible to hold strong opinions and still to be tolerant. After all, modesty, friendliness, humanity, judgment, balanced by a reasonable sense of humour, are, as in other things, the basis of human welfare." Toleration is not a careless neglect of the right and duty to defend and spread one's own point of view when that view is one to which reasoning may lead anyone. Such toleration is lack of normal intellectual vitality. Neither is the desirable state one in which people are educated to stamp out all conduct and opinion different from their own: that spells stagnation and ultimate suicide in the group in which such an attitude becomes predominant. Toleration, in the degree to which it is required, consists in smiling a vigilant welcome on all variations and continuing to do so as far as it is necessary to the progress of the group and so far as it is not productive of a weakened group structure.

X. Criminal Psychology and the Notion of Blame

If social progress is to become a swifter and a smoother stream, and if society is to have a happy regard for the rights of individuals, the direction of change must be away from regulation by public opinion and towards the assessment of eccentricities by specially qualified bodies. Public opinion must still exist, for it is part of the matrix in which culture develops, but it must exist in a variegated form, centred in a number of distinct parties and societies consciously striving for differing goals; there is no demand for its function as a vast, shapeless, conservative blanket over the whole of society. Specially qualified bodies already exist to deal with eccentricities, but not adequately. The law, for example, deals rather indiscriminately with all forms of anti-social eccentricities. When the judicial body has decided what conduct is undesirable, the police detect and collect that particular class of eccentrics and the magistrates decide how to deal with them.

Only recently, and in relation to children, have we had the growth of a wiser reaction on the part of society (in the form of psychological clinics) to those who are repeatedly delinquent and astray from the social standards of moral conduct. We need qualified bodies for reporting on all forms of eccentricity, and for deciding, as specialists acting for the public, which forms are really anti-social. It must then be their second task to apply preventative and remedial measures.

Although a vast amount of border-line criminal conduct is alternately neglected and persecuted to-day, by a public opinion incapable of deciding what relation such conduct has to social welfare, there is a considerable core of definitely anti-social behaviour which society has always clearly labelled as such and attempted to eradicate by fines, imprisonment, corporal punishment, and execution.

It is to this problem of handling non-conformity by legal methods when it has definitely become anti-social that I wish to direct the enquiry ; for psychology has much to offer in this field, and it concerns the forms of eccentricity which, after all, are of greatest social urgency.

Until quite recent times society had no other resource in treating the habitual criminal than to punish, again and, if necessary, yet again, without attempting in any way to control his behaviour through understanding his mental processes.

With the work of such pioneers as Lombroso began the scientific study of the criminal and the pathological delinquent. To-day, the thorough psychological studies of Healy[1] and Burt,[2] among others, have brought into existence a true psychological understanding of adult crime and juvenile delinquency. This science of criminal psychology has already given evidence of the immense promise it holds for the succouring both of society and of the unfortunate individual criminal.

It is impossible to give in a brief, non-technical outline the more subtle and complex findings in the psycho-analytical field in regard to criminal tendencies and their cure, but the more tangible results of the psychological study of the criminal may be sketched.

All intelligence-testing so far carried out shows the criminal to be subnormal. This applies both to delinquent children and delinquent adults. Various forms of mental disease are also much more common among criminals than in the general population. Lombroso was even tempted to say that every criminal is an epileptic.

The same tale of stunted subnormality and disease appears on the physical side. Leonard Darwin remarks : "As regards English criminals generally, except those convicted of fraud, they are markedly inferior to the general population in stature and bodily weight."[3]

The hereditary tendency to crime is also well established. The

[1] W. Healy, *The Individual Delinquent.*
[2] C. Burt, *The Young Delinquent.*
[3] *Eugenic Reform*, p. 211.

record of some six generations of the Jukes[1] family is itself sufficiently convincing, but that evidence is now a mere drop in the general pool of evidence.

Let the above writer, an outside observer of psychological evidence, sum up the evidence: He concludes that all researches in regard to the ancestry of criminals have proved conclusively that crime does tend to run in families.[2] It has frequently been said that every criminal, by virtue of his inherited or early-acquired mental constitution, had the choice between being a criminal or a neurotic.

Burt and Healy have done much to show the environmental influences that are to be avoided, but the importance of heredity remains undiminished by their researches. The weight of humane opinion is indeed with McKim when he writes that "all defectives and degenerates committing heinous crimes merit gentle removal from life. To this, education must come and educational propaganda must be directed. The more primitive the mental life of society, the more does it canalise its impulses—lavishly sentimental in this thing, extravagantly cruel in that. The more true our world picture, the more must we face the necessity of destruction, death, and evil."[3] Fortunately, as long as the possibility of eugenic measures by sterilisation and segregation remain open to society, it need never be forced to such drastic measures as the lethal chamber, which McKim suggests.

Our novelists have indeed done the public mind a great disservice by constantly presenting so false and so romantically glamorous a picture of the criminal that the public mind is obstinately unable to get a true conception of the typical criminal mentality. Thus it cannot easily be educated to see what its wisest course of action should be. Goring in his careful study of the English convict and his offences writes: "The one characteristic common to the offences of 90 per cent. of the 150,000 persons convicted to prison every year—the one characteristic apart from their intolerableness to a well-ordered society—is the in-

[1] For the reader who is not now familiar with the results of this class of investigation I quote the following from Estabrook's *The Jukes in* 1915. Referring to Dugdale's earlier investigation he says: "Of the 709 whom he studied, 180 had either been in the poorhouse or received outdoor relief to the extent of 800 years. There had been 140 criminals and offenders, 60 habitual thieves, 7 lives sacrificed by murder, 50 common prostitutes, 50 women venereally diseased contaminating 440 persons, and 30 prosecutions in bastardy. The total cost to the state of New York of this one group of mental and social degenerates was estimated for a period of seventy-five years beginning in 1800, at 1,308,000 dollars."

[2] *Eugenic Reform*, p. 214.

[3] *Heredity and Human Progress*, W. D. McKim.

credible stupidity of these offences."[1] The criminal is rarely a person consciously pursuing evil, but an unfortunate being drawn by the forces of his heredity, the mistakes of his early upbringing, and the dullness of his perceptions in relation to the intricacy of modern social life. The psycho-analyst, moreover, could cite case after case in which a neurotic criminal has virtually been forced to anti-social acts, after acute mental conflict and in face of the strongest efforts of will to subdue the compulsive ideas. Not all criminals, by any means, are victims of a compulsion neurosis, but the contemplation of such extreme cases will help us to realise, the predetermined nature of all criminal actions—the inevitability of certain attitudes and actions, given a certain hereditary soil and a particular previous environment.

Now the average person is invariably confused by this notion of psychological determinism when it is applied in the criminal sphere. For he says: "If the criminal is the inevitable resultant of a given heredity and environment, how can we possibly blame him for his actions? But we do blame and punish those who do wrong, and it makes some of them sound citizens again, so the idea of psychological determinism must be wrong." The logic halts a little, but such is the usual reaction of the man trying to grapple with this problem, and we can overlook such academic errors.

The scientist in all realms begins by finding clear instances of predetermined successions of events. He proceeds in all his investigations in the simple faith that such determinism—such invariable relation of cause and effect—exists. And until he finds anything to the contrary—as has occurred in certain obscure happenings now being investigated in advanced physics—he is content to regard determinism as universal.[2]

Now the psychologist, like other scientists, has proceeded on such an assumption, and up to the present he has found no proved instances of indeterminism where all the factors are known.

Consequently we can assume for the present that all actions—of the normal and neurotic alike—are predetermined by sequences of earlier happenings, memories, feelings and inherited urges.

Out of this "problem"—this clash of our desire to believe that we have free will with the observed facts and deductions to the

[1] *The English Convict*, H.M.S.O., quoted by Darwin, op. cit.

[2] This possibility of a certain absence of determinism in complex phenomena has been instantly exploited by all those whose philosophies of life lead them to resent the growth of science. It is, however, important to notice that the advanced physicists who are actually responsible for discovering these phenomena are not in the least impressed by this upsetting of causality, believing that further knowledge of the conditions will naturally clear up the non-determinateness.

contrary—philosophers have long made a fine wordy exercise, especially when Christian theology demanded, in order to be able to dispense rewards and punishments hereafter, that we should have wills of our own.

Strictly there is no problem here, but only a very cunning pitfall of confusion into which we all fall, at first. Both aspects are true: we make up our minds and our decisions are predetermined. The confusion arises firstly from not standing in sufficient detachment from ourselves when we are standing in detachment from the environing universe, and secondly from the misleading effects of the word "I" in every step of this reasoning.

"I" is a single, fixed, and unatomisable symbol; whereas the self is a changing fountain-head of forces and no more a fixed unchanging object than is the government of a nation. The conative self, the willing and deciding self, is the organised resultant of a team of instinctive drives. To say that "I decide something" describes the inner feeling of action of one impulse taking the lead over another. The self is the leading organised instinctive drive at any given moment, and varies according to the group of instincts uppermost at the time. Consequently the self, though always possessing substantially the same members of its instinctive committee (which core gives it substantial identity and continuity), has now this member absent and now that. If my self-assertive instinct has been recently stimulated by some success, my felt self is suffused with a quality of pride and confidence and my decisions and actions may show more than a justifiable amount of self-confidence. Or again, the recent contemplation of love scenes may have called my sex instinct into predominance so that I am predominantly an amatory self both as to my subjective awareness of myself and as to the acting self which other people perceive. The self is thus a solution of forces, changing in identity but continuous, like the head of a fountain. It is, if you like, a pair of scales for weighing the impulses of which it is composed.

Thus it is clearly correct to say that "I decide," just as it is correct to say that the heavier weight in the scales raises the lighter one. But in both cases the happening is determined by immutable laws and the particular happenings that have gone just before.

Determinism and Free Will are, then, in no sense contradictions. If one considers only the small universe of my own mind I undoubtedly decide just as I wish to do. Considering the larger universe, the spectator will see my decision as a determined item of its totality. From the smaller universe I see a fixed environment

to which I react as I please, but "as I please" means according to the nature of my being, and brings me within the fold of determinism.

Now if determinism is true, says the thinking man, what becomes of sin and virtue, punishment and reward, conscience, praise and blame, remorse and congratulation ; for all our actions are predetermined and could not have been otherwise ?

Here again the thinker is forgetting the artificial nature of his momentary, contemplative detachment from the interacting universe of impulses and objects to which he wishes to orientate his conduct. His praise and his blame of actions good or bad for social welfare are themselves determining factors in the behaviour of others, for praise and blame influence conduct.

In his detachment the scientist may think of the universe as a marvellous piece of clockwork, and he perceives blame and punishment simply as a reaction occurring wherever anti-social conduct has gone by. But if he now descends to everyday life and attempts to maintain the same attitude, as some psychologists do, saying that to understand all is to forgive all, then his position is essentially false and illogical. For he has his part in the scheme to play, and if he has a normal desire for social welfare he must desire, in addition to understanding the mental mechanism of the criminal, to influence it in a definite way. Society has always attached blame only to those wrong actions which it supposes to be under the control of the will, for the simple reason that it knows blame and disapproval cannot influence other kinds of action, the structure of our minds being what it is. But society has never been able adequately to decide what is willed and what is not. It has long excused idiots ; it has more recently excused the insane ; it is just beginning to doubt whether punishment is the best treatment for neurotics.

The psychologist sees blame and punishment everywhere as a primitive reaction of society to unsocial conduct—as an antibody[1] against the disease of criminality. As a physician he may then construct a more effective cure than this primitive reaction. He may say to society : "The criminal actions of this individual are blindly predetermined, as are your reactions against him. It is your place, as the saner party, to perceive that our goal is not really to inflict damage upon him but to modify his reactions. It is your duty to adopt better and better measures of reforming individuals, even if these measures conflict with the blind, primitive revenge impulse of blame and punishment." It is indeed the next task of society to react in a more complex and effective way

[1] With no apologies to purists.

to delinquency than the crude way to which it has been accustomed to act.

It is sometimes said that punishment can have three functions: (1) Retributive, the satisfaction of society's "natural" desire for revenge. (2) Deterrent, the prevention of criminal acts by others through the spectacle of a criminal being punished. (3) Reformatory, the bringing about of a beneficial change in the criminal punished. This order represents the order of their development with the passage to civilisation. Notice, however, that even the most primitive reaction of society, the impulse to revenge, is unconsciously purposeful. It evolved blindly in the individual as a self- and race-preserving reaction, and proved serviceable in the group. Yet since it is a blind impulse likely to lead us astray in civilised life, it must be dropped in favour of more effective reactions; only the deterrent and reformative aims are of value today. And if, in some cases, the reformative treatment prescribed for the criminals proves to be positively pleasant, that is no unsatisfactory feature, providing the deterrent aspect of conviction is not destroyed. Blame must continue to be attached to crime because social disapproval is a deterrent, a quantity in the arithmetic of decision which, being present in any predetermined act of will, tilts the balance of action in the direction desired by society.

If society will eliminate the undesirable eccentricities which we call crime, it must proceed: (1) eugenically, by the elimination of physically and mentally defective types; (2) educationally, by sound character education based on established psychological principles and adapted to individual differences psychologically measured; (3) remedially, by true reformative treatment of the criminal, involving if necessary, deep psycho-analysis; (4) socially, by the removal of situations and social practices anomalous to the spirit of social progress. The order of importance of these measures probably falls as they are written.

It is estimated that in America alone crime costs roughly £1,000,000,000 a year.[1] Surely it would be wiser to spend a fraction of this sum on discovering principles which would be of universal application in the prevention of criminal development and the reform of criminal mentality? But perhaps society as a whole enjoys too well the game of making criminals in order to hunt them down.

[1] According to J. E. Baum, American Banker's Association.

XI. Clarifications Required in the New Morality

Social and antisocial conduct is probably distributed according to the normal curve of biological distribution which we discussed in Chapter II. The bulk of the population is just well behaved and respectable; a few individuals strain every nerve for the social welfare; an equal number damage society in every way conceivable.

The true picture of good and evil is one full of middle tones shading off to a few high lights and condensing in a few spots of complete blackness. But the picture implicit in the attitudes of the popular mind is just a sketch in black and white—criminals and ordinary people.

All citizens are alive to the problem of clearly labelled crime; only the more intelligent section of men see the importance of watching the border-line conduct between good and evil. These perceive the constant necessity of recognising new kinds of crime which grow up unnoticed and unchecked, and of removing the stigma from conduct which has ceased to be criminal and has become valuable.

Undoubtedly the confusion in ethical theory—the conscious adoption of secondary "universal" ethics along with unconscious adherence to evolutionary ethics—has led to a state of affairs in which only the most approximate judgments as to the desirability or otherwise of certain conduct, has been possible.

A reasoned adoption and development of complete evolutionary ethics would do much to clear popular thought and so avoid much of the ineffectiveness of the social will, the blindness of legislation, and the wastage of social energy resulting from society's inability to handle any but the most obvious forms of good and evil conduct.

Then again there is confusion from the legacy of unclear thought which labelled feelings and ideas as well as actions with approval and disapproval, merely on the probability that certain emotions would lead to certain actions.

Thus kindness, as a feeling, is so constantly labelled good that it is believed to be a virtue independently of any action to which it may lead. Similarly, acquisitiveness is frequently stigmatised just as it stands; whilst lust, the sexual emotion, was so thoroughly denounced by Christianity, especially in that Victorian era which was the peak of inhibitory Christianity, that few people to-day, even the educated, can regard it as their reason tells them to regard it. This attachment of moral values to emotions and

inborn impulses has gone even further, and men like Calvin, Rousseau and St. Augustine, reflecting the atmosphere of their eras, have discussed whether the whole of inborn human nature is good or bad!

Essentially no emotion, sentiment, or instinct is intrinsically good or bad: it is just given as a natural object. Only particular actions which assist or conflict with social progress are good or bad. Yet the current outlook condemns thoughts and feelings along with actions and, still worse, condemns or approves of a whole instinct according to whether many or few of the actions emanating from it happen to conflict with social laws.

Even the psychologists, at least the more popular writers, have fallen victims to this way of thinking, for they seek to reduce the motives of their antagonists to less "reputable" or "respectable" ones than are apparent on the surface. Religious emotion becomes transferred sex emotion, opposition to authority arises from an incestuous jealousy of the father in childhood, a scientific curiosity develops from repressed sexual curiosity—and so on. These analyses may be perfectly true but the moral values attached to them by those who use them are entirely non-existent. The moral worth of an action can be in nothing but its real social consequences, and the peculiar quality of the instinct energy which happened to be used for that particular action is only of psychological interest.

It may be true that constant preoccupation with thoughts of criminal action may help to lead to such action (though to-day the psychologist realises that the impulse is the father of obsessive ideas, not the ideas father of the impulse). Again, it is true that the possession of a great natural tendency to kindness may make a better citizen than the possession of a strong sexual instinct, since there are relatively few kind actions that are undesirable and many sexual ones. But between the emotional energy and overt action there is such scope for education, deflection by will and sublimation, that all thought on these lines is courting confusion in society's moral opinions.[1]

[1] Even Bertrand Russell (*The Conquest of Happiness*) seems to fall into this error when he reproaches those who attempt to look after the morals of others with satisfying their own self-assertive desires. At the same time he disparages conduct which springs from the instinct of fear and approves relatively of that arising from the parental instinct and the sex instinct.

There are also many utterances of Christ seeming to thrust moral valuations on general emotional attitudes themselves. Probably in both instances we have an attempt to speak to the popular mind in the language which it understands.

Allied to this error is the doctrine that the contemplation in thought of immoral actions is itself immoral—instead of merely being dangerous, as in fact it is. This is responsible for much of the obscurantism, the insincerity

To all this discussion the practical man may object that though it is of interest as logical analysis it has no direct bearing on social life, since no court of law has yet sentenced a man for too strong an acquisitive instinct or for experiencing sexual desire for a person not legally united to him.

Unfortunately the objection misses the larger cultural effects. Who knows the amount of suffering through mental conflict and repression caused by labelling the whole sex instinct as disreputable? Or the total amount of misdirection of ideals in education and social life, from the notion of original sin?

Again, since such an attitude as that of kindliness is asserted to be intrinsically virtuous, it is impossible to bring to society any full realisation of the evil character of certain actions prompted by this emotion. For the same reason, it is an easy matter to call forth disapproval of any action originating in pride or self-assertion although the action may be obviously and clearly directed to the welfare of the community. Such sweeping condemnation of pride is one of the effects of excessive attention so far given to propagating merely the secondary "universalist" principle of evolutionary ethics, instead of the complete perception of morality. Pride that is truly adjusted to the capacity and integrity of the individual or nation can in no sense be called immoral. Too frequently it happens to be excessive and brings about the downfall of the party concerned. Then its unethical character consists in being responsible for a maladjustment, but a maladjustment which rapidly destroys itself. Much of the passive opposition to eugenics and the failure of intellectual people to support leaders like Dean Inge, spring from a fear of being accused of any pretentions to superiority. There are many actions springing from sublimated self-assertion of which our civilisation stands in great need.

In crossing the borderland of morality, one strikes these misplacements of value much more frequently than in the extreme instances of clear good and evil conduct, and much of the difficulty arises from causes we have just considered: judgment by ignorant public opinion; judgment on general emotional attitudes rather than on actual actions; and judgment confused by the conflict

and conservative obstinacy of social thought among the leaders of the last generation. True reasoning of the mathematical kind in which one begins, "Now suppose we do adopt this practice, then it follows . . . etc. . ." is quite impossible with such people, for at the very act of contemplating such a state of affairs their minds become so acute a confusion of panic and conflicting repressions that they become first petrified and then raving "moralists" blustering to hide their own inner uncertainties. We are troubled at the moment with a plague of such writers in the Sunday press.

of "universal" ethics with intuitively perceived evolutionary ethics.

The average man tends all too frequently to judge actions in a general way by his feeling for their subjective motives rather than their ultimate objective results. A man who scatters trivial generosities which he can well afford, whilst pursuing a distinct antisocial slant in his larger transactions, is always certain to be able to trade on the weaknesses of public judgment, even though both aspects of his life are known to society. Even mere sociability weighs greatly with the uncritical public mind in making judgments of approval or disapproval which may have far-reaching consequences for the object of them. From the bus driver who chats with his passengers when he would be doing them greater service in respect of safety by attending to his business, to the university professor who spends the spare time that society has given him in a round of social engagements designed for his own advancement, devotion to results of real social value calls forth less social approval than admittedly superficial courtesies.

We need a social life made nobler by a general appreciation of true values. We need a distinct shift of moral values at the present moment and a system of social alertness which will ensure a continual shift in the directions demanded by the best interests of society.

Ignorance, the absence of a broad and liberal knowledge must be made a new trait of evil repute and its opposite a virtue. It seems hardly necessary to demonstrate how this change in valuation arises from a change in civilisation towards greater mechanical and social complexity, but one may note, in passing, the direct obstruction to progress through an ignorant electorate; the limitations to educational advance imposed by parents and committees who know nothing about modern advances in educational principles; the losses in national health through those who will not trouble to find out something about hygiene. These are a few of the prices we pay for a complacent and genial acceptance of ignorance.

In another instance, that of narrow-mindedness, public opinion has already begun to move in the direction demanded by new ideals. It has begun to perceive a little of the harm wrought by the narrow-mindedness of middle-aged men and women, into whose hands the reins of government have always dropped with comfortable regularity from the preceding generation of unmeritorious middle-aged. Narrow-mindedness was scarcely to be considered a sin in periods of the past where social situations changed slowly, if at all, but in societies of the present day where

change through material urges is rapid, narrow-mindedness, the firm intention to be deaf to all viewpoints conflicting with one's youthful beliefs, is one of the deadly sins.

Apart from such changes in respect to particular kinds of actions, a sharper edge is needed to moral valuation. Public opinion needs to be educated to perceive the tones of grey between the white and black of good and evil. Providing a man abstains from active wrong-doing we are indifferent (at least in times of peace—those slack times which create the need of the violent effort of the next war) as to whether he is actively helping society or living purposelessly. We give a living to hosts of purposeless occupations. We permit, for example, an army of capable people to spend their own and other people's time working the machinery of betting ; we hold a host of fine minds and characters preaching in empty churches ; we employ still more ingenious minds turning out cheap and futile stories when our libraries are full of good books. Because a man has a private income, he is permitted, without censure, to spend his life on a golf course, or worse. The English public school tradition even prides itself a little on turning out purposeless men who "do not take life too seriously."

Perhaps not all can have an occupation of value to the community (and some of the most valuable are the most dry-as-dust) which interests them to the extent that they grudge the time spent away from it. (Though a general adoption of scientific vocational guidance would do much to avoid the sad prevalence of misfits in occupations which they cannot hope to find satisfying and purposeful.)

But there are thousands of opportunities for social service, even merely by self-improvement, outside the individual's occupation ; and these opportunities a more alert social conscience would expect to see used, especially by those with spare time—the unemployed —whether living on the dole or interest on consols.

Against any attempt to enforce higher moral standards, and particularly a standard expecting positive social service rather than a mere abstention from disservice, a good proportion of the community will always offer a resistance. In the first place, it will label all attempts to produce a sharper edge to moral awareness as "priggishness." If this were priggishness it would be the purpose of all far-seeing national leaders to evolve a nation of prigs. We must admit the psychological fact that all cultural advance is accompanied on the whole by an increase of suppression. Freud expresses this in psycho-analytic terms when he says: "If civilisation is an inevitable course of development from the group of the family to the group of humanity as a whole, then an

intensification of the sense of guilt—resulting from the innate conflict of ambivalence, from the eternal struggle between the love and the death trends—will be inextricably bound up with it, until perhaps the sense of guilt may swell to a magnitude that individuals can hardly support." Increased recreational outlets and innate modification, will, however, make possible development of conscience necessary to further cultural advance.

But the true increase of morality will be measured not merely by the decrease in criminals, but by the decrease in moral neutrality, which will affect a far larger number of people. And the change will arise through an education which succeeds in bringing the religious spirit as distinct from theology and religion into the very texture of daily life. That is a task depending firstly upon a psychological investigation of character and religion, an investigation which we may begin in the next chapter.

. . . . .

The thesis of this chapter has been primarily that moral rules can be explicitly calculated by deciding on a goal of social endeavour and working out, according to sociological science, the conditions necessary to the attainment of that goal. More precise reasoning shows that the goal has not to be invented but only discovered, by an examination of nature. In fact it is the goal of evolutionary progress. Morality is thus a branch of natural science. Although no explicit and conscious perception of this truth has appeared in history prior to the last century, the trial and error and intuitive striving of social groups and religious leaders have always resulted in the adoption of moral laws really directed to this goal. An important secondary principle, arising out of this primary rule of competition, leads to a doctrine of love and co-operation between all members of any group. Since culture lives mainly within such groups this secondary ethical principle has been mistakenly accepted as ultimate morality and become embodied in all great religions. Until the complete principles of evolutionary ethics are entirely accepted there will therefore be a constant conflict between our intuitive sense of right and wrong and that explicitly taught.

Society's methods of getting its moral laws obeyed have so far not been highly successful and could be greatly improved by psychological investigation. In particular, a more explicit judge than public opinion is needed to report on abnormal behaviour and its treatment; to change antiquated moral valuations, and to introduce a fuller regard for degrees of positively moral conduct.

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*Viewpoints essential to the argument.

CHAPTER FIVE

PROGRESS AND THE PRESENCE OF GOD

"O death, where is thy sting; O grave, where is thy victory?"

I. What are the Activities which we Describe as Religious?

"RELIGION is the vision of something which stands beyond, behind, and within, the passing flux of immediate things; something which is real, and yet waiting to be realised; something which is a remote possibility, and yet the greatest of present facts; something that gives meaning to all that passes. . . ." Thus has Whitehead summed up the essence of the religious activity. But this is the view of an individual and a metaphysician; perhaps we are beginning at the end; let us take up the anthropologist's standpoint and make a broad sweep of all the human activities which those concerned in them call religious. Thereby we may arrive at a true conception of the social psychological forces which we are to examine. What is religion? Professor Leuba[1] has collected (from copious works on the subject) some forty-eight definitions. From these, Thouless[2] has selected three to represent the three classes into which, in his opinion, all the rest can be divided.

First we find Frazers': "A propitiation of powers superior to man, which are believed to direct and control the course of nature and of human life." There is next, from James Martineau: "The belief in an ever-living God, that is, a Divine Mind and Will ruling the universe and holding moral relations with mankind." Lastly we encounter Dr. McTaggards': "Religion is clearly a state of mind. . . . It seems to me that it may best be described as an emotion resting on a conviction of harmony between ourselves and the universe at large." Thence Thouless proceeds to argue that the three classes of definition refer respectively to a mode of behaviour, an intellectual belief, and a system of feelings. This psychological classification, reflecting conation, cognition and feeling, is a good step towards clarity, but one must point out that the first is obviously related to the third, and that the third,

[1] *A Psychological Study of Religion.*
[2] *An Introduction to the Psychology of Religion*, p. 3, C.W.P.

according to the principles of dynamic psychology, can easily give rise to the second as a rationalisation.[1]

This emphasises the three aspects of the individual's religious activity, some one of which most essayists are inclined to overlook, but it gives us no conception of the richness of the social functions of religion and nothing of the actual content of the individual's beliefs, feelings, and actions. The systematist may continue to make his arbitrary definitions, but we must put down our dictionaries and look at the protean forms of religious expression which pass without boundaries into all fields of human life.

We shall then find ourselves concerned with all those beliefs in a supernatural person or persons, in immortality, in divinely inspired priests, and the occurrence of miracles. We shall be called upon to discuss propitiation by sacrifice, and supplication by prayer, ritual, creeds, and the experiences of mysticism and conversion.

These are the living stuff and texture of devout human souls, the activities and beliefs of man's most idealistic yearnings, but yet they must be the coldly contemplated objects of the psychologist's study and must eventually come under scientific thought in a psychology of religion.

The greatest degree of detachment can best be assured to those not accustomed to the psychological standpoint, by reviewing first the religions of primitive people.

In the first place religious activities are greatly fused with others. "It is difficult," says Tylor, "and in fact quite impossible, to distinguish sharply and finally in primitive life between law, morality, art, and religion." Religion, as a reaction to the supernatural, indeed interweaves itself in an illogical pattern, derived from complex cultural evolution, in most of the activities—eating, hunting, begetting children, tilling the soil—which constitute the life of a primitive. The supernatural forces consulted indifferently for moral or immoral ends, are now implored, now cajoled, now cheated, now threatened. Always we find the supernatural powers closely modelled on the savage's own mentality. They are sometimes his ancestors ; sometimes the spirits of animals ; sometimes essentially good, sometimes essentially evil in nature. But religion does not yet mean for him an explanatory principle in the universe and one intimately connected with moral goodness. "Religion to-day," says Briffault, "is primarily thought of as a system of metaphysics," but "nothing is more foreign to the psychology of

[1] Observe that this classification admits of infinite subdivision according to the particular set of intellectual beliefs, the nature of the emotion; and the kind of action practised.

primitive humanity than a desire to answer philosophic questions and to interpret the universe of existence. Its function is not to explain life but to be practical and obtain those things necessary to his sustenance. It is magic." Nevertheless, religion has its connection with morality and with such interests in understanding the universe as the savage possesses. The breaking of taboos—the legal statutes and moral laws of the primitives—is visited not only with tribal penalties, but with the still more terrifying displeasure of darker powers. And in the animistic explanation of natural happenings, which is the only kind of explanation the primitive mind seems to favour, the supernatural figures of his religion play the major rôle as "metaphysical" entities. Every bush, hill and river has its very human-minded spirit whose whims, whose loves and ambitions, explain natural happenings as completely as any scientific system. The supernatural plays a diminishing rôle as human life ascends. It crystallises first into a single devil for all the evil spirits and into a single god for all the well-intending beings (as in Zoroastrianism). It was the intellectual feat of the Jews to reduce all the myths of the supernatural that had gone before into the conception of a single omnipotent deity. Perhaps that was nothing, but the creating of a single monstrous illusion in place of a number of weak and scattered illusions.[1] The supernatural, as it tended to vanish with the melting mists of ignorance, was caught up into this single conception. Its relations with moral behaviour were rendered explicit: it continued to ensure moral behaviour among slightly more sophisticated people as it once ensured conformity to tribal taboos. In its second function, as an explanatory principle of natural happenings and magical control of environment, the supernatural disappeared more rapidly than in the moral sphere. Animism receded first into the word-entities of philosophers—it plays its part still in many metaphysical treatises—and reverted still further before the advance of science. With the decay of magic went the decay of ritual, a thing assuming immense proportions in primitive social life. Briffault remarks: "Primitive magico-religious ritual consists broadly of two orders of procedures, the one intended to please, attract and conciliate the divine powers, the other to avert and exorcise the harm which they have power to inflict." In the field of magic which gradually separated from the magico-religious plexus, we find ritual—incantations and ceremonies—persisting right down to the times of the alche-

[1] "We are told that having only one God is 'progress.' *Is it?* How can we find 'progress' in the shift from divine oligarchy to divine autocracy?" asks Clemenceau. Op. cit., p. 374.

mists. The clearing-up of natural phenomena by science and the decay of ritual in this branch of control of nature had doubtless much to do with the increasing disrepute into which it fell in the religious branch of supernatural activities.

Surveying religious interests as they are cultivated in primitive life and perceiving the trend of their evolution, we are better able to see what functions are essential and what inessential, what aspects belong to the childhood of man and what shrivelled appendages are about to be shed in the progress of higher social life. Most of the notions of primitive man need no discussion as to their validity: we can smile at their beliefs in mixed envy and indulgence as at the make-believe of children. But we still have religion with us in varied forms; and the belief in God—in some vivid personal deity or some vaguer, abstract essence of nature—is central to these religions. Let us examine these later developments of primitive patterns from the point of view of the physical sciences and of the psychology of man in society.

II. The Notion of God

Just as the emotional attitude to the gods has varied from one of fear to one of proprietorship, and from one of worship to one of hatred, so has the conception of God in men's minds shown considerable variation—especially in recent times and since the advent of metaphysicians and scientists.

Nearly all the earlier beliefs we find to be directed to some form of a personal spiritual being. There have been endless variations on the theme of king, ancestor, father, mother. God has also been whittled down by philosophers to an Absolute or an entity about which only negatives can be asserted. This entity behind the seen universe has been called Reason, the First Cause, the Life Force, and many names too vague and meaningless to be considered.

To criticise the notion of a god of human parts and passions, necessarily containing all the insufficiencies and defects which beset the mind of man (the notion of personality can be derived from no other object than man) seems to-day unnecessary. It has been amply carried out by many thinkers during the last half-century. Three salient objections occur straight away: (1) That the human mind is only a stage in the development of mind, and a stage which is to be far surpassed. To construct a God on this basis would have no more dignity than to construct a god on the model of a monkey or a rat. (2) We have as yet encountered nowhere in the universe evidence of mind other than our own.

(3) The psychological considerations which we shall shortly encounter show the mind to be already amply determined to acquire such beliefs on purely psychological grounds. The notion of first cause also scarcely needs refutation. It is very doubtful whether causality is a conception to be applied far outside the field of restricted human experience,[1] whilst to think of a beginning in time is not only incompatible with the probable development of the relativity theory, but involves in itself a logical contradiction which renders it inconceivable to our minds. The Absolute of the philosophers, on the other hand, is clear to the intellect but has no more claim to inherit the position of what we feel when we think of God than has, say, the exponential theorem of eternity.

There remain, I believe, two entities which invite us to react as we traditionally react to the idea of God, and which possess various attributes which would entitle them to be the fitting objects of reference for the word "God" is in its usual contexts. The first of these has already received homage in the writings of Spinoza, of Haeckel, and of many other philosophers, from Democritus to Bergson. To the Universe itself with all its forces, with all its inexpressible complexity, and vastness, which gave each of us his being and provides in its boundless grandeur the "timeless and eternal background" to our little lives, the mind of man cannot but stand in an attitude of awe and worship. This great intricately-interwoven unity is the source of inexhaustible wonder, joy, and reverence to the scientist, and forms the binding and consecrating principle of his life's work.[2] In contrast to the partial and specialised conception of God which are to be found

[1] See Aveling's treatment of this matter in *Mind* (London).

[2] This attitude of the scientist cannot be better expressed than in the words of Einstein: "The most beautiful thing we can experience is the mysterious. It is the source of all true art and science. He to whom this emotion is a stranger, who can no longer pause to wonder and stand rapt in awe, is as good as dead: his eyes are closed. This insight into the mystery of life, coupled though it be with fear, has also given rise to religion.

"To know that what is impenetrable to us really exists, manifesting itself as the highest wisdom and the most radiant beauty which our dull faculties can comprehend only in their most primitive forms—this knowledge, this feeling, is at the centre of true religiousness.

"In this sense, and in this sense only, I belong in the ranks of devoutly religious men.

"I cannot imagine a God who rewards and punishes the objects of his creation, whose purposes are modelled after our own—a God, in short, who is but a reflection of human frailty. Neither can I believe that the individual survives the death of his body, although feeble souls harbour such thoughts through fear or ridiculous egotism.

"It is enough for me to contemplate the mystery of conscious life perpetuating itself through all eternity, to reflect upon the marvellous structure of the universe which we can dimly perceive, and to try humbly to comprehend even an infinitesimal part of the intelligence manifested in nature." (*Sunday Dispatch*, 2nd Nov., 1930.)

in many metaphysical theories, this idea of God as the universe itself, or rather, as the existence, of which the universe we perceive is an aspect and an extension, is a conception truly able to inherit the title of "Deity" by reason of its emotional and logical relation to man. On the other hand, the material and spiritual universe which evokes our worship, which gives us birth, and stands to us as an eternal, changing but unaltered mystery behind our passing individual lives, is deficient in any intimate concern for man, indifferent to the issues of good and evil in society, and not logically identifiable with the spirit of goodness. And these latter attributes are so important a part of the older image of God that it seems unjustifiable to carry on the term "God," and the reactions it attracts, to this different object of contemplation.

Now, it is my present thesis that there exists an entity which has sufficient similarity to the older conception of God to be given that title, and to be identified with God not merely for the sake of preserving this old reaction when true sincerity of thought should lead us to abandon it once and for all, but because it is a very real entity, presenting in essence all the nobler features of older images of God and capable of the same beneficial function in our spiritual life.

This entity is constituted by all those forms in the collective mind of man which are working for ultimate good. As a manifestation of the human mind it is also a part of the whole universe, indeed a culminating expression of the forces in the distant stars, and in the green beauty of the earth. From the foundation of instinctive urges which the human mind shares with the higher animals there soars a fine edifice of thought and reasoning, sweeping up to lofty pinnacles of great and eternal virtues and ideals. It is this growing-point in human idealism, integrated from the idealistic thoughts and actions of many individual minds, that is properly to be regarded as God. Every evil action conflicts with other evil actions and comes to nought. Every good action and wise thought finds somewhere, in the endless train of consequences which it sets afoot, another good action, performed by some equally isolated individual, with which it joins itself in the furtherance of the purpose of life. In the finest manifestation of the collective mind, in the best literature, the wisest traditions and most selfless institutions, there is a power for good greater and wiser than the individual mind, which gathers up into itself all good actions, lets no striving go unrecognised by eternal resultants, consoles the individual in his struggle with ascendant evil or stupidity, and provides an assurance of completion of those things which individual mortality would otherwise render purposeless.

In this entity we find something that has been the core of many previous conceptions of God, something indeed to which these earlier conceptions were approximations framed in the symbol of a humanlike personal God for the sake of greater tangibility and emotional appeal. The atheist is usually a more sincere thinker than the comfortable religious man, and tilts at images for the existence of which no evidence can be given. These images are the religious leader's intuitive perception of the collective spirit of goodness, for which there is every evidence in sociology but which, as an intuitive perception, remains unclear and undemonstrable. When the fragments of the idols have been swept away we shall find a clearer and more direct vision which, because it satisfies the intellect as well as the heart, will come into closer contact with human life than such concepts have ever come before.

Critical reasoning must, however, be given another opportunity to inspect this conception, though any elaboration of its relationships must be postponed. Reason asks: "How can the collective human mind have eternal life if, as animals dwelling on a minor planet attached to a second-rate sun, human beings are liable to be cut off at any moment by accidents of nature?" The insignificance of the human beginning is no indication of the true place of human destiny in the cosmic happenings. And as to fallibility, we can turn beyond the possibility of human destruction to the eternal existence of a universe which has produced human life once and can produce it again. This collective mind has its roots in the material cosmos from which it is an emergent. God is the manifestation of a presumably potential emergence in the universe itself. Thus, in the end, this concept unites itself to the concept of God as the Universe. The worship of nature is one with the worship of God, of the purposeful collective mind, composed of individual consciousnesses conscious of each other and bearing in themselves all the echoes of past good actions and all the advantages resultant from wisdom and self-sacrifice, to pass on to eternity. But how developed and remote is this concept from that which our divines hold before us! And how different from the various notions which the most progressive leaders of the Protestant Church are trying to shape out of the stubborn intransigence of their original creed! Says Inge: "Although science is for the most part agnostic about the existence of a personal God, it is positive in rejecting much that has been falsely taught and believed about God. God is, at any rate, not a capricious and cruel Oriental sultan, nor a magnified schoolmaster, nor the head of the clerical profession." How can we hope constantly to drag down new conceptions to old creeds? Continuity of social life?

Yes, where it does not mean postponement of progress, and where breaks in the stream are not inevitable. But I think we have reached the end of a phase that is more than two thousand years old. Science has no historical precedent, and its conclusions cannot be seduced to the beliefs of the culminating philosophies of an age of super naturalism. And we may ask here, as it has been asked by thoughtful men before, whether there is any reason for constantly continuing in the use of the term "God" for constantly changing conceptions. It sins against the simplest rules of logic and the demands of reason, and in return, can claim only to satisfy the need for continuity in things affecting social affairs. Only the fear of creating unacceptable neologisms can have prevented many a modern thinker from suggesting that the word "God" be abandoned to the older conceptions and their worshippers in view of the danger to discussion and clear thought which it involves. How little words may mean and how the maintenance of the same term for several different concepts may court confusion, is shown again and again in religious discussions. How many "atheists" are more religious than their church-going neighbours!

In Russia there exists a Cultural Association for the Abolition of God, a part of the "anti-religious" movement of communism. "They will find," says a prominent English politician, "that they cannot do without religion. They will have to come back to it." To which Shaw replies: "There is no need for them to go back to religion, because they are full of it. The whole movement is inspired by a great spiritual impulse.

"The Third International is a Church, so naturally it will not allow any other religion to be taught to the children.

"The irreligious man is the man who is thinking about himself, and not caring about the past or the future of the human race. He is narrow, egotistic.

"The religious man is the man who is bored with himself, who wants to make the world better and wants the future to be better than the past. He is working for some purpose outside himself.

"I put that to Gorky and Stalin and they agreed. They are not thinking about God as an old gentleman with a white beard—not that I should object—but of the Evolutionary Purpose."[1]

Here is the idea of religion as pure service, which we shall later discuss. Is this entirely opposed to the idea of God, and does it render the conception of God unnecessary?

In truth it is another aspect of the same thing. God as the best in the group strivings of mankind, as the idealistic efforts, the constructive purposes, the coherent spirit, as the forward

[1] At the I.L.P. Summer School. Reported in *Daily Herald*, 6th Aug., 1931.

striving evolutionary head in human affairs, compounded of the good actions and thoughts of all men, is nothing but this service.

Why then externalise and objectify the evolutionary consciousness in man in this way? Why not deny this objectification as is done in Russia, or at least neglect it as unimportant? Mainly, I think, because of the inability of men always to see eye to eye in their idealistic strivings; because all too frequently the majority of mankind have been wrong and the isolated genius has been right. Then it is in the concept of God, in the consciousnesses of the greater and more remote groups striving for real goodness, that the isolated genius finds his support. Substitute for this a complete service to the presiding political power and, in gathering momentary efficiency, you lose for ever the spiritual independence of individual minds whence progress springs.

III. The Alleged Conflict of Science and Religion

Up to this point the breath of real controversy has scarcely broken in upon our study of religion. We have been patiently investigating the nature of religious activities and the nature of the entity which can be called "God," in the spirit of natural science. But the picture would not be complete if we omitted the fact that we are passing over a battlefield, and the omission would also disappoint those who imagine that there can be no thought without controversy. Moreover, the history of the conflict of science and religion provides for the psychologist one of the most interesting sidelights on the human mind.

In that struggle, not lacking in dramatic qualities, the Christian religion has mainly represented religious thought in the lists, because it is only in Europe under the sway of Christian theology that we find a race with that combination of intelligence with love of nature and patient insight which leads to the development of any appreciable systematised science. The story opens with Galileo and Copernicus, in the single-minded worship of truth, naïvely shifting the centre of the universe from the earth to the sun. This abominable heresy shocked, but did not shake, the Church. It left the overwhelming confidence of religious institutions utterly unimpaired but it awoke a persecution of the infant science which seriously impaired its growth. The rack and the stake broke and consumed some of the most promising minds of the period.

Gradually the patient labours of isolated scientists, working in darkness and supported by a lonely faith that others would some-

where be doing the same, built up a greater body of knowledge. Still organised religion sat in absolute command of the situation and scientists veiled the conclusion of their researches either deliberately[1] or unconsciously through the conflicts engendered in their own minds by their early exposure to religious suggestion. I think, in that diminution of perspective which must exist in a very condensed account of history, that the premature attack of Voltaire and the French Enlightenment can be discounted and that it will be correct to regard the middle of the nineteenth century for Europe, as well as for England, as the moment at which the real struggle with religion began.

With the appearance of Darwin's *Origin of Species*, and still more, with the *Descent of Man*, the already arrayed forces of science received a reinforcement which enabled them at one stroke to reverse the relation hitherto existing and to place science permanently above an undermined, riddled, and discredited theology. So stupefied were the leaders of organised religion at the suddenness of the event, that they failed to realise their defeat and set up an uproar long after the decisive happenings were finished, indeed even to this day they can still be found here and there "defending" positions which no thinking man will turn back to attack.[2]

Of course the Church possessed more men of great native ability than did a poorly-endowed science, and these defended their cause with greater ingenuity and foresight than was to be found at that time among the scanty followers of science. Indeed, even to-day in virtue of the control which it has so long had over education and indirectly over state institutions, the Church succeeds in deflecting into its ranks many members of the most able classes.

Towards the close of the nineteenth century, the noise of that struggle swelled to a climax as it spread from the few leaders of science and religion to their less disciplined followers. Many bitter and exaggerated polemics then appeared which, to-day, now that the essential struggle has died down, incur reproach of

[1] It has been suggested that Descartes intended the thoughtful reader to perceive the anomalous break which he made between the animals and man. It is almost certain that he intended the intelligent reader to follow him into a belief in the revolution of the earth around the sun. Clemenceau concludes (p. 311): "It would seem that he tried to put his readers on the wrong scent in regard to his adhesion to the Copernican system. 'I deny the movement of the earth,' said he (with the lesson of Vanini and Galileo before him) '. . . If I seem to attribute some motion to the earth, the reader must regard it as unintentional . . . I assert nothing here, and I submit all my opinions to the judgment of wiser men and to the authority of the Church.'"

[2] Such as the position of the Catholic Church, the American Fundamentalists and lesser creeds.

being unnecessarily acrimonious and uncharitable. Statements of that tone are sometimes found in the writings of Haeckel, Winwood Reade, Buckle, and Huxley, but they constitute the predominant feature and frequently the only arguments in the tirades of their opponents. But the statements of combatants are always liable to appear unreasonable in tone after the event.

But "even one man with truth on his side constitutes a majority" and after the rout of Bishop Wilberforce, in spite of the organised strength of the Churches, the question was, for the educated classes, decided, though it is probable that only in the last generation have the results and effects of this conflict come into the hands of the new elementary-school-educated and newspaper-thinking public. Owing to this slowness of percolation from the actively reasoning to the inert body of the population, it is still possible for millions of people to overlook the real position of the Church and to forget, as Wells has said, "that the bishops, socially so much in evidence, are intellectually in hiding." Occasionally the bishops emerge from their intellectual funk-holes, but with an altered strategy. The modern churchman borrows the approach, but not the spirit, of science. He collects the ignorabimus confessions of scientific men ; he expands the vaguenesses which cluster on the growing borders of a science ; above all he finds the teachings of psychology bearing out his beliefs and, with a very arbitrary selection of the authorities in that field, with a display of technical jargon and a subtle confusion of the real issues, he seeks to reinstate his particular religious creeds in all their unchanging dogmatism.[1]

There is, however, an important aspect of the conflict, which is commonly overlooked. Those very qualities which religion cherishes are the traits demanded in the service of science. Devotion to the service of humanity, the renunciation of personal pleasures and the contempt of worldly values assigned to wealth and position, the development of the intellectual at the expense of the lower activities—these are required of the man who serves science for its own sake even more than they are to-day demanded of the servant of religion. The scientist and the religious man stand as one type,[2] opposed to those without purpose or responsi-

[1] Such an attempt is Canon Streeter's *Reality*.

[2] Ames, p. 412, supports this conclusion : "In several other respects, the virtues of the scientific mind seem inherently religious in the familiar sense. For example, science requires patience, diligence, accuracy, self-control, self-forgetfulness, willingness to take risks and to endure. But in this devotion to enquiry, to doubt, to experimentation, to reconstruction, in this unwillingness to be quiescent under mystery or authority, in this the scientific mind seems fundamentally opposed to the prevalent conventional religious mind. Dissent from the external authority of custom or precedent is insubordination which

bility, without principles and without loyalties—the men who think it is enough if they earn a living and refrain from criminal actions. In some of the greatest scientists, alternating with their profound scientific satisfaction, we find relapses to less complete expression—to enthusiastic religious expression. When Robert Mayer was denied, by cruel circumstances, the completion of his scientific work, he manifested in intervals of actual insanity a fervent biblical religiosity. Newton in later life developed a profound mystical attitude to the universe. Blaise Pascal, perhaps above all others, shows how a great mind can alternately find its satisfaction in scientific and religious expression, whilst in Mendel we see the two activities working quietly side by side through an obscure life of great service. These two attitudes are but an effective and an ineffective, a higher and a lower psychic satisfaction of the same root-trends of personality. Many scientists—Mitscherlich, Buckland, Partington, Callendar—to name a few, have been children of clergymen.[1]

The conflict of science and religion is therefore not only one of ideas and faiths but one of competition for devoted men. Finally, let us remember that the conflict which has been won has not been against all religion or even all creeds, but against dogmatic theology, against revealed religion and all those cramping activities of religious organisations which have so long obstructed human progress. Science sees in religion its own spirit as yet unaware of the intellectual adventure on which it may embark.

IV. The Psychological Roots of the Religious Sentiments

Having acquainted ourselves with the development of religion, having arrived at precise conclusions as to what conception of God an objective study of the Universe will allow, and having outlined the essential relationship of science and religion in order to give the treatment its true background, we are now in a position to examine the various extant beliefs in God, and the religious consciousness generally, from the standpoint of psychology. This has already been ably carried out by Freud, that veteran of psychological endeavour, in his work *The Future of an Illusion*, but I propose here to give a wider basis free from the unfounded exactness of outline peculiar to the psycho-analytic branch of psychology. Many studies of the psychology of religion have been

the accepted religious type cannot tolerate. Permanent compromise or evasion is impossible here. Science recognises only the authority of experience."

[1] In Nordic countries—elsewhere there is a greater contrast between the types for the religion of the Mediterraneans is something more occult.

made (see Bibliography) but mostly in regard to such striking matters as conversion or mysticism. Of the former, Coe concluded that sudden conversion was only found in a minority of individuals, who were normally characterised by: (1) Pronounced emotionality, (2) tendencies to automaticism, and (3) high passive suggestibility. The conclusion on mysticism from Leuba's investigations are equally interesting. But with the exception of Freud's general analysis the psychology of normal religious life has not been adequately investigated.

We have learnt that under the influence of the institutions of civilisation the primitive instinctive equipment of man undergoes modification in favour of the building up of systems of sentiments corresponding to the necessary patterns of group behaviour (e.g. sentiments of honesty, of respect for law, of patriotism, etc.), and the evolved ideals maintained in any particular group. Thereby the energy of the instincts is, with more or less strain and usually with considerable opposition to the educating forces, sublimated into socially desirable reactions.

The majority of people thus succeed in finding a suitable outlet for most of the energies and yearnings of their minds, but there are two common ways in which this healthy stability may fail to maintain or establish itself. Firstly, some accident of environment may deprive an individual irretrievably of an outlet long enjoyed, or circumstances may prevent the satisfaction of an instinct from the very beginning. In such cases some form of insanity—usually a paranoic delusion—is a frequent solution.[1] In such a delusion the man whose self-assertive instinct has been thwarted completely through, say, a menial social position, imagines that he is an emperor; the ageing woman with no admirers sees herself pestered by the attention of a hundred suitors; and so on through the series of frustrations possible with the major instincts. This tendency to believe in the existence of some wish-fulfilling object is the most serious biological fault in the structure of the mind, and long before it gives rise to serious delusions, it distorts, exaggerates or obliterates more trivial ideas arrived at in the normal mind by logical processes. The second way in which the mind may become faultily adjusted arises out of the tendency to repression and fixation. As we grow up, our instinctive energy continually goes out to new objects. Old constellations of instincts, i.e. older sentiments, are broken up and new ones constructed as the child passes from the nursery to the school and from the school into adult life.

[1] See, e.g. the delusion of the professor in Hart's *Psychology of Insanity*.

Some of these earlier emotional solutions are never completely abandoned, they continue to dog the attempts at higher syntheses which are better fitted for adult life. Most important among these emotional fixations is what Freud has called the Oedipus complex—the childish direction of the male child's libido upon its mother, which implies a potential revolt against the father. Our adult reactions are again and again illogically directed by reason of regression to these childhood emotional fixations. In all these instances the earlier emotional attitudes and the ideas and memories connected with them come under the influence of repression and thus trouble the conscious mind with strange moods and irrational urges of the origin of which it is unaware.

Whatever function and origin religious expression has in society, there can be little doubt that its roots in the individual mind lie to a considerable extent in the two mechanisms we have just surveyed: instinct frustration and early instinct fixation. Freud gives major importance to the father complex itself. Others have stressed the importance of sublimated, unsatisfied sexual urges.[1] The truth seems to be that any floating emotion, any unsatisfied instinctive craving, may form the core of the religious experience. It is this variety of possible dissatisfaction, indeed, which gives the variety of religious attitudes which is so striking to observations unbiassed by any preconceived notions of religious unity.[2] Probably the herd instinct,[3] so frequently thwarted in the hypercritical atmosphere of civilised life (and producing that desire for companionship and that sense of loneliness which some have regarded as the true proof of God's existence) together with the sex instinct and the instinct of self-assertion which are also never given full direct expression in group life, constitute the core of the religious longings. Fear, too, has played no small part.[4]

[1] Most liable to repression from the social attitude and therefore most frequently built into non-utilitarian sentiments.

[2] On this account, too, we should expect religious life to be more evident among the dissatisfied and among all people at times of deprivation and social instability.

[3] Schleiermacher found the essence of religion in the desire for absolute dependence—without requiring any definition of the object of this dependence. Here we can clearly see the herd instinct motivation, though probably fused with the reactions of the instinct of helplessness—the child's complementary reaction to the parental instinct of protection.

[4] William James describes well the religious attitude springing from unsatisfied fears: "There is a state of mind known to religious men, but to no others, in which the will to assert ourselves and hold our own has been displaced by a willingness to close our mouths and be as nothing in the floods and waterspouts of God. . . . The time for tension in our soul is over, and that of happy

Now, whether or not some object exists capable of satisfying these desires, the tendency to delusion which we have just studied will seek to build, in a variety of subtle ways, a belief in the existence of such objects. Thus there grows up a notion of a personal God who is father, lover, or companion. A moment's contemplation of the strength of our desires will convince the scientist that there are ample grounds for a similar wish-fulfilment origin of the belief in immortality for our loved ones and ourselves.

William James[1] has asserted that "Religion, in fact, for the great majority of our own race, *means* immortality, and nothing else." I will take the words of H. G. Wells as best expressing the beliefs of scientists and thoughtful, educated men as to the possibilities of the objective existence of such an immortality:

"I do not believe in the least that either the body of H. G. Wells or his personality is immortal, but I do believe that the growing process of thought, knowledge and will of which we are parts, of which I am a part and of which you are a part, may go on growing in range and power for ever. I think that Man is immortal, but not men. . . . Our individuality is, so to speak, an inborn obsession from which we shall escape as we become more intelligent. . . . If I had the time and erudition I think I could make an argument to show that this idea of the immortal soul of the race in which our own lives are like passing thoughts, is to be found in what Confucius calls the Higher Person, in what St. Paul calls the New Adam, in the Logos of Stoics, in the modern talk we hear of the Over-Man or Super-Man."

Wells has summarised in well-known pages the arguments against personal immortality. The changing nature of the ego under the influences of time, education, disease, etc., seems to me one of the most potent reasons for rejecting the idea of eternal life for each ego.

That great Frenchman Clemenceau (*In the Evening of my Thought*) expresses almost exactly the same conclusions. This immortal soul of the race, of which Wells speaks, is, except for its load of evil features, the God in humanity whose real existence

relaxation, of calm deep breathing, of an eternal present, with no discordant future to be anxious about, has arrived. Fear is not held in abeyance as it is by mere morality, it is positively expunged and washed away" (*Varieties of Religious Experiences*, p. 247). This attitude is logically consistent either with the idea of a personal God or with the idea of God as the integration of all that is good in the group mind of men, but less so with the latter, because the individual is there made partly responsible in his striving for the extension and success of God. The illusion of a personal God puts the individual in an attitude of false security which must be to some extent dangerous to himself and his kind—to the true existence of God as the forward-striving mind of his group.

[1] *Varieties of Religious Experience*, p. 524.

has been demonstrated. From this point of view our best thoughts are God, and God is immortal.

But in this case clearly the belief which logical enquiry (into the universe) shows to be possible is a very different one from that to which our childlike desires urge us and which religion has adopted. One could array many examples here from general psychology illustrating how the particular nature of the unsatisfied wish determines exactly the form of the illusive object believed in. Even a "wish" persisting in the traditions of the group mind can have such an effect. For example, the Mediterranean peoples have always had in their primitive religions a woman deity. Confronted with Christianity, they elaborate a minor feature, the Virgin Mary, to satisfy the original wish. Many similar examples will be found examined in psychological literature.

To trace religious feeling to simple instinctive sources does not deny the solemnity or the profundity of those religious experiences which for some people are felt to constitute the core of life. We must regard religion as a solution to life's problems on an intuitive level, a balancing of facts and emotional tendencies which has taken place slowly, like the settling of rock strata with sundry earthquake tremors, and unconsciously. The instinctive solution so obtained is frequently for each individual an entirely sound adjustment to reality, apart from his adoption of such beliefs as that of personal immortality. But even if the emotional attitudes are generally not misplaced, the scientist would demand to know the subjective roots of his own profoundest beliefs, and the rational evidence for the existence of the objects in which he finds himself believing. He needs to readjust his emotions on the finer plane of conscious reasoning and to rest assured that they have not betrayed him into false beliefs.

Our enquiry has thus led us to perceive men as urged to religious beliefs by socially and educationally conditioned non-satisfaction of instinctive tendencies. These free urges have built up a system of beliefs which sometimes correspond roughly to reality and sometimes do not.

Still pursuing the purely analytical treatment, I wish now to ask whether we should consider religion as normal or whether it is to be regarded as an abnormal reaction thrust upon society by an active minority operating under some special advantage and recruiting those whose instinctive adjustment is most faulty. (An active minority may sometimes succeed in virtue of its prestige, e.g. spread of accent of upper classes, or because of some instinctive mechanism of society, e.g. jealousy of others' sexual activity producing support for the imposition of strict morality.)

Religious beliefs and attitudes, as *we* know them, are by no means widespread among primitive peoples, though some activity or belief which might be called religious is almost everywhere. On the other hand, it is a common observation in civilisation that, apart from any scepticism produced by reasoning, there are great variations in the interest in and the need felt for religious activity. Many surveys have indicated that the majority is rather to be found with the naturally non-religious, though all the trend of social impulsion is to induce a man to call himself religious. Ames referring to a questionnaire sent to people, most of whom one would expect to find religious, says: "About one-fourth of the respondents answered that they did not consider themselves religious or that they did not know whether or not they were religious."[1] According to the figures of Duncan (p. 256) just about a half of the population of the U.S.A. belongs to no Church, but he adds that less than one half of those who profess to have Church connections take any interest in the Church.[2]

In the autobiographies of a great number of distinguished and successful men one will find no reference to religion at all, or else the quiet statement that they have never felt any need for religion other than in the form of their own reasoned philosophies of life. Sir John Collier in his *Religion of an Artist* remarks, "some of the best people that I have ever known have no religion at all."

I think that we can safely conclude that the majority of men, under civilised conditions, if uninfluenced, would not have sufficiently strong spontaneous and explicit religious feelings to lead them to demand any elaborate institution for their satisfaction and that differences which exist, except in so far as traceable to environmental causes, are due to inborn differences associated with sex and race. Havelock Ellis concludes in his study *Men and Women* that although men have generally provided the leaders of religion, the greater part of its followers and the most devoted part has been composed of women[3] and those of unstable and neurotic disposition. James[4] remarks: "Religious geniuses have often shown symptoms of nervous instability. Even more perhaps than other kinds of genius, religious leaders have been subject to abnormal psychic visitations." Kretschmer sums up: "The poor in spirit, the mentally diseased, found the kingdom of heaven.

[1] Ames, op. cit., p. 370.

[2] Duncan says in U.S.A. there are: 48,000,000 no Church connection, 25,900,000 Protestants, 17,500,000 Catholics, 3,500,000 Jews, 250,000 Greek Catholics, 500,000 Mormons.

[3] Coe has observed the same fact. This may be confirmed in Church congregations where despite the tendency to go in pairs and the demand of home duties on women, women will (especially to-day) be found in a majority.

[4] *Varieties of Religious Experience*, p. 6.

The healthy and strong made of it a system and a power."[1] There is indeed considerable evidence that a natively emotional temperament is essential to what we now regard as a religious personality.

In attempting to realise the importance of constitutional, temperamental factors in determining the presence or the absence, the social and individual form of religious beliefs, it is helpful to consider the differences produced by racial constitution. Racial differences lead not only to differences of the whole shaping of the religious life but also to great differences in the demand for religion and the part which it plays in thoughts of individuals and the activities of society. It is no accident that the founders of most religions have been of the Mediterranean or Hither-Asiatic races.[2] Christianity, Mohammedanism, the sun cult, Mithraism, etc., are their products. Contrast with these the non-emotional, immortality-denying, rules of life—Confucianism and Buddhism—which have grown up among the Mongolian peoples. The comparatively small success of Christian missionaries in China is not altogether due to the resistance of old-established cultures, but to a difference of temperamental constitution. There is some evidence that the other, and possibly related, round-headed race, the Alpine or Slav, is also relatively free from religious impulse. The one nation—Russia—which is constituted almost entirely of this type has—after driving away its Nordic aristocratic element—thrown away religion and settled down to an attitude which seems stable and adapted to its own nature; whilst France, with a smaller but still predominant Alpine element,[3] was the first nation to develop a strong rationalist and anti-clerical movement.

But to return to a closer study of the Mediterranean race: They have always shown an immense activity in developing religious cults of all kinds. There is some clear evidence that in England the Mediterranean race tends to be the chief corner-stone of religion. Havelock Ellis in his statistical treatment of the races revealed in the National Portrait Gallery, found that whereas sailors, scientists and political innovators were mainly of the fair type, religious leaders were very dark. Religious revivals of an emotional kind have been strongest in, and indeed peculiar to, Wales and Cornwall, the two strongholds of the Mediterranean race in Great Britain.

Speaking of this type in England, Barker remarks: "A turn for natural magic—an open eye for the divinities of woods and

[1] *The Psychology of Men of Genius*, p. 169.

[2] The Jewish Nation is substantially composed of these two races. See Günther, op. cit.

[3] See Günther.

waters, and a secret awe before darker powers—may be ascribed without any great play of fancy to that dark and ancient European strain." (*National Character*, p. 32.)

Although the Nordic race—being related as most anthropologists believe to the Mediterranean—evidences more religious activity than the round-headed peoples we have been discussing, it has certainly shown less than the Mediterranean, and, as we shall see, a religious activity of a different kind. The Nordic Greeks, as they migrated into Greece, suppressed and enslaved a Mediterranean race with an abundant mystical and ritualistic religion. Over this, as they dropped the half-believed puerilities of their own myths, they built up a civilisation whose religion was metaphysics; but with the dysgenic process of the centuries the indigent race replaced them and the old cults began once more to break through the Hellenic culture. Similarly the northern tribes of Europe easily dropped their primeval myths and developed their greatest thought in metaphysics and science. The spirit of Nordic man as seen in the great thinkers of Scotland and Germany goes out rather to metaphysics and morality than to revealed religion, mystical experiences and ritual. Many writers have observed this difference in its various aspects. William James was perhaps the first psychologist to notice a difference, though he chose perhaps a rather debatable one: "On the whole, the Latin (Mediterranean) races have leaned more towards the former way of looking upon evil, as made up of ills and sins in the plural, removable in detail; whilst the Germanic races (Nordic) have tended rather to think of sin in the singular and with a capital 'S,' as something ineradicably ingrained in our natural subjectivity." This latter may be doubted, especially in view of Ludendorff's remarks, but he was on the track of an important fact. Ames commenting on the Jewish notion of God says: "Contrast this idea of God with that which expresses democratic social conditions. . . . The ideal demanded is not that of a special favour, which characterises a paternal order of society, but it is rather the ideal of justice and equality. The final tribunal is the intelligence, an experience and sense of fair play in the masses of the people. When such a social order projects itself in the form of conscious and comprehensive ideas, it results in a conception of God as imminent. The inner reason and conscience of society, by which justice is sought, defended and avenged, now appears as the central factor in the idea of God. . . . Therefore in a despotic society, where sovereignity is idealised, to think of God means to humble oneself, to take on the postures and employ the phrases that a menial uses in the presence of his lord. The ritual and

psalm of many Oriental peoples illustrates this type of reverence and worship."

The notion of God which Ames here admires is clearly that which we have selected as the most intellectually satisfying one, while the notion he disparages arises partly out of the temperament of the race concerned and partly also out of social conditions (notably from the wide scatter of ability in Mediterranean groups which, as we have seen in Chapter II, leads to despotism and prevents the proper working of democracy). Mathilde Ludendorff in her eloquent and powerful appeal for a return to the spirit of the Nordic God belief,[1] seizes on this difference: "Sie (the Semitic peoples) stehen nicht aufrecht in ihren Tempeln, sondern brechen ihren stolz im Knieen und beugen den Rücken oder liegen gar auch im Staube vor ihrem Gotte. Ohnmachtgefühl und Demut vor Gott nennt sich ihr 'Frommsein.' Aber weil sie einen Hauch göttlicher Geistes, eine Stimme Gottes in sich zu hören glauben, so klettert ihr gebrochener Stolz als Eitelkeit wieder in die Höhe. Er rächt sich so für das Knieen und Im-Staube-liegen. Sie blähen sich auf und verachten Andersblütige und Andersgläubige. Und je mehr sie dies tun, um so besser gelingt ihnen danach die Demut und das ohnmächtige Betteln um Gnade und Erbarmen vor ihrem Gott, um so 'frommer' können sie sein. . . . Wie ganz anders will es Deutscher Glaube! Der Deutsche sieht vor allem die Seele selbst von Gott durchdrungen. So weiss er, sein innerstes Sein ist gut, Irrwege geht nur die Vernunft und das Lustwollen und Leidfliehen, mit dem er geboren. Aus diesem klaren Wissen: der Gott lebt in mir, wird ihm sein Stolz, sein Mut, sein Vertrauen, wird ihm vor allem der tiefe Ernst, nie diesen Gott in sich selbst zu schänden, wird ihm die hehre Weihe des Lebens. Furcht und Demut vor Gott kann ihm nur angezüchtet werden von Kind auf, doch nie ist sie ihm eingeboren. Sein aufrechtes stehen zu Gott ist ein Staunen, ein Ehren, ein heiliges Verstummen, doch niemals ein demütiges Knieen und Senken des Haupts und Gnade-erbetteln."

Writers so diverse as Ames, Ludendorff, and McDougall express thus essentially the same perception of the particular religious frankness and sense of imminence common to all branches of the Nordic race.

The most able treatment of the effect of racial differences on the nature of the religious response has undoubtedly been given by McDougall in the work which we have already discussed in dealing with race in Europe. It would be premature to attempt a complete delineation of these differences of religious response even among

[1] *Deutscher Gottglaube*, Mathilde Ludendorff, p. 28, Weicher, Leipzig, 1928.

the three European races, and very difficult to describe the differences of native endowment from which they arise. When psychology has advanced sufficiently to understand the full complexity of these innate divergences of mentality and their effects, the task of relating them to present religious differences will be an historical one. But it seems clear that the Nordic man demands less a religion of authority; he wishes to have the feeling of depending on his own conscience. Probably, too, he has less appreciation of beauty and ritual in his worship and is less attracted to group worship. He is perhaps less ready to forgive sins and less ready to permit temporary relaxations of the moral codes, especially in the sexual sphere, but he is willing to alter codes and to have faith in the integrity of his fellow men. In his religious moods he agrees with James that "melancholy constitutes an essential moment in every complete religious evolution,"[1] whereas the Mediterranean and the Alpine run a richer gamut of emotions, often of a festive kind, in their religious enthusiasms.

It is these which lead the Mediterranean type to Catholicism and Mohammedanism, and the Nordic type to Protestantism and all the moral Churches and brotherhoods to which it is the stepping-stone. And the native differences beneath this are probably greater self-submission (admiration-worship attitude) in the Mediterranean, greater self-assertion in the Nordic type; higher I.Q. of Nordics (leading to lesser demand for detailed rules of conduct); introvert temperament of Nordic, extrovert of Mediterranean, and greater curiosity of the Nordic.[2]

The specificity of religious expression to inborn constitution and natural environment is everywhere apparent, and only rarely is it possible to convert a people to a religion which is unsuitable to its racial nature. The ancient Nordic tribes of Germany were only converted to Christianity at the point of the sword with great slaughter. Buddhism has had no success among European races. Mohammedanism will succeed wherever the relatively primitive forms of Christianity will thrive. It is, like Catholicism, better suited to extravert peoples, even more extravert peoples than those satisfied with Catholicism. For that reason, in spite of much Christian missionary endeavour, Mohammedanism is bound to make greater progress among the African negroes. General Smuts was recently forced to admit: "The Christian missionary has, after a century of ceaseless effort, not yet succeeded in making any deep impression on Africa.

"Mohammedanism is already in solid and uncontested possession of Africa from the Mediterranean to the tenth parallel of

[1] p. 24. [2] See McDougall, *National Welfare and National Decay*.

north latitude, and to the south of it is spreading more rapidly than Christianity."

It is sad that a primitive mental organisation cannot be made to accept enthusiastically the religious solution accepted by more highly evolved types, but it is a psychological fact to which we must adjust our strivings.

On the other hand, what evil has arisen and what suffering has been wrought by subjecting one race to the beliefs and rituals of another! History is full of these misguided religious efforts. The emotional residues resulting from various adjustments of instructive expression to life must be diverse and differently integrated in different people. In the absence of a scientific viewpoint the diversity of attitudes will result in a diversity of behaviour and moral systems. To one people religion will be an absorbing matter of mystic love; to another it will be resignation and the rejection of material pleasures; to yet another it will mean "muscular Christianity." These inborn feelings must be developed in accordance with the behaviour which science shows to be best. When the religious feelings are completely opposed to the active scientific attitude the people so constituted will stagnate and perish, whilst those in which the emotional adjustment practically unites religion with science will be set on the path to progress. A distinguished writer has recently said: "Countries which believe in resignation and what is mistakenly called a 'spiritual' view of life are countries with a high infant mortality. Those who think that matter is an illusion are apt to think the same of dirt, and by so thinking to cause their children to die." The particular direction of our religious yearnings clearly depends on our instructive constitutional endowment and on the particular pattern of material frustration which environment forces upon us. The latter we can alter, but not the former, except by prolonged eugenic measures.

Our study of the psychological roots of the religious sentiments shows that they are likely to be varied according to native constitution and social environment and that they begin by dictating beliefs to the intellect. The scientist sees here the task of discovering objectively what beliefs are tenable and then the opportunity to construct a system of education and organised idealism which will give the fullest opportunity for our given instinctive urges to express themselves in a way favourable to the finest social progress.

V. God and Morality United in Scientific Knowledge

We have seen that there stands on the one hand a certain ill-defined residue of desires in each individual which lead to religious experience and on the other certain views as to the nature of the universe and God which our intellects permit us to accept. From these premises some may be led to argue that the belief in God is but one with other unemotional beliefs, as that two and two make four, and that the overweight of emotion would disappear in a well-organised society in which every individual obtained happy and complete expression of his instinctive energy in work and recreation. Then, they say, there would be no need for specific religious institutions and activities, for the individual would absorb all his mental life in contented social service.

Doubtless, if this psychological analysis is sound, much of the energy which now has to invent religious forms for its satisfaction would be utilised in a happier organisation of society preceded by a more insightful education. But a certain residue is bound to remain because of individual differences in temperament and the inevitable existence of some imperfection in individual education.

The more complete we can make self-expression for all of us the more occasional such experiences will become, but destiny is harder and sterner than we are generally prepared to recognise. There must always be frustration, injustice, mental conflict, and unsatisfied desire, whilst the thought of the brevity of life and the transience of natural beauty is always with us. We shall control more and more of our social and individual lives, but the more remote course of destiny, and all the unknown, incomprehensible, and awe-inspiring things that lie beyond the receding boundaries of knowledge will continue to leave us with some element of religious need. Science will provide us with an intellectual understanding of the universe and blend with a religious emotion of curiosity and awe for what remains unknown. The residue of feelings which we call religious emotion is thus to be organised to the changing conceptions of the universe which our probing intellects shall give us.

But that is not all. There are further reasons why this residue will never vanish. It is a measure of our non-adaptation to existing things. The cruder and most widespread manifestations of religion may represent equally crude frustrations which wisdom could eliminate. Other manifestations occur in those who are too backward to adapt their emotional life to the stage reached by society. But there is a deep and refined dissatisfaction known to an equally

numerous body whose development has outpaced the average of society. Religion as a measure of non-adaption is thus a measure of the urge to progress. Remove non-adapted souls and you remove the potentiality of something greater and better. Religious experience is thus an earnest of progress which we may pray always to have with us. Explanation cannot destroy the profundity or mar the sacredness of these experiences when we perceive that they are truly directed to such goals.

There must come to all at times (and particularly to the schizothyme mentality) a sense of the tragic mystery of life, which creates a yearning for closer contact with the heart of things and for a richer unity with all other living beings. Others may know it as a love of beauty or simply as a desire to sing and dance with other loved human beings. The particular colouring of that feeling will depend upon temperament differences and upon the particular disappointments, self-reproaches, and successful modes of expression known to the individual.

It is the task of synthesis, however, to relate those strivings consciously to the idea of God, to which the better of them are logically connected. That conception of God is already defined. It has its habitation among the lofty, eternal pillars of the universe into which the scientist (and every man may acquire the scientist's vision) is leading us. Then everyone may find the stable background of his life in that knowledge and his adventure in the common voyage of mankind into the mysteries of mind and matter in search of greater knowledge. His guidance and his consolation lie, then, in the spirit of God, of which his noblest strivings are truly a part—this God composed of the super-individual strivings of men end his feelings, loves, and aims. His companionship is with God—with the group of living thoughts which, as tradition, knowledge, example, art, and living goodness, lie in the minds of living men—scattered but united and continuous through time. This God grows under his labours. In part it struggles with other aspects of itself where men with differing goals of goodness clash, but out of that struggle and by the very nature of things, emerges something derived from each man's effort which is eternal. It perishes in part if mankind perishes, but it is inherent in matter and will emerge again.

It stands with him as an assurance of victory against the evil powers of the world—for the goodness that is God tends ever to foster its own manifestations in every individual scrap of life, whereas evil destroys itself and with it, life.

This God which is all that is altruistic, intelligent, wise, powerful, courageous, and unselfish in the group mind of man is a reality in

the fullest sense. We meet it in every kind action, every effort to discover further secrets of the universe, every creation of beauty, and every sacrifice for a super-personal object. It lives in the idealistic organisation of all minds, and each one of us is part of it in proportion to his idealism.

To such an entity we can confidently direct our thoughts and our appeals for consolation. It will make life ever more rich, more satisfying, and shelter us more and more from accident, disease, and pain. But in so far as we are ignorant, selfish, and cowardly a remnant of vulnerability will remain. "The normal process of life," says William James, "contains moments as bad as any of those which insane melancholy is filled with, moments in which radical evil gets its innings and takes its solid turn. The lunatic's visions of horror are all drawn from the material of daily fact. Our civilisation is founded on the shambles, and every individual existence goes out in a lonely spasm of helpless agony." To realise this is to realise that the consolation of Deity, of the Deity that goes on living in men when any individual dies who has contributed to it, is a thing with which only the intellect of small compass will wish to dispense.[1]

The rôle of such a conception in our emotional life is obvious. William James, even without such a completeness of conception, expressed his essentially pragmatic aspect of truth in saying:[2] "Meanwhile the practical needs and experience of religion seem to me sufficiently met by the belief that beyond each man, and in a fashion continuous with him, there exists a larger power that is friendly to him and his ideals," and thereby religion gives "an assurance of safety and a temper of peace, and, in relation to others, a preponderance of loving affection."[3]

Here we begin at last to sense the true connection of religion and morality upon which we must shortly concentrate the discussion.

First, however, let us examine the other possible objects to which men have sought to attach their religious feelings. With the personal god and other orthodox religious conceptions we have already dealt: here we may consider mysticism—particularly

[1] This is very different from reacting to an externalised God directing the path of all humanity, and still more different from making a ritual and a poetry to celestial kings. "Doubtless," argues Clemenceau, "there is a poetry of the gods, and even of that solitary God, without form and without colour, who has temporarily survived them. But how much finer is the poem of the nobility of thinking man, struggling hand to hand with the world while the litanies of passive submission are moaning before the capricious omnipotence of a diverse love, clothed in the eternal evil for which it is responsible."

[2] *Varieties of Religious Experience*, p. 525.

[3] Op. cit., p. 486.

nature mysticism—and that peculiar synthesis, by no means rare among highly developed minds, in which aesthetic experience becomes religious experience—in which for all our cultural distinctions, art and religion are one. In the sweet communion with nature and the worship of natural or artistic beauty some of the finest minds (as Thoreau, Wordsworth, and Richard Jefferies) have found a profound spiritual experience of mystical union. Whether it is rational from the point of view of meaning to attach the ill-defined superfluous instinctive energies of the soul to crude, inanimate nature, however beautiful, may well be questioned, though such a solution is clearly less objectionable than the invention of a personal deity to interact appropriately with our longings. The simple emotional relation to the Universe involved in worship (gratitude and self-submission) is at first sight untenable, for Nature is neither beneficent nor cruel to life, though at times prodigal of pleasure and at others incredibly destructive. Yet the fact that this Universe has been the vehicle of life, justifies for mankind as a whole, at least, the human emotion of gratitude rather than of hostility. Now, while the complex emotional attitudes that lead to nature mysticism or give rise to the illusion of supernatural persons, cannot be justified by reason, as can, to a certain extent, the worship of nature, it can be argued that this attachment to nature is the most intellectually harmless solution of all. For the best variety of unsatisfied desire, which is not to be eliminated by social improvement, may well find satisfaction in this direction and produce indirectly, in some way which we do not understand, a beneficent catharsis of the mind and thereby an increased strength of character and spiritual power.

This beneficent effect of mysticism and art must be provisionally accepted as true. Most studies of mysticism in its acuter forms agree that it leads to real effects in conduct and to a finer integration of character; whilst as to the ennobling influence of beauty all are agreed. Nevertheless, the impression of the experiencer that an experience is noble or religious cannot be accepted as evidence for the reality of a corresponding salutary effect on the mind or on behaviour: a real psychological proof remains to be given.

Probably we have here in part a question of stages of development. The integration of our unattached libido through the self-regarding sentiment into a religious relationship to God of the group-mind is the most desirable state. But respect for development may teach us to tolerate a development through nature mysticism and religio-artistic experience. Perhaps the impersonal nature of some of these residual yearnings is an indication of their

still more remote but highly valuable relation to the social good,[1] so that mystical experience is desirable even in the highest spiritual development despite the fact that it is directed arbitrarily to things (e.g. natural beauty of forest and ocean) which cannot logically justify the feeling relationship.

In our earlier approach to the relation of morality and religion we saw connections chiefly in the use of the superstitious fear of the savage to maintain taboos and, in more highly developed societies, the use of rewards and punishments in a supernatural after-life to maintain ethical conduct in this one.

At first sight it would appear that the refounding of ethics on a biological basis—the discovery that the ten commandments and all the subsidiary ones are essentially only humanly framed[2] rules for the good of society, which first appeared in utilitarianism—would sever for once and all the connection of ethics and religion. The utilitarians would seem to suggest that with a properly organised public opinion reflecting itself through education in a conscience in the individual and aided *in extremis* by the policeman around the corner, any religious influence is unnecessary. Ethics thus stands complete in itself, and religion, still undeprived of its peculiar emotional life, functions merely as an organised form of satisfaction for our ceremonial emotions—indeed it becomes art. A closer examination will show that such a solution is not desirable or possible, at least according to some of the more essential definitions of religion. It may be possible by attending carefully to early training to produce a social individual simply by inculcating a strong conscience built out of the elements of the self-regarding sentiment, and this conscience will continue in the normal individual to function successfully throughout life in virtue of the great power of habits developed by early suggestion. But such an individual would be incapable of making any virtuous action not already included in his set of habits: he would be ethically static and spiritually stagnant.

Such a separation of morality and religion, though to superficial examination quite consistent with the discovery that ethics is a science of social welfare, is both fallacious and disadvantageous. In the first place, the individual whose good actions depend

[1] By this I mean urges which cannot find expression in society as it is, nor in a relation to the group mentality of the immediate future, but yet have some unknown value in preparing the way for still more remote social development.

[2] As we have seen, "framed" is perhaps hardly the correct word; for the more enlightened rules of later historical times as well as the often socially deleterious taboos of savages were blundered into by a process of trial and error—mainly on the part of genius—those tribes with biologically impossible taboos having failed to survive.

entirely upon a socially conditioned conscience may attain to a degree of rationalism when he perceives the possibility of rejecting the demands of conscience to satisfy selfish desires. There is nothing—no religious sense or altruistic urge—to prevent his doing so, though he may involve himself in severe conflicts with his conscience akin to those which the victim of a compulsion neurosis sustains with his underlying complex.

Secondly, such a purely secular plan of morality must lead to the stagnation already referred to. For the will of the individual would be that of the community: there would be none to stand in dissent from the community if all were bred and educated to recognise no higher authority than the existing community mind.

Authority must go beyond the immediate community to that mind developing out of nature which we call God. This growth of goodness, truth, and beauty to which our religious emotions must be directed, provides a conception of human purpose satisfying to the intellect. Here we may argue with Ames[1] that: "The contrast between moral and religious conduct belongs to that conception of the world which makes a rigid distinction between the natural and the supernatural, between the human and the divine. But if religion is identified with the most intimate and vital phases of the social consciousness, then the distinction between morality and religion is not real." For the group-mind which becomes integrated from all good human actions, which leads human destiny and directs the unfolding of the universal plan, is a natural reality—as real as a hormone or the pull of a magnet—and morality, which consists in striving for ultimate progress, is nothing but service to an eternal God demonstrably part of the Universe with which we make contact. Religion is adventure in the service of the ideal of purposeful human progress. "Evil," says Whitehead, "is the brute motive force of fragmentary purpose, disregarding the eternal vision. Evil is overruling, retarding, hurting. . . . The worship of God is not a rule of safety—it is an adventure of the spirit, a flight after the unattainable. It is an immortalisation of the individual life."

VI. The Inadequacy and Superfluity of Older Forms of Religious Expression

But what have churches, mosques, and temples to do with religion? Do we want group worship, ritual, and periodic religious meetings to sustain the religious consciousness? Is the religious

[1] Op. cit., p. 285.

outlook a thing to be taught, and if so, how? What relation have traditional religious creeds to the religion of the scientist?

What have modern thinkers themselves to say to such queries? "The desire for service," says Wells, "for subordination, for permanent effect, for an escape from the distressful pettiness and mortality of the individual life, is the undying element in every religious system. The time has come to strip religion right down to that, to strip it for greater tasks than it has ever faced before."[1] There are admittedly great individual and racial differences in the need felt for ritual, prayer, and organised worship, but there can be no doubt that the trend of development in religion has been away from ritual.[2] In Protestant, and even in some Catholic, countries a large number of highly religious and earnest men find their spiritual satisfaction and inspiration away from organised worship and in individual communings, in nature, in science, and in art. Where ritual gave some emotional satisfaction, fine art, fine music, and the vast beauties of nature now give a deeper satisfaction. And as for the more intellectual aspects, there are millions who can say with Julian Huxley: "I can get, on the whole, more satisfactory mediation from three or four feet of properly-filled bookshelf than from a dozen priests," for "that which in a simple society was only attainable in prayer and sacrifice . . . is now attainable in an increasing degree through literature, music, drama, art." And this is undoubtedly true. To the man for whom the mere presence of friends and co-worshippers is insufficient recompense for the inferiority of the average hymn to Beethoven's sonatas, there is no question that organised church worship is a failure. It is not merely a matter of feeling either. Common sense tells him that he is more likely to meet in the imperishable books of the world, and all the fine poetry that he loves, the insight, the noble thinking, and the spiritual assistance that he desires. Hence the thinking man is finding more and more that the Church is superfluous to him: he is finding his religion in nature and the communion of great minds, and, partly in consequence thereof, his religion is becoming more individual.[3] Since the development of the mind is in many ways towards introversion, it seems likely that religion, in its emotional

[1] *The Open Conspiracy.*

[2] Occasionally, as in the Church of England to-day, there is a movement towards ritual, but that is clearly explicable as the result of the progress of the more progressive elements to totally new outlooks and the abandonment of the Church to reactionary elements.

[3] William James would appear to have felt this when he gave as his definition of religion: "Religion—shall mean for us—*the feelings, acts and experiences of individual men in their solitude, so far as they apprehend themselves to stand in relation to whatever they may consider the divine.*"

expression only, will become increasingly unique and personal as opposed to communal.

And if the new outlook cannot be pressed into the old forms of expression, still less can it be made to conform to the old creeds. No religion makes a complete break with its predecessor. It brings wider vision, shapes cruder symbolism into more exact knowledge, and modifies ethical boundaries, but it continues in the same general direction. Yet it is a mistake to keep the new wine in old bottles; every religious advance must insist upon its detachment, and the new religious synthesis of to-day cannot be pressed into the creeds of Christianity, still less into the creeds of less developed religions. The genius of Christ is a light from the past among many lights, and Christianity must be the historical background from which a wider perception of morality and a more naturalistic conception of religion has developed.[1]

Next one must ask how the new religious outlook is to be taught.

I have developed more fully in the chapter on Education the assertion that at present our institutions are too much separated and too much inclined, by compartmentalising training, to compartmentalise the individual mind. Religion is expanding into life and into so-called "purely intellectual" fields. A true religious outlook is acquired by a right emphasis in all spheres—the laboratory, the library, the playing-field—not by specific teaching in a state of sterile segregation.

Psychological science would suggest two clear recommendations here, though it can at present give little further definite assistance.

Firstly, since the religious needs of each person depend both upon his inborn temperament and upon the accidental experiences of his early years, the emotional attitude (though not the intellectual beliefs) must admit of considerable individual variations. Each from his own peculiar standpoint has to adapt his emotions to an intellectual belief which is the same for all. Consequently, religious education, whether it be an active thing or not, must be like all good modern education in making a study of every indi-

[1] The divinity of Christ and the notion of a personal God are ideas essential to Christianity, which cannot be embraced in the new outlook, but which will only disappear very slowly. "Do you object," asks Dean Inge, "as evolutionists to the perfect character being supposed to have appeared nineteen hundred years ago? Then listen to Rodin, the great French sculptor: 'In art there is no law of progress. Beyond Pheidias sculpture will never advance.' So in the sphere of character we may say: 'Beyond Jesus of Nazareth man will never advance.'" The anthropologist may well suspect that evolution in man has practically stood still for the past two thousand years, though even while it was standing still it continued to produce many great men of varied but equivalent perfection of character only some of whom—Socrates, Mohammed, Confucius, Buddha—can be known to us.

vidual child. This is a matter for the individual psychological testing and treatment which should be as established a feature of our schools as is the medical service.

Secondly, religious feeling and expression should not be expected before the years of adolescence. There can be no doubt that before the sexual and parental impulses have found their positions among the instincts at adolescence, the mind is quite incapable of altruistic urges and the community of feeling which make profound religious strivings, in any direction, possible. Primitive peoples recognise this, but in civilised countries the scramble for souls that takes place between contending religions causes the most absurd attempts to "teach religion" to the tender minds of children. Our various Churches succeed, in addition to doing irreparable damage to young minds, in teaching merely theology and making religion for these minds a ridiculous impossibility. But they succeed to a considerable extent, owing to the fathomless suggestibility of the child mind, in imposing their own brand of theology and closing the mind effectually to any new ideas.

In any civilised country it should surely be the rule to withhold suggestion on such profound matters and to put before the youth at adolescence the material from which he may choose and build up his own religious outlook in the fullness of his own judgment. A more scientific understanding of emotional development may show us how to till the soil during childhood to make possible a stable adolescent growth of sentiments, but the actual plant which shall grow must, according to the progressive tenets of evolutionary ethics, be left to the self-developing mind of the individual.

Dewey, impressed equally by the need of waiting for the new synthesis and the need of adapting religion to childhood, put forward a clear argument for the omission of specific Christian religious instruction from our schools, at least until the new religion of democracy and science is sufficiently developed[1]: "Nothing is gained by moves which will increase confusion and obscurity, which tend to emotional hypocrisy and to a phrase-mongering of formulae which seem to mean one thing and really import the opposite. Bearing the losses and inconveniences of our time as best we may, it is the part of men to labour persistently and patiently for the clarification and development of the positive creed of life implicit in democracy and science, and to work for the transformation of all practical instrumentalities of education till they are in harmony with these ideas. Till these ends are further along than we can honestly claim them to be at present, it is better that our schools should do nothing than that they should

[1] "Religion in our Schools," *Hibbert Journal*, Vol. VI, 1907-8.

do wrong things." The religion to which science is leading us is more difficult to grasp than the more primitive religions of mankind, and if that is so for adults it is still more so for children. With our present knowledge of child-psychology the only general guide we have is the recapitulation theory of Haeckel and Stanley Hall. According to this we should be prepared to give the growing child a series of contingent religious solutions adapted to his emotional and intellectual development at each age and following in the order in which the race has passed through them. Myths and folk-stories would clearly constitute the first stage, and here there would seem no reason to prefer the Old Testament to the Northern and Greek myths, at least for European children. Similarly, in the next stage, that of middle childhood with its respect for manly virtues, its hero-worship, and its movement away from the shadowy anthropomorphism of myth, there is much to be preferred in the Icelandic Sagas to the Old Testament stories with their objectionable mingling of adult vices with childlike situations. Breadth of mind and richness in variety of material are essential in building such a course. Religions bringing in the full spirit of altruism and the doctrine of universal love—Christianity, Buddhism, Mohammedanism—and which introduce more subtle, less primitive and obvious virtues, are clearly the food for early adolescence. Whether the notion of a personal deity is to be taught in these transitory stages is debatable—it smacks somewhat of accustoming a boy to warm baths who is later to get used to cold ones. On the whole, there seems some ground for speaking of a personal God during the very early days of childhood, and explaining that belief later as a temporary approximation to the more abstract notion of God as the highest in human consciousness. That notion might be developed in later adolescence as the youth is able at last to grasp the religion of democracy, of science, and of concerted adventure. But this is not the place for constructing such a detailed picture. The new religious education is a matter for construction by the finest brains using the best tools of knowledge that educational psychology can provide.

VII. Difficulties of Building the New Structure upon the Ruins of the Old

To make this new vision clear to a minority of fortunately-educated people is one thing; to communicate it to the popular mind so that it stimulates and informs all social endeavour is quite another. For the reaction of established religion to the new

views is one of stubborn opposition for the most part and of equally undesirable attempts at compromise for the rest. A handful of advanced thinkers is forced to contend with a weak but massive organised church, and between these contending parties the vast majority of the population stands in a state of bewilderment or indifference. All too many, finding themselves unable to accept the Christian religion, have left the Churches but failed to find their way to a purposeful organisation of themselves about the new religion. The period is for many one of anxious uncertainty, for a few it is a state of moral bedevilment, for others it is a moment of keen expectancy, and for an engrossed minority it is a period of immense effort, of decisive action and joyous construction.

But for all people who are in the least mentally alert, indeed, for the majority of educated Atlantic democracies, the day of dogmatic theology is definitely at an end. Ames, regarding the reaction to dogmatic theology, remarks, "In modern society where education and science train the youth in observation and in methods of independent judgment there is an increased tendency to react against social groups which represent themselves as necessary to the individual and yet refuse to justify such claims in a rational way." But Clemenceau, less confident in a country where the finest rationalism arose two whole centuries ago and where the crudest theological practices still persist, merely asks, "For how many more centuries will humanity in a thousand successive forms remain a victim of 'orthodoxies' which began by knowing everything before they had observed anything?"

Professor Huxley leads us to survey such phenomena as the belief in magic, in sacrifice, in Genesis as literally true, in a God of human parts and passions, in ritual, the ordaining of special priests, the possession of an absolute knowledge of God and in a divinely appointed rule of conduct. All these beliefs are to be modified or rejected, but mostly rejected. "On such matters," says Huxley, "most advanced thinkers have long been in general agreement."

Here it is that we find the task of removing the old structure and building the new beset with innumerable unnecessary difficulties. The builders of the modern religion, arriving, as it were, with their plans and materials, are met by the irate caretakers of a crumbling and deserted building who can see nothing to justify the removal of their property. It may be generally true, as Veblen[1] has argued, that religion is essentially a conservative force, following at a distance the thinkers and leaders of each age

[1] *The Theory of the Leisure Class.*

rather than leading mankind. But it is certainly the case that to-day the organised traditional religion of Western civilisation—Christianity—is holding back the van of progress. The question as to whether Christianity on the whole has been a blessing or a curse to the development of Western civilisation has at present not got beyond the stage of being debated in heated and irresponsible rhetoric, and in any case the early training of almost any European—and indeed the subtle influence of all the literature he may meet—unfits him to be an investigator. Again, humanity as a whole, like any one of its constituent members, is inclined to congratulate itself on the course that it happened to take and to overlook the possibilities of greater progress on another route. Christianity, by its diffusion of the gospel of love, which is the only positive and clear doctrine[1] which emerges from a real study of the great truths of the Christian religion, provided an antidote to the excessive pugnacity of man, and so introduced a cement for society which enabled it to support and give nourishment to some of the finest features of our civilisation. But it is fortunate that the Christian doctrine was not put whole-heartedly into practice in the manner which more intellectually sincere thinkers, like Shaw, now urge upon us. For that would have meant communism throughout Europe and the arrest of individual and family selection for two thousand years, a state of affairs which might have resulted in a large part of the population being now almost on the level of mental-deficiency, as Huntington tells us it is in parts of China as a result of the absence of individual selection for two thousand years.[2]

There seems little doubt that impartial historical science will show that humanity has had an immense gain from Christianity. Our purpose, however, is not to sum up the past, but to assess its importance for the present. Christianity must hand on to modern culture the fundamental doctrine of brotherly love within the community. Comte, essaying a positivist creed, made this doctrine the basis of his religion of humanity, and such a firm foundation of the secondary principle of Evolutionary Ethics must be laid

[1] The doctrine of universal love was present in many other early religions, but in none did it achieve that emphasis associated with the great epic of Christianity.

[2] As I have suggested in the preceding chapter, it may be doubted whether, at least in the mind of the priests, there has ever been any sincere belief that the doctrine of "love" should be carried to its logical conclusion. Christianity is regarded as a practical measure, not a genuine philosophy—a practical measure to reduce warfare and selfishness to a reasonable degree by spreading an opposing influence, which however must only be half believed. Christianity was of great value because of the failure to apply thoroughly what was in it and the tendency to apply what was not in it. But such has been the strange working of many other human designs.

down in the very bones of living men before they can hope to pass on to yet higher culture. Christianity, in this essential, must be "taken for granted" in the progress to more complex views. With this meaning in view one may agree with Dean Inge when he says, "the more it (the Church) leavens society, the less, perhaps, will the power of the Church become, and the less need will be felt for a large Christian ministry."[1]

That the Church is being steadily deserted, at least in England, Germany and America (in France it was long deserted by educated people, and in Scandinavian countries it has never properly been filled) cannot be denied, but the significance of this exodus is rarely correctly appreciated. A recent speaker at the Congregational Union Conference,[2] remarked that four-fifths of the population of this country were entirely outside the Church. He deduced that the nation was becoming "morally bankrupt" and ascribed the failure of the Church to the wrong handling of evolution. On the contrary, I think that no unbiased witness can deny that never before was there in the mass of the people such a healthy moral tone. This body of the population which, for the most part without philosophical thinking, but by the steady pressure of the facts and arguments of the new culture on its unconscious thinking, has abandoned interest in theological discussion, does not consider it necessary to have anything to say on the Trinity, on Incarnate Atonement or even about the Divinity of Christ. It strongly resents the easy judgment that it is careless in living or indifferent to ideals. The general behaviour of such people evidences kindliness and consideration in all social and even international matters. But for the Church they are "morally bankrupt" because, having their own conception of purpose and of religious service in life, and being engaged in straightening out the difficult places of a progressive social life, being really busy in laying the foundations of a broad democratic scientific religion, they have no time to drag the tortuously-thinking ecclesiastic out of his theological retirement.

At no time in the past was there so little crime in so vast a population. At no time when religious orthodoxy was more widespread could there be found so much real courtesy, consideration for others, and general honesty as is found to-day. The level of devotion and self-sacrifice in the armies of the Great War was higher and gave those armies a greater efficiency than in any armies of the past.

All this improvement of the moral atmosphere, especially

[1] Inge, *Christian Ethics and Modern Problems*, Hodder & Stoughton, 1930.
[2] Rev. J. E. Evans, England, September, 1930.

evident in the positive aspects of morality, can only be the result of the general secular education, of the elementary schools; for it has appeared with the spread of general education and has shown no decline sympathetic to the decline of church-going.

The credit for much of this education lies indirectly with the Church, but specific religious teaching can be given little of the credit for the moral improvement. That is the result of education through example, through secular idealism, through sports, and through many other social traditions.

This accusation of moral degeneracy must, then, be set aside as the natural but unfortunate reaction of a body of men who find themselves exposed to a Church whose teaching is felt by society to be no longer what it needs.

And next, what do we find to be the reaction of the Church to intellectual criticism from the growing body of scientific thought? On every front it has long been in retreat before a more comprehensive attitude to life and the universe derived from the synthesis of science. The Christian, Buddhist, Mohammedan and Confucian doctrine of love is embodied in this new viewpoint, but its position there is entirely different from its place in these old "revelations." Naturally, established religions will offer every resistance, in their unimaginative followers to this new synthesis. They will twist and turn in all the varied efforts at escape which intelligence and literary education can suggest. Finally they will deny science the spirit that animates it and rave against its corpse, like the ecclesiastic who cried: "to substitute science for religion is utter folly. The greatest things in human life must ever be beyond the scope of the scientist. What does science know of piety or of great character or of heroic faith? And yet these things make up three-fourths of the experience of life."

Nothing is more modest than science as to the things that lie beyond knowledge. The churches and not science have been most dogmatic about the things we cannot know. But the reverence of science is more profound, more vital, more tinged with the hope of understanding and the willingness to a prolonged self-sacrifice in the attempt to realise more about the universe. As Clemenceau reminds us, "under the action of the highest emotion, the very flower of the martyrs to scientific knowledge died in torture at the hands of the Church, as if to bear witness that science in its turn could inspire sacrifices of high unselfishness; and science was in this superior: it never delivered a man, or even a book, into the hands of the executioner." "What does science know of piety or of great character or of heroic faith?" asks the priest in his intention to be blind.

Ultra-practical Christians meet the unassailable objections on a practical plane, by retreating into the Church and pointing out that though Christianity may be riddled by historical and philosophical criticism, the actual results of the Church ministration are good. But if now the Church is attacked, with all the doctrinal accretions and perversions which have at various times disfigured it, the devotee escapes into Christianity. This acrobatic reasoning would be amusing were it not so serious a question.

Finally there are many sincere attempts to make Christianity evolve with the times. As if any doctrine could evolve and still remain itself; as if primitive magic could have evolved into Druidism and Druidism into Christianity, and Christianity into the devotion of the future and still remain the original creed! The Church will naturally continue to react as it is already reacting by throwing overboard outworn symbolism, jettisoning most of the crudities of belief to which objection is taken, and by subtly adopting much of the jargon but none of the spirit of progressive thought. That, however, will not provide us with the religion we need.

Nothing is easier than to give a semblance of such evolution. The old terms are maintained, but used with shifting meanings. God is the God of the Bible and yet He is something impersonal. Prayer becomes, not supplication, but "an aspiration to understand the laws and nature of reality." Yet in the next chapter it again becomes prayer in a church pew—honest, straightforward prayer to a personal God. Or again prayer is good because it is auto-suggestion, and we know what M. Coué has made out of that. And so with the ritual, the creeds of the Church and the name "religion" itself. There can be no true change because all these things have long been fixed and are all consistent parts of a system of supernatural, divinely-revealed ethics and religion. The rank and file of preachers play on the vaguenesses of words and may indeed well be accused of throwing dust in the eyes of the average man, who stumbling out of the Church, is trying to grope his way to a yet truer solution. And advanced thinkers of the Church, in maintaining an exclusive Christian ownership of the more noble features of Christianity and in giving their support to these abortive efforts at progress, essentially non-Christian in origin, are merely giving longer life to the reactionary elements who shelter under the same roof, who would be clearly placed in a social rear-guard by intelligent criticism, and who yet have a better right than their progressive fellows to be called Christians.

Such manœuvring is unworthy of a body with a great responsibility in the leadership of society. At best it is a senseless patching

and glossing of what ought to be totally reshapen. Humanity must change its social habits from time to time. It may not be called upon to destroy the things that have long sustained it, but it is required to build something quite new upon them. And Christianity itself cannot be made to stretch all the way from advanced leaders of Protestantism like Bishop Barnes and Dean Inge, from Unitarianism and the Ethical Church, to the most ritual-bound Roman Catholicism. It must break somewhere, as it has already split between Protestantism and Catholicism, and I should be inclined to give the name "Christianity" to the larger and older fragment that will stay behind with the Catholic Church.

No impartial judge can overlook the definitely pernicious influence of this major arm of the Christian Church upon progressive ideas. Here the reactionary forces clearly labelled offer not a passive but an active obstacle to reform at all points. The present-day Church goes to some trouble to excuse itself from the inhumanity of persecuting the early scientists, particularly Galileo, but can the thinking man see any change of heart or policy when to-day he finds that in the latest edition of *Index Expurgatorius*, issued from the Pope, a large proportion of the inhabitants of Southern Europe are forbidden to read John Stuart Mill, Bergson, Descartes, Voltaire, Rousseau, and Immanuel Kant? Not at one point but at many the archaic Church is obstructing what would otherwise be healthy growths of noble intellectual developments. Around the lair of this ancient organisation of superstition there continue to collect the bones of many promising children of human intellectual effort, social movements of great import crushed in their fragile infancy.

Even to-day there are many actions of the Catholic Church which the thinking man can hardly ignore, and which should shake his complacent acceptance of Comte's description of Catholicism as "an imposing historical ruin." There has been much active Catholic obstruction to the institution of birth-control clinics in slum areas in Great Britain. There has been political interference and obstruction to the completion of a state educational system of non-denominational schools. The same influence is brought to bear on less important matters. In Germany there has been opposition to women's sports from the Catholic Bishops of Bavaria, and in England Catholic priests have even inveighed publicly against mixed hiking and camping parties! Cardinal MacRory, Primate of all-Ireland, recently[1] indulged in strong criticism of the British Broadcasting Company for permitting a number of scientists and distinguished writers to discuss views which failed to agree with

[1] Birmingham Catholic Reunion, January, 1931.

the Catholic interpretation of Christianity. This is an example of the intolerance one might expect if Catholicism should get into a position to exercise its repressive influence.

The attitude of intellectual Catholics is indeed difficult to understand. It is many years since William James summed up his observations (op. cit., p. 461): "To intellectual Catholics many of the antiquated beliefs and practices to which the Church gives countenance are, if taken literally, as childish as they are to Protestants. But they are childish in the pleasing sense of 'child-like'—innocent and amiable, and worthy to be smiled on in consideration of the undeveloped condition of the dear people's intellects. To the Protestant, on the contrary, they are childish in the sense of being idiotic falsehoods." This, however, was written before the time of G. K. Chesterton and Hilaire Belloc. It is quite possible for high intelligence to go with defective emotional development. The existence of profound complexes, the origin of which is clear only to psycho-analytic treatment, can cause even highly intelligent people to come to totally false conclusions. In England and Germany, owing to the correlation of higher social status with relatively Nordic blood, there is a marked tendency for Catholicism to claim its greatest number of supporters among the lowest classes. This has two important results. Firstly, the present dysgenic increase of the lowest class means an increase of Catholic power. Secondly, it produces the strange spectacle of Socialism wedded to Catholicism—the most secular movement bound to the most authoritarian religious movement. In England this has already affected political issues, forcing Socialist M.P.'s, holding their seats by Catholic support, to vote against enlightened educational measures.

The future of Catholicism depends upon the future of education and racial improvement. If eugenic progress can be got under way, all authoritarian and "revealed" religions will fade away with the poor economic conditions and intellectual weakness of the present lower classes, but if the dysgenic process slips too far we may expect a recrudescence of medieval religious conceptions.

Within the English Church itself there are some signs of a schism between progressive and non-progressive parties. The attempt to "evolve" the prayer-book resulted in clear manifestation of the insurmountable obstacles that will face any attempt to shape Christianity as such to the modern spirit, while recent belated, very conditional and really unnecessary approval given to birth control has occasioned a heated protest from a large minority.

Everything in this struggle for religious progress shows the necessity of transferring all those passengers who are going farther

to a new ship and leaving the remainder in the latitudes which their poor spiritual vigour can alone tolerate. Christianity has led us to the new outlook of science and human adventure and we must embark with that new attitude upon a totally new stretch of humanity's voyage. Does all this lead to the view that a complete and rapid supersession of our present religious systems is ideally desirable? I think not: it must pass out more slowly with this generation. For those who are to be at once attracted by the broader scientific relation to the universe and God a liberal and enlightened education is the essential prerequisite. In this generation there are very few with the education that will enable them easily to reach out to the new viewpoint. Science has built a vaster, airier temple for the emotional satisfaction of the educated democracy that is arising with the next generation; but those of the last generation see in this nothing but the destruction of faith by science and they sincerely plead for the maintenance of "religion." Here the reformer whilst not abnegating the firm intention to inaugurate a wider vision, must think of the sincere and upright old folk who have striven too long by the faith they know, ever to pass on to anything different. He must think of the shabbily educated mothers, the obscure toilers with no opportunity to think or read, the war-wrecked, and all those whose earnest endeavours are too deeply entangled with their early religious upbringing to permit of change. The faith they have known so long must not be lightly taken away from them. If that means some postponement of effective construction of the new outlook we can reflect that a man who can devote his life to science, even if he comes to no stable philosophy or is unable to feel society at one with him in his new vision, at least sees enough of the order that prevails and gets a sufficiently solacing sense of the minuteness of his own troubles, to come to mental serenity. Religion, in the forms in which organised religion still continues, is in fact to be regarded as a rearguard of human progress. And let us do honour to those devoted men who, frequently in the face of their own misgivings, continue to provide spiritual help for those who are still in need of such an emotional interpretation—the dwellers in slums, the emotionally conservative, the emotionally unbalanced and those hovering on the verge of criminality.[1]

But we must watch lest this rearguard seeks to reverse the order of our march. Le mieux est l'ennemi du bien. The Church

[1] I am not here subscribing to the well-known communist view that religion is a solace, a narcotic, but to the one element of truth in that view, namely, that an emotionally religious solution is the more eagerly demanded by the hard-pressed, the poor in éducation, the emotionally unbalanced.

by continuing to provide a facile solution for emotional conflicts and the desire for a philosophy of life, may in many instances cut short the longer journey to reality that those members of the rising generation who are capable of it would make if left to themselves.

We have machinery to-day for diffusing a teaching and practising a ritual which are not believed or accepted by the leading thinkers of our time. Sooner or later the nation must set out to reorganise the Church for the diffusion of a broader faith. Our churches are empty, but much money and energy still goes to their empty functioning, whilst the vaster part of the intelligent body of the nation is forced to support its new spiritual life at the small spring of congenial inspiration which it finds issuing from a few unappointed but splendid leaders of thought among the writers and artists of to-day and yesterday. Since the greater part of the nation is prevented by lack of time or insufficient education from finding its way with certainty to these sources of religious teaching in keeping with the knowledge of our time, is it any wonder that there is such widespread purposelessness and cynicism of a minor kind and such misplacement of enthusiasm on foolish cults? People take the first super-personal interest that satisfies their minds and give up their loyalties to it. "In the last hundred years," writes Julian Huxley, "Nationalism has usurped the place of Religion as the most important super-individual interest of individuals—has indeed in a sense become religion." Nationalism is but one of many directions in which idealism, affronted by the absurdity of the religious outlook provided, seeks to express itself.

There is to-day, as never before, a population of eager minds waiting for a new centre of intellectual emotional life around which to organise itself. It is composed largely of men who have reached the same ultimate viewpoint by independent thought, who want religion to express itself more clearly in social service, and social purpose; who want a new educational atmosphere for their children; who want to see science informing public and political life, and who want to direct their emotional life without reference to superstition.

Quite the most important task for cultural leaders of the present day is to provide a rallying point and an organisation for the effective expression of these tendencies.

Meanwhile exploded views, abandoned emotional solutions, and intellectual anachronisms are continually maintained in the public mind by a purely economic mechanism.

Any preacher wishing to propound views different from those now held has to find means of supporting himself while doing so,

whereas the Church is always offering congenial posts for those who are willing to teach its views. Any evolution of religious ideas is therefore impossible, because each newcomer must reconcile his ideas with Christianity before entering on religious work. The larger endowments of the Church, representing all the economic energy which the community can given to the religious aspects of its life, were settled on the Church long ago, when it was really ahead of the thought and morality of the times, but it is now obstructing the growth of the religious synthesis which truly needs broadcasting to the people to-day.

As I have argued in the chapter on Education, much that has been carried out by the Church is being, and can increasingly be, better performed by the schools. The endowment of the Churches should be partly devoted to research on religion and character education in the schools and libraries. It is interesting to note that this conflict of Church and schools exists even at the far ends of the world. In China the students have recently joined with the trade unions in a battle for the conversion of Buddhist temples into schools, and many thousands of priests have paraded the streets in an attempt to invoke popular superstition in favour of their own return to office.

There is still a need to-day for a constant re-inspiration in adult life. We need a body of spiritual leaders interpreting the new ethics of our age in terms of individual lives, purging social life of the evils that gather from time to time, and constantly using their influence to reinforce all valuable movements. The functions of the Church which are not taken over by the schools would be assiduously furthered by such men, mainly through broadcasting, writing, committee work and attention to artistic life, rather than by organised ritual worship or preaching. They would organise psycho-analytic clinics for the maladjusted and the delinquent; for does not all psycho-analytic treatment end eventually, of a logical necessity, with the education of the patient to a sound, objectively-valid philosophy of life? The psycho-analyst and the theologian, in the true sense of theologian, cannot be separated.

Society may try to avoid destroying the old habitation before the new one is ready, though that is difficult when they must both be on the same spot. While the psychologist, the sociologist, and the metaphysician are building the new edifice, those who are bound to keep the daily accounts of life must get along by patching, improvising, and altering parts of the old fabric. For the Church as the organ of society's spiritual life is to develop into something totally new and different.

Meanwhile "What shall we teach our children?" is the cry of

the thoughtful parent to-day. The religion of science and progress is different from all its predecessors in that it is taking shape slowly and by the synthesis of the discoveries and principles issuing from the steady labours of many minds. Hence it will not appear suddenly, by "revelation," but gradually, like the physical process of dawn. Lofty and able minds will be the first to catch its light, and it will be their task to reflect their discoveries on to those less happily situated—the emotionally weak, the mediocre in mental capacity, and the children.

We stand now with the main outline of the new synthesis clearly propounded, awaiting our assimilation. It is the great task of the educator, of the psychologist and the teacher, to shape, on a basis of research, the approach to this great viewpoint along which we can lead our children. For the realisation of a nobler order, barred to us by our inevitable heritage of ignorance and misdirection, lies with the unblemished life force that arises with each new generation.

. . . . .

It is the thesis of this chapter that religious emotion, which has always been harnessed to morality, but connected with widely differing beliefs from time to time, arises essentially from a residue of instinctive urges thwarted and unsatisfied in a variety of ways by the varying conditions of physical environment and social life.

By the typical psychological mechanism of delusion the individual comes to believe in the existence of objects and conditions satisfying these desires. Science conflicts with religion as to the objects in which we can believe, but in spirit it is one with the finer emotions of religion.

A conception of God properly connected with these emotional longings and arising from the very definition of morality, is that of God as an emergent from the good actions and thoughts of all men. Good being defined as in the previous chapter, our emotional desire for God is a measure of our ill-adaptedness to the present environment, and Goodness is the social tendency to progress. In God defined as the group mind existing in the consciousness and physical inheritance of individual minds, no good action is ever lost and individual immortality passes into an ever-growing Godhead.

The great task of culture to-day is to reconstruct a totally inadequate and outworn Church and creed in true accordance with the new conceptions of morality and religion which science is revealing.

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CHAPTER SIX

MAN AND WOMAN IN CIVILISED LIFE

"The only freedom which deserves the name is that of pursuing our own good in our own way, so long as we do not deprive others of this, or impede their efforts to obtain it."

J. S. MILL.

"Love is too young to know what conscience is;
Yet who knows not conscience is born of love?"

SHAKESPEARE.

I. Sexual Customs and Biological Conditions

THE problem of sex, with all its ramifying emotional values and implications, is one which no age has yet been able clearly to focus, and one over which whole civilisations have stumbled as grievously as private individuals.

A powerful instinct—and the sex instinct, according to one school of psychology, is the strongest we possess—begets powerful prejudices. These prejudices may be the sanest of reactions, but since our initial aim is always detached analysis, they must be set aside in our present approach with a deliberation commensurate to their insistence.

Leaving the outlying phenomena for later discussion, we will seize the problem by the salient which projects most sharply into the discussions of our present age—the institution of marriage.

Marriage in human society, as Westermarck points out, may mean anything from a temporary joint agreement of two, three, or more people living together, to a permanent indissoluble union of two, involving a jealous exclusion of all other males and females. The different conditions obtaining in various tribes, races, and communities are usually traceable to existing environmental, economic conditions and the inborn psychological qualities of the people. Complications in this direct determination are, in addition, brought about by the borrowing of cultures among peoples.

It is, however, clear that the widest variations of sexual practice can exist without any incompatibility with human nature and human emotions or with the ordered working of society, though the particular form of equilibrium adopted certainly affects the whole of social evolution.

There are tribes with matriarchal family structures in which inheritance is always in the female line and in which the father plays a subordinate rôle, and may indeed even be unknown as such. In areas where conditions put a premium upon physical strength, generally among hunting and nomadic peoples, a patriarchal structure is more common, and this leads to a true ownership of the wife by the husband. It also brings with it in ways that will be clear to further thought, a tendency to male polygamy and the growth of large families. Among fighting peoples also, where the males are liable to be greatly reduced in numbers relative to the females, male polygamy tends to become the order of the day. Here, too, since the production of children necessary to maintain the strength of the tribe is dependent on the number of women surviving and not on the number of men, women are nevertheless treated as of more value and are given a better status than in agricultural communities. Thus arises the basis of chivalry and a rule "to save the women and children first." All these examples show sexual morality as a purely relative matter determined by biological conditions.

Although polygamy has probably resulted in much unhappiness and stunting of individual lives, it has certainly been a great eugenic influence, especially because of the greater capacity for reproduction which it has given to more able members of the tribe and the outstanding leaders.

Throughout this discussion, it is necessary to insist upon the purposefulness of all customs and taboos, for upon an appreciation of the natural origin of even the most absurd sexual customs depends any true understanding of the conflicts which arise between individuals and society. Apparently irrational taboos, fulfilling protective and beneficial services of great practical value, have been encountered in other fields of enquiry as, e.g., among class distinctions, but it is especially in the field of sex that these obscure taboos stand out in such abrupt relief against a reasoned approach from an individualist standpoint. It is here that they have been subjected to the most fierce attacks, the attackers generally believing that by labelling these social conventions as taboos and relating them to the emotional customs of savages, they will have brought them into discredit.

Admittedly it does bring them into some discredit, inasmuch as it is the duty of a fully educated man to realise frankly the biological object of the customs and laws which he habitually obeys, whereas the savage cannot do so. Admittedly, too, the particular customs attacked are usually outworn remnants fitted to older environmental conditions, but a taboo as such—a conven-

tional restriction or custom, the obscure social effects of which are not obvious to a "rational," non-biological approach—is not to be despised. McDougall has done well to remind us of this.

As to the usual method of growth of conventions in human history, we know very little. Some prescriptive and restrictive customs and moral laws are undoubtedly the work of inspired leaders, who, faced with a crisis in tribal life, realised intuitively, as did Moses, the need for certain new customs which all must be made to respect. Others appeared by a complex group process in which no individual mind stood out as clearly grasping the step to be taken. In such circumstances there is a gradual accretion of trivial customs and beliefs under the interaction of the environment and the unconscious minds of all individuals—perhaps even of a group mind—until a clear-cut convention is established.

Again, some customs appear to have arisen in a way which can only be described as accidental.

Whatever the mode of origin of conventions, there goes on among them a slow but constant selection in favour of those most suitable to the people and their climatic, geographical, and living environment. A very meagre part of the sifting and rejection takes place through "experience," still less through a conscious historical retrospect of the fate of the tribe under various systems of taboo. Largely, the survival of customs goes hand-in-hand with the survival of the peoples who have adopted them. The chance adoption of good customs ended in an increase and a spreading of the tribe concerned or a superiority of this tribe over its neighbours, which resulted in those neighbours borrowing in a wholesale fashion the customs of their respected conquerors. The possession of a custom with bad biological results would similarly result in the downfall and extermination of the unfortunate people involved. McDougall concludes: "One may assert, therefore, in general terms, that any taboo which is found at this late date to be very widely spread among peoples of the earth is probably a useful one, or has at least a strong presumption in its favour, even though one may be unable to point confidently to any particular evil that must result from the breach of it."

Thus the taboo against incest has become practically universal[1] and, because of its great antiquity, has even the appearance of being innate in the human mind. Murder within the tribe is also widely forbidden. The immediate value of both of these taboos is evident. There are taboos against stealing, but these are scarcely

[1] The few exceptions, as the Egyptian royal families and the royal families in certain South Sea island tribes, prove the rule by being exceptional in other respects too—notably in being racially distinct from their subjects and so having to resort to incest rather than interbreed with the natives.

existent in areas where all necessities are abundant; against meat-eating in hot countries and countries where meat is likely to contain parasites (e.g. Jewish taboo on pork).

On the other hand there are undoubtedly certain customs the existence of which is only accounted for by their satisfying instinctive tendencies diverted from normal direct expression. Such would clearly have no cause to exist in a rational society. Many of the cruel initiation ceremonies in savage tribes appear to have little or negative biological value and to exist as a canalised "sublimation" for the envy which age bears to encroaching youth. All the periodic orgies of sexual licence customary in savage tribes in connection with agricultural festivals appear, too, to have no biological value and to be mainly an outcome of the thinking usual in "imitative" or "sympathetic" magic and the desire to abandon irksome repressions. An acquaintance with anthropological knowledge and all those vastly interesting accounts of social customs connected with sex throughout the world is a most valuable preliminary immersion of the mind to render it pliant to the task of studying our present customs. The greater part of that knowledge must be assumed here. We will content ourselves with noting that great variation in custom is possible, that the custom which eventually survives is one which constrains the impulses of the individual into a form compatible with the demands which the environment makes of the group, and that the origin of the ultimate customs and taboos adopted is generally completely obscure to the people obeying them.

II. The Particular Benefits of Monogamous Marriage Customs

In civilisation, as we know it, permanent marriage has been the rule, and has, in contrast to a system of complete freedom, fulfilled the following valuable functions. (1) Provided for the care of children and increased their survival rate generally. (2) By making parents responsible for their own children it has provided that children of more able parents shall have greater advantages than those of less able parents. (3) Decreased the amount of energy expended by adults in love making, jealousy, strife for possession of love objects, etc. (4) Ensured love and care for the aged women, since, under free love, there would be a moderately persistent tendency for males to jilt older partners for younger ones.[1]

[1] The absence of this function of monogamy in many tribes, e.g. the Australian Blacks, has the result that the older men of the tribe are married to young women and the young men temporarily to old women with much resultant futility, waste, and emotional bewilderment.

It has thus fulfilled humanitarian purposes, i.e. made life a thing of relative happiness, security and purpose, thereby producing the prerequisite atmosphere for all other progress. It has set free a vast amount of constructive energy which would otherwise be frittered away (function 3). Finally, in the second function given above, it has contributed to a steady betterment of the race, a process which, as we saw in Chapter II, has only been reversed in modern times by the spread of shallow humanitarianism, by obstructions to birth control knowledge and by irrelevant economic factors.

Since, from ancient times, the successful communities have been those in which these processes have been most strongly active, the customs and morals and emotional values connected with them have tended in progressive areas to become established. For that reason marriage and the family are firmly entrenched in our minds without our being able to explain why; for that reason we have committed cruelties to the unmarried mother, treated the foundling with less consideration than the child of known parentage, held up premarital virginity as an ideal, made simple adultery a grievous sin, and established many other irrational attitudes in face of our own "logic" and in unhappy conflict with our own tender feelings.

Let us examine some of the modifications of marriage which are now being widely proposed, from the point of view of their social results. One "modification," the communist intention to abolish marriage altogether and to bring up all children at the expense of the state, can be dismissed forthwith. It provides only for the first function of marriage, leaving the other three untouched. With well educated citizens the third and fourth necessities might be satisfied without marriage: they might proceed to change partners without friction or interference with their work and they might remain devoted to their mates instead of attempting to cast them aside for younger ones. But there would be no mechanism to ensure this, nothing to prevent feckless and half-witted Don Juans from propagating their kind with prodigality while the more earnest and capable men and women gave their lives to the service of the state. A system which is to carry a nation's destiny must be fool proof. It must contain in itself protections against abuse, unless it is to be constantly supplemented by some other safe-guarding social mechanism. Free love would moreover tend to the greatest production of children by those who were merely the most sexually attractive—having no finer and stronger virtues—the scatter-brained woman, the shiftless male. It would probably result in an exaggerated and retrograde development of secondary sex characteristics.

It is true that in imagining that the persistence of the family with parental responsibility for children will automatically maintain eugenic progress, we are to some extent misled by a superficial, simplified idea of the family. In no non-communist country are abandoned children or the numerous children of shiftless, incapable parents allowed to perish. They are brought up less well than the children of more able parents, but this—by rendering their drift to a lower class still more certain—merely increases their fertility. The result is the dysgenic process which we know to be going on in most civilised countries.

Nevertheless, the dysgenic process will tend to be even more rapid under a free love regime in which the state guarantees to bring up all children. One must remember, too, that the more or less permanent bond between two people who wish to bring up children provides a means of keeping check on the reproduction of any particular individual, and keeps open the possibility of making him responsible for having only as many children as medical and psychological advice considers desirable from the point of view of the state.

In all the fair promise of Soviet Russia, this fallacy of thinking that the family does not matter, that all the children are equally worth rearing, stands as a damning blot. Some artificial, state-instituted selection for parenthood can alone prevent the downward drift which has now set in in that country and will slowly undermine all the more obvious progress made in economic, social and educational reform. And any selection for parenthood based on fitness will once again bring such restrictions to bear on the citizens concerned, that the solution will practically amount to a reinstallation of the family. McDougall in his sound and lucid work, *National Welfare and National Decay*, has clearly brought out the true value of family integrity, and pride of family, in evolution. He may be expressing reactionary tendencies in insisting that the maintenance of the family is the only possible eugenic system, for eugenic demands can be met by other systems as Haldane has indicated,[1] but until human nature and human conditions are considerably different from the present stage, the sanctity of the family remains the best eugenic safeguard. By "sanctity of the family" is meant no more than the above.

Nevertheless, considerable changes are possible in our present customs, partly as a result of changes in scientific knowledge and economic conditions, which would increase general happiness without upsetting progressive evolution.

Education has resulted in an increasing individual self-control,

[1] *Daedalus, or Science and the Future.*

to replace watchful control by society. Therefore with certain safeguards, society could well relax the rigidity of many of its present laws and conventions. Personality is lifted up to an entirely new plane when it is allowed its own self-direction. The value to the individual, and ultimately the value to society, of permitting all whom psychological examination has proved fit, to guide their own destiny, cannot be over estimated. This principle is already widely recognised in many less important fields by modern education, and since the personality is a unity, if freedom is acknowledged in one field it should properly be acknowledged in all when once the desirable forms of conduct have been laid down. The true adult, therefore, being educated to love his fellow men, and being richly aware of the social consequences of all forms of behaviour, should be allowed a greater margin of freedom from social interference in his sex life than is at present customary.

Free love, as we have seen, is almost certain to be dysgenic from several angles, productive of social instability, and the squandering of energies otherwise devoted to the constructive undertakings of mankind, at least under present conditions of education and inborn nature.[1]

III. Divorce, Trial Marriage, and Free Love

There remain some three other important modifications of our present written and unwritten law, which have been repeatedly suggested. They are: divorce by mutual consent, the institution of trial marriage, and the removal of adultery from the class of "crime."

No valid reasons, no biological objections have yet been demonstrated against the practise of simple and easy divorce, and there seems every reason to introduce it forthwith in all advanced communities. One must add—providing the separation of the mates, if they are parents, does not lead to them begetting, in other

[1] There is an error of reasoning from which even the finest intellects seldom escape. It is that of implicitly supposing that all other personalities are like their own. This psychological phenomenon of "projection" is being particularly studied at the present time in regard to psychiatry and primitive psychology. Such men as Bertrand Russell and Bernard Shaw are prone to suggest courses which are impossible to the majority. They perceive the outward difference of the average man in his interests and abilities, but are unable to escape from this weakness of partially projecting their own mental universes upon him. Since, as we have seen, every type, by self expression, tends to bring others increasingly to its own outlook, free expression is a desirable thing, but suggestions of such men in regard to the amount of freedom which all men can be expected to enjoy without abusing it, are not immediately practicable.

unions, more children than are properly required of them. There can be no doubt that easy divorce would in no way increase the likelihood of human pairings being less permanent than they now are (see evidence as to number of divorces on page 232). Inertia, the binding effect of custom and habit, and the profounder sanctions of human emotion would maintain just as many stable unions as now. Primitive peoples without legal or conventional bonds live a life-long monogamy with a single mate, as a normal thing. Alexander Goldenweisser in *Sex and Primitive Society* concludes: "Promiscuity does not seem to fit either human or animal psychology; at any rate it is belied by their practice. It may be possible but it has never been tried." Easy divorce will not destroy marriage or render the care of the child less thorough, it will only lead to better assorted matings and the childlessness of types incapable of normal social life.

Trial marriage, the most intensely human, the most experienced and sincere exponent of which has been Judge Lindsey, has been crystallised into the definite proposal that young people desiring to marry should live together for a year in a trial marriage which could be confirmed as a permanent marriage, or dissolved, according to its success, at the end of the year. During this time they would beget no children, and should this condition be unfulfilled, the marriage would at once become permanent. The notion of companionate marriage is also bound up with the idea of early marriage. The parties, typically about twenty years of age and likely to be students without real earning power for two or three years or longer, would be financed by the parents or the state in their joint life (as they now are in their separate lives), until they could support themselves. This earlier marriage in itself would be a factor leading to greater perfection of marriage, in the first place by reason of the partners being of like age. In America, through fortunate economic circumstances, marriage can be, in any case, early. But in Germany, for example, where few men are able to marry before thirty, the older bridegroom chooses a bride as young as possible, thereby setting up a vicious circle which perpetuates the custom of there being a great age difference between the sexes in marriage. This, of course, is by no means the only or the greatest evil of "late" marriage. If the husband has had sexual intercourse in the preceding years he has been contributing to the social evil of prostitution. If he has not, he has been practising masturbation, or a rigid continence with equally harmful psychological effects. J. Blake Eggen[1] in a study of the relation of sex to insanity writes: "The deferment of

[1] "Sex and Insanity" (in *Sex and Civilisation*, p. 598).

marriage for many years after puberty, characteristic of industrial bourgeois civilisation, is the social mechanism responsible for the incoming tide (of mental disease corresponding to the Victorian tide of high social repression), since for several generations it made a normal vita sexualis impossible for a large number of people." As Freud has pointed out, the anxiety neurosis is the chief form taken by the psychic disturbances of sexual repression in normal people.

To the first part of the proposal for companionate marriage there seems no objection from the standpoint of social science. It is not entirely sound to say that the relation of the sexes is no concern of society until children are born, but it is largely true, and in this case no subtler immaterial dangers appear to exist.

The advantages of such a system are very clear, especially to those conversant with all aspects of the problem. It would reduce enormously the percentages of unhappy marriages which now bring such general criticism to bear on that institution; it would practically abolish prostitution; it would render youth free from the conflicts that now distort character and impede steady work during pre-marital life.

In this last respect trial marriage would particularly be a boon to women, of whom Russell writes:[1] "A woman who has had no experience of sex and has considered it important to preserve her virtue has been engaged in a negative reaction, tinged with fear, and has therefore as a rule become timid, while at the same time instinctive unconscious jealousy has filled her with disapproval of normal people, and with a desire to punish those who have enjoyed what she has forgone. Intellectual timidity is an especial concomitant of prolonged virginity. Indeed I am inclined to think that the intellectual inferiority of women in so far as it exists, is mainly due to the restraint upon curiosity which the fear of sex leads them to impose."

Safeguards against abuse of this system as of every other may be necessary, largely in the direction of preventing predatory men and women marrying and deserting a whole series of the opposite sex. Such a function can reasonably be left to social pressure and the legislation which it will devise.[2]

Those who argue that an unhappy marriage is the just punishment for rashness and stupidity of choice, are merely seeking to

[1] *Marriage and Morals.* London, 1929.

[2] Especially, of course, does it depend on the spread of more effective education. There can be little doubt that a valid objection to trial marriage exists to-day in the faulty outlook of most men and women on sex, which makes trial marriage particularly dangerous for women. It can only be properly adopted in groups with high ethical standards, wise education, and the economic equality of women.

rationalise their own self-righteous prejudices. The mistake is one which in all conscience is easy enough to make. Nowhere else do we allow such a heavy penalty for such a humanly possible mistake to go unalleviated. Moreover, the only excuse for any punishment in general—that it may lead the recipient to better judgment on another occasion—is completely removed when we admit no second occasion. Surely a year of unhappily married existence, such as would be the lot of the companionate lovers who had entered marriage unwisely, would be considered ample reminder of the seriousness of the marriage contract. Dean Inge, in *Christian Ethics and Modern Society*, has declared himself to be in favour of the state recognising marriages for a limited period. He writes of a "limited contract" with the "terms clearly understood on both sides."

Some sidelights on companionate marriage will be reflected from our study of sex in adolescence. The fate of companionate marriage in America will be watched with intense interest by those in less enterprising lands.

In a society adopting free love[1] there can obviously be no adultery, but it is not so obvious that the conception of adultery as disharmonious need not exist in a society maintaining the integrity of the family. Bertrand Russell, Wells, and many others, have demanded that the nastiness of the present outlook be ameliorated by the mutual permission of married people to greater freedom. This view regards the home and the family and the devotion of the parents to their children as desirable features, but sees no evil in either party consorting temporarily with another mate. Against this it can be urged that jealousy is liable to render such relations dangerous to the stability of the family. Jealousy has come in for a great weight of criticism in psychological thought. Much of it is of admitted validity, especially that which points out the origin of jealousy in the possessive instinct of mankind, an instinct which for many reasons ought never to enter into the sexual relation. Jealousy springs, too, from the instinct of self-assertion and the selfishness which fears deprivation of the concessions of love. The problem is a difficult one, for jealousy is in some ways a legitimate protection of the self akin to many protections which are not socially frowned upon, but it is a thing which may readily pass into objectionable selfishness, damaging to society through introducing unnecessary conflict, and holding together people who would be better mated elsewhere.

[1] An excellent discussion of the psychological facts pertaining to this matter will be found in Tansley's *The New Psychology*, especially the chapter "The Sex Instinct and the Human Sex Complex."

Tansley stresses the necessity of "gradually discountenancing by public opinion . . . the whole idea of *possession* of the person in married life. . . . There can be no question that, qua emotion, it is desirable that the expression of love should be free according to the herd law."

The idea of a stable marriage in which neither partner, once children are conceived, strays permanently away but yet is free to find attraction in other personalities, is one compatible with human nature, particularly with some natures under civilised conditions. Many educated people of great depth of character find such a liberal outlook practicable. Probably its success depends on the presence of strong stabilising life interests in both the parties which bind them together in satisfying work. The existence of large individual differences in temperament, instinctive endowment and social condition render it impossible to describe this latter modification of monogamy as one which could be universally adopted with advantage. Introverted people in good social circumstances will probably be first to adopt conventions outlawing jealousy and permitting greater degrees of individual freedom in sexual life.

IV. Unnecessary Difficulties in the Evolution of Sexual Morals

The reformer and innovator sponsoring the changes in sex conventions here advocated finds himself in a curious position. Whilst his views are generally opposed by the conservative majority, he knows that they are in fact put in practice in debased, furtive and vicious forms by the majority of those who oppose them. As Huxley in his *Essays of a Biologist* remarks: "The majority of people have failed to think out the sexual problem and have resorted either to repression or settled down to constant conflict with the unintegrated sex instinct. . . ." The result is that those who attempt the complete emancipation possible to a properly organised mind are confronted first, by the lag of our institutions and traditions, and secondly, by the unconcealed suspicion of all those—and they are as yet the majority—in which the conflicts arising out of sex are unresolved. People with such twisted characters are found as frequently to-day among the educated as the uneducated, the intelligent as well as the unintelligent. All these individuals, as Huxley says, remain "shocked and shamefaced as regards the difficulties of others."

Whereas the reformer would tolerate sexual intercourse outside

marriage as one of the possible, but rarely accepted, privileges of an ennobled form of marriage, he knows that adultery is sadly practised by more married men than not. A surprising number of the young, unknown to their elders, indulge in a covert and ineffective attempt at trial marriage, as the evidence of Lindsey shows. And divorce by mutual consent, involving conscious or unconscious perjury, has long been with us. I do not wish to dwell here on the illogicalities of our present system or the increasing signs of breakdown which it is showing. The group of more able writers who have dealt with this question in *Sex and Civilisation*, a book which no intelligent citizen can afford to overlook, have shown at length the almost endless unhappiness, and totally needless unhappiness at that, arising from most extant systems. As Garfield Hays tells us that "As opposed to the figures of 1890, when there were 33,197 divorces to 548,779 marriages in the United States, or a ratio of about one to sixteen, the figures of 1925 show 175,449 divorces to 1,182,005 marriages, or a ratio of about one to less than seven. Add to this the cases where people do not concern themselves much about the law, cases of desertion said to be the poor man's method of divorce, or voluntary separation. . . . The divorces in liberal countries like France, Austria and Norway do not compare in number to those in New York." Judge Lindsey, who has now been hounded from the position in which he was doing such humane work, wrote some time ago, apropos of the confused and perverse sexual morality which we try to teach modern youth: "No society can live on with such lies and at the same time possess machinery and natural science. Should it try to do so, science and machinery will crush it, for machinery and natural science without moral health are a curse. The world war proved this. We live in a fool's paradise so long as we do not recognise this. But perhaps Youth will yet save the world if it holds on tenaciously enough to its intentions to get at the truth. Infected with the spirit of science it is beginning to reason. For science is something impersonal and has no respect for traditions as such."[1]

The hypocrisy of the common man in these matters has long shocked sincere thinkers. Yet it is not so irrational nor so morally oblique as it seems. The discrepancy between ideals and practice in society is only a reflection of the division between the super ego and the self (the "id") in the individual, and may be regarded as a valiant attempt to aim at high ideals and fall a little short of them rather than achieve lower goals easily. The mistake lies in the

[1] *The Revolt of Modern Youth*, p. 118. (I quote from the German, having no other at hand.)

belief that the more difficult ideals are always the better ones. We inherited a system of sex conventions which were an advance on those of paganism, but are not for that reason to be regarded as final. Christianity, and especially Puritanism, proved beneficial to those adopting it, for it diverted, for more complex purposes, the simple energy of sex. Psycho-analysis has pointed out that in the struggle to convert that energy, which was primarily attempted by denying it any normal expression, all sorts of distortions of personality arose. Repression proved to be the main mechanism of the neuroses and of all manner of perversions, and the psycho-analyst, horrified by the endless train of ugly personalities coming before him (and they must have been even more numerous in the Middle Ages) cried out on the evils of repression. Some even called upon society to relax the rigour of its taboos purely for the sake of eliminating repression and conflict in the individual mind. That step we now realise would be possible only at the expense of the group failing to meet the demands of its environment and falling behind in its struggle with other groups. Freud himself has recognised[1] the importance of this sexual suppression in aiding the growth of that universal love which is the necessary condition of the development of culture within each group. As psychologists now argue, the real solution is not relaxation of necessary conventions, but a true sublimation, by the gradual process of a well-planned education, of those impulses which for the benefit of society must be refused direct indulgence.

Now the rigidity of the present sanctions favours repression instead of sublimation in the individual exposed to them. Their whole tone is fitted only to produce further repression and conflict in subsequent generations, since it is derived from the conflict-distorted mentalities of ecclesiastics and ascetics. For example, the frantic cry that all sex is bad needs to be replaced by the social atmosphere which regards sex as good with certain necessary restraining conditions.

In short, modifications are desirable in our conventions because, though these modifications might lead to slightly greater expression of energy in sex, they would save still greater amounts of energy[1] now wasted in mental conflict, would eliminate ugly,

[1] *Civilisation and its Discontents.*

[1] This whole question of the economics of mental energy is all too frequently overlooked in non-psychological discussions of the revision of sexual morals. Obviously it is a central issue and no irrefutable conclusions can be drawn until precise research in the psychological field has taken place. Meanwhile, we should bear in mind that a considerable amount of civilised progress depends upon the energy made available through the limitation, by some means or other, of simple expressions of sexuality.

misdirected characters, and render the education of the sex instinct on lines of sublimation a relatively simple process.

Secondly, these alterations of social taboos are permissible because material and social conditions have changed. The greatest change of the material conditions is the possibility of contraception—a trivial-seeming matter, yet one the full implications of which in all moral laws will not be realised by the majority of people for at least two generations.

The cost of the older—alas, in many countries one may say the present—system of sex morality, was the maintenance of a large army of prostitutes; the prevalence of venereal disease; the existence of a large percentage of unhappy marriages that should never have been made permanent or should have been dissolved; the persistence of widespread ignorance and crudity of ideas on sex matters resultant upon the general repression, and a crop of neurotic personalities.

V. The Necessity of Intermediate Stages in the Education of Youth to the Finished Adult Sexual Outlook

Whatever system of sexual ethics be adopted for adults it will need modification for adolescents. This need for a graduated approach to the ultimate civilised level has yet been scarcely recognised, though it is a direct corollary from adolescent psychology and the principles of education. In other words, having decided on the pattern of conduct most suited to adult civilised life, the next task is to devise the methods of educating the young to this standpoint.

For example, it is easy for the adult, especially the satisfied married adult and the aged, to demand that the young shall maintain the same indifference to sex as they themselves find easily possible.

Now, in the first place the young of both sexes have the added motive of curiosity to strengthen their sexual advances. They have also the desire to feel themselves emotionally adult, and they have a sexual instinct more psychologically insistent than in later years. No self-respecting youth with normal enterprise and normal desire to shape a philosophy of life for himself will in his heart be prepared to remain ignorant of women until the age of twenty-five or more when he marries. He may desire only a transient period of love-making, followed by a sterner withdrawal into what he conceives to be the more serious purposes of his life, but he will not tolerate the formative period of his life to be lived without the influences which constitute a half of the normal adult life.

Youth may have the intelligence and the idealistic temper of character to carry it through great enterprises, but it has not the experience to match itself against age, and it starts with the crippling disadvantage of being psychologically and financially dependent upon established elders. Consequently it is only in the fortunate soil of America that the revolt of modern youth has carried any of its long deserved objectives, and even there the result is largely due to the immense interest and activity in educational psychology among the present adult generation in America.

It has been said that the last century was the one in which the rights and needs of children were discovered. This century—let us hope the first half of it—will be the century in which the needs of the still more critical period of adolescence will be understood.

It may be objected that the permission—or the acknowledgment—by the adult world of sexual freedom among the young between seventeen and twenty-five will lead to excesses, will lead in fact to a tendency to satisfy sex on a physical plane without any spiritual factors. That is a real possibility, but education can prevent it, and is strong enough to prevent it, largely by creating an ethos among the young which regards a mere physical satisfaction of sex as puerile and contemptible. Actually the present system, promoting masturbation and prostitution, gives sex in each individual a physical futility which is irremediable. In a saner age, freedom would lead to companionships lasting months or years, enriching the personalities of both lovers, leading in most cases to marriage and in others to an understanding of human nature which would result in fewer false attitudes to life in later marriage. The average human life would have had the benefit of intimacy with two or three lovers before its permanent love—an enrichment which would bring great balance in one's attitude to life and an appreciation of what is rightly to be expected of marriage.

The protective instinct, which is the root of disinterested kindness, is closely bound up with the sex instinct. Hence sexual expression is often the forerunner of greater human feeling, whilst repression of sex is conversely the cause of selfish, inimical characters.

Unduly late sexual experience is in ninety per cent. of cases socially and individually harmful. Modern social research is showing that the real cause of an immense amount of married unhappiness lies rooted in the sexual frigidity of the female partner and, much less frequently, the impotence of the male.

Sexual frigidity in women is largely due, as Hamilton and

McGowan[1] have clearly proved, to a repressive atmosphere in sex matters during childhood and to lateness of sexual experience. It is expecting too much of nature that sexual emotion, unexercised for a decade after it has been bestowed, should blossom in a normal, healthy fashion. The following figures for married women from the research of Hamilton and McGowan, relating the completeness of sexual functioning to the earliness of sexual experience and the nature of the sexual education, bring out some important relationships hitherto undemonstrated.

Of those with their first sex experience:

Between 16 and 20	. . .	63 per cent. have climax
„ 21 and 25	. . .	52 „ „ „
„ 26 and 30	. . .	56 „ „ „
After 30	. . .	43 „ „ „

Reaction of parents to sex enquiries: of those who as children met with:

Encouragement	. . .	73 per cent. have climax
Neither encouragement nor rebuff	.	56 „ „ „
Embarrassment, evasion, lies, stiffness	. . . .	42 „ „ „
Rebuff	. . . . .	50 „ „ „

These figures indicate the effect of the general atmosphere, frank or repressive, on the child mind, and its ineradicable effect on those children when they grow up to be wives. Hamilton's figures also suggest that inexperience on the part of the husband results in unsatisfying sex relationships. They also clearly show that early sexual experience is valuable to the mental health and the marital normality and happiness of women.

In so far, too, as late heterosexual experience tends to promote and to fixate masturbation habits and therewith the narcissistic fixation of libido upon the self, postponed sexual experience again tends to unfit both sexes for the adult sexual and human relationship of marriage. The following figures from married women are instructive:

Never masturbated	. . .	62 per cent. have climax
Masturbated at some time	. .	51 „ „ „
Masturbated frequently after marriage	. . . . .	27 „ „ „

In connection with all these cases it must be remembered that there is considerable evidence that the satisfactoriness of the

[1] *Sex in Civilisation*, chap. "Physical Disabilities in Wives." Hamilton and McGowan.

whole marriage is either reflected in or derived from the sexual relationship.

There are broad social effects, too, that cannot be overlooked. The present tendency to extend the years of education, a tendency which is bound to augment itself in response to the complexity of civilisation, is leading to the continued postponement of the age of marriage. Unless some deliberate policy is adopted to correct this effect, late marriage will become the rule and the present evils of the unmarried youth period will be even more evident. One of these evils not yet discussed has important racial effects. Under the present educational thrust towards complete repression or sublimation, the small percentage of youth which fully responds, the most tractable and educable portion and those who quickly acquire strong interest in the activities of civilisation, achieve a wellnigh complete denial of sexual expression. The more complete this sublimation of sex energies is, the more dominating become the life interests into which it is merged, and one of the greatest incentives to marriage, the sexual urge, is removed. Consequently they are more likely than their relatively casual, hedonistic and primitive coevals to remain unmarried, so that a slight but chronic loss of the more educable types is brought about in successive generations. Russell, in that beautifully sane philosophy, *The Conquest of Happiness*, replying to the insanities of modern life, has carefully analysed other aspects of long premarital sexual repression. He points out that the desire for exciting and fatiguing pleasures is one result of late marriage and a form of "sublimation," which is the cause of much unhappiness in married life.

In some, there is considerable reason to believe that sexual experience should be the normal right of youth between the years of seventeen and twenty-five.

Moreover, educational theory points the same way, indicating that in educating youth to any adult outlook the mature outlook can always be most successfully attained by passing through a number of intermediate goals. The theory of recapitulation, now realised to be a general indication rather than a precise law, remains one of the educator's best pilots, as do so many more of the "exploded" educational contributions of Stanley Hall. It leads us always to expect that the best path for the individual to maintain natural maturity in present civilisation is to pass through the viewpoints of earlier cultures in historic succession. This might indicate a period of moderate sexual freedom followed most typically by an ascetic phase preceding complete maturity, but such matters can only be decided once and for all by controlled experiments in education.

VI. The Need of Organised Research to Stabilise our Sexual Education and Customs

From all these considerations the system of sexual conventions with which we are left is perhaps not entirely clear. And indeed it cannot be until the psychology of sex is still better understood, and until much individual and social experiment has been tried and recorded. Roback has well voiced the psychologist's outlook on this problem when he asserts: "We are still immersed in a sea of legend and folk-lore with regard to the essentials of sexology . . . . our only salvation lies in well conceived and properly directed experiments." The slow trickle of arduously obtained statistical and experimental evidence has increased our knowledge a little even since those words were written. But widely-planned research in this field of social psychology is one of the first needs of our age.

If the evidence then is not sufficiently complete, the conclusions of our discussion must be correspondingly tentative, though it is true that several independent lines of argument have led us the same way. For example, it is generally agreed that a very full sex education should be given to children before the emotional period of adolescence, preferably by the schools themselves in connection with the biology courses, though it should not be detached from its human context.

Then, at adolescence, this teaching will need to be followed up by an emotional education which seizes the potentialities of idealism latent in the sexual emotion and sublimates it into a romantic, poetic outlet on the one hand, and an aesthetic appreciation of bodily and athletic fineness on the other. Physical expression of sex will not be forbidden, but explained as a frittering away of energy, and so discouraged. It was the greatest mistake possible for the older educators to excite the attitude of disgust to sexual things. By one of those drastic economies of nature which show us how important a place economy of energy and material plays in nature's competitive system the sexual and the excretory organs were placed together. It was easy enough for teachers to seize upon this and cause an emotional confusion in the minds of the adolescent which, though it checked the sex instinct, destroyed for ever the possibility of educating it in idealistic channels. The proper education of the sex instinct is still unknown, but I believe it lies in the direction indicated—non-repression, connection of sex with idealistic formations and particularly art, together with strong attempts to sublimate the libido by capturing the individual interests in other directions.

Early companionate marriage, financed if necessary by the

sources that now finance single persons at the same age, is an indication. This will require a more delicately adjusted relation of parent and youth than is now usual, if the financing is to be by the parents.

The understanding between husband and wife in such marriages will be so profound that no external convention binding against extra marital affections will be necessary.

Divorce, though it ought to be possible on grounds of mutual consent, ought not to be so simple that the impulsive and unintelligent fly to it on any provocation. Legal regulation to the extent of requiring notification of divorce six months before it is granted seems sufficient regulation for even the most ill-educated communities.

In conclusion, there is really no need for the present conflicts on sex questions except in so far as they are determined by native differences. All that is required is that the conservative realise frankly the fears and envies which motivate their prejudices and the reformers the necessity of careful biological reasoning and sufficient experiment.

VII. Civilised Woman, Domesticity and Economic Freedom

In all our changes of custom we tend to be unaware of the economic and psychological forces and the impact of scientific inventions that initiate the changes with which we are dealing. We are so unsophisticated in social psychology that we can be blindly led by unsuspected forces, whilst believing that a change of view has resulted entirely from a deliberate piece of reasoned consideration. The invention of birth control has revolutionised the possibilities of sexual ethics; the economic possibilities in women's work has initiated a new view of women's freedom and marriage, and the reduction of labour through scientific appliances in the home is changing the whole philosophy of women's life.

In all these matters, however, we are slower to move than we need be. We are led by circumstances instead of ideals. Rarely have we succeeded in moving ahead of physical change and utilising the drive of circumstances to shape things to our own ends. In a true equality of men and women in society there are possibilities of spiritual development of the utmost value,[1] and

[1] I cannot refrain from quoting here a passage from Charlotte Perkins Gilman's "Sex and Race Progress" (*Sex and Civilisation*, p. 117), which sums up admirably the general social effects of dominance by either sex. "A dominant motherhood gives us the most extremely socialised types we know, as seen among certain insects, but such unbridled action of one sex, with the

also the possibility of marriage becoming something more than "the best of a bad job." Yet we have done hardly anything to aid the set of economic forces which are leading us in that direction.

In the opportunity, created largely by the war, for women to demonstrate their effectiveness in business, began the present economic independence of women which has resulted in widespread advances in sexual ethics, in marriage and in society. Psychological investigation could have pointed out independently of the historical happenings that women's abilities fit them to perform many occupations as efficiently as men, and some occupations with greater efficiency.[1] Modern psychological research is showing all along the line the superiority of women in occupations where steady application, patience and a good memory are required. In intelligence tests there is no difference manifested between the sexes, but men on an average have greater initiative, more impersonal intellectual interests and better power of applying what they know. A good summary of all but the more recent work will be found in Havelock Ellis's *Man and Woman*, especially Chapter VIII.

Released from the burden of continual child bearing, and from home duties by reason of the manufacturers' provision of much that was once laboriously prepared in the home, the women of this generation and still more those of the next, will be able to contribute valuable energy and intelligence to social, economic and cultural progress. The woman who, enjoying the support of a husband earning more than he would a generation ago, by reason of scientific progress, continues to think that attention to a labour saving flat and two children (only on their holidays) is a

almost utter extinction of the other, does not produce any further culture than a hugely efficient nursery. Our own reversed position, with the dominant male and reduced female, has allowed of better results in spite of all its inevitable individualism, warfare, disease and crime." (Elsewhere: "An individualism whose more than natural greed is stimulated by the limitless demands of the dependent woman, married or hired.")

"The fairest balance of male and female influence would not in itself have given us race progress, which comes through the development of quite other faculties of a distinctly social nature; but our unbalanced position, with excessive sex development, and the male as the main factor in making and managing civilisation, has been responsible for many of the plainest obstacles to progress."

[1] Rivers, in *Psychology and Politics*, has pointed out that the question of giving women a vote could have been decided by psychological investigation, instead of which "the issue was largely determined by personal preferences and prejudices and on grounds of political expediency, while perhaps the most striking fact is that in our own country the final and peaceful outcome of the conflict was largely, if not mainly, determined by a pure effect state, viz., the gratitude of the community to women for all they had done during the war," p. 13-14.

full occupation for one able individual, should compare herself to her grandmother with eight children, little schooling and a home that needed all that human energy and ingenuity could contribute to run it. And comparing, she should regard herself as having unconsciously become something of a human parasite. The access of leisure in this scientific age is falling mainly to women, who have no idea whatever of using it profitably. Not without justice has Dean Inge referred to the wives and daughters of the rich in our prosperous age as "the largest and most irresponsible leisured class that the world has seen."[1]

A less artificial education for girls will do much to change this state of affairs, but a truly happy solution will only be arrived at when society definitely makes up its mind to recognise the economic freedom and independence of women, and their right to true professional life under conditions which permit of interruption by childbirth as a normal contingency.

In a later discussion on education I have discussed the absurd and pernicious ban on married women teachers and have examined the issues, economic, racial and psychological, in the employment of married and unmarried women. Such obstacles must vanish with popular ignorance and conservatism, but there are other obstacles inherent in the practice of man and wife both being engaged in occupations of their own.

At present it is usual for the husband's occupation to come first and for the wife to adapt her occupation to the circumstances fixed by the husband's place of business. There is bound to be some embarrassment when occupational interests are more nearly equal and the movement of the husband's place of occupation requires a change in the home and in the wife's employment. A wise society, alive to the general economic and cultural advantages ensuing from a more vigorous occupational interest in women, will facilitate such changes by a standardisation of occupational qualifications rendering transference more easy than at present.[2]

[1] Still more so, the woman who takes advantage of economic good luck to force another woman into removing what little work still remains to her, so that she can lead a life of futile leisure. Present economic changes are forcing down the incomes of the white collar class relative to those of the manual labourer with many resultant complaints of hardship and injustice, so that it will be increasingly difficult to purchase the labour of the womenfolk of the labouring classes. Thereby will arise a new system which, in all justice, should have existed before; the more intelligent woman will only be able to delegate manual labour to others if she herself is employing her intelligence in some socially useful occupation.

[2] Will this lead to professional women retaining their maiden names, as many women doctors and novelists now do? Such a change would be a valuable symbolic indication of a new social attitude. Apropos of this, see a letter in *Nature* by Marie Stopes, complaining that a research grant from the Royal Society was refused because of her declining to use her married name.

The incorporation of women's interests, efforts and productions in the economic, political and social life of the times is a necessity for the evolution of the new phase of organised civilisation.

VIII. The Social and Individual Importance of Sexual Selection

Probably there is nothing of such great importance for individual happiness and social welfare, which we leave so much to chance, as the choosing of life mates by the young. Among some past and present nations and in certain social classes, attempts have been made to improve upon this situation by putting the arrangement of marriages entirely in the hands of parents or even of marriage brokers. It has frequently been remarked that such "loveless" marriages are quite as happy as, or even happier than, those in which the parties fall in love before marriage. But even if this were true, psychological and ethical objections to a practice which denied individual liberty and responsibility, as well as emotional experience, in one of the most important events in life, would rule such practices out of conceivable social organisations.

Surprisingly little is known about the psychology of sexual selection, in spite of the importance which Darwin showed it to have for racial evolution. We must turn aside for a moment to discuss the factors in sexual choices as far as they are known.

In the sentiment of love among civilised people we have a complex functioning of the mating instinct, the parental, protective instinct, the gregarious instinct and the self-assertive instinct. These are satisfied respectively by such aspects of the loved one as sex appeal, childlike features and behaviour, companionableness and the possession of universally admired traits. Each of these instincts, being added to the mating instinct, has produced some change in the original direction which sexual selection would have had under the urge of the mating instinct alone. At present one may best leave to the novelists the description of that "sex appeal" which is the original stimulus to the mating instinct, but health and beauty (whatever the latter may be) may reasonably be supposed to be important elements of it.

It is the effect of civilised life in binding the protective instinct to the sex instinct which has such important racial results in sexual selection. Because of this change, both lovers, male and female, come to desire various childlike, delicately-immature features in the loved one, capable of exciting that mixture of compassion and delight which a parent feels for its child. Already

the selection by men and women with a large endowment of such childlike, immature traits has done much to produce the incompetent, clinging, emotionally-immature women who are so marked a feature of advanced civilisations. Throughout nature we find natural selection keeping a check on sexual selections. By continual sexual selection among deer, for example, favouring stags with large antlers, a species is eventually produced in which the antlers are of such weight as to reduce the chance of survival of the males of that species when attacked by predatory carnivorous animals. Thus does natural selection step in and call a halt to sexual selection by removing the most successful examples of sexual selection, or, indeed, the whole species. Something of that kind may well have taken place with man. The sexual selection which evolves a helpless type of woman may go a long way before it produces racial decay, for the menfolk may, if highly competent, be capable of extending their protection more effectively to women under civilised conditions than in more primitive life. On the other hand, the sexual selection of men with childish traits has rarely yielded any manifest results precisely because races pursuing such a course have rapidly been eliminated by natural selection. Of course, there must come a point even in the evolution of relatively helpless women, when the race begins to suffer. This would be particularly true, for example, among a seafaring or nomadic people who carried their womenfolk with them. There we should expect natural selection rapidly to put a stop to sexual selection. It is probably significant in this respect, that the figures quoted in Chapter II show sexual differences in ability to be markedly less among Nordic peoples (living more recently under rigorous, semi-civilised conditions) than in the Mediterranean race and the Jews, who have been much longer civilised.

If the ideal of true companionship of man and woman is to be realised in civilisation, the undesirable effects of sexual selection must be avoided by introducing a new cultural outlook on sex, and by educating the young to a more suitable set of socially approved ideals in regard to womanhood and the choice of a mate. In any case the possibly deleterious effects of sexual selection on both sides of the race under civilised conditions are so important as to justify a very full enquiry into this psychological problem.

A second effect of sexual selection which is of considerable political importance may be indicated by the question: "Does sexual selection in a group composed of different races living side by side tend to mix the races or to preserve their distinctness?" Since in sexual choice the individual is likely to be attracted by human features markedly different from his own, one might

expect differences in type to be mistaken for more profound sexual differences, and thus to give an added mutual attraction to opposite sexes when they are also of different racial type. Undoubtedly such an effect tends to operate. The popular mind favours those matings in which a difference of type exists between the man and woman as, e.g. in which the woman is blond and the man dark, the man thin and the woman plump. Indeed such contrasts are regarded as desirable.

Now, in actual fact, as Karl Pearson's surveys have shown, the physical characteristics of man and wife tend to be correlated, i.e., the partners are much more alike than if they were chosen at random from the general population. The popular idea is, therefore, opposed to a more fundamental biological tendency in the sex instinct which causes like to choose like, even in spite of a contrary tendency arising from the possible confusion of type differences with attractive sex differences.

Some as yet unpublished research work of the present writer on the racial type of partners in mixed populations tends so far to confirm Pearson's results.

Now, although the existence of a tendency of like to mate with like is a strong presumption in favour of its being the best course from the point of view of married happiness, some more direct evidence is wanted. A first contribution to this subject comes from the enquiry of Hoffstatter,[1] who found that there were a greater number of happy marriages among those showing greater similarity in mental qualities.

This tendency for like to marry like is thus productive of happiness in marriage, but it has an equally fortunate effect in tending to postpone racial intermixture in areas where different races by political blundering are kept in close contiguity. It has the further desirable effect of producing more extreme types on which natural selection may act.

As psychology is shaping at present we shall soon be in possession of valuable knowledge as to the psychological traits which promote happiness or unhappiness when bound together in the marriage of the sexes. Then, it will be a possible and desirable thing to put these facts at the disposal of young couples, who, knowing from psychological examination the degree to which they possess various traits, will be able to decide for themselves on the matings in which real happiness would lie before them.

One of the few objections to early marriages is that the young are less endowed with that discernment necessary to distinguishing

[1] Ahnlichkeit, Gattenwahl und Ehe. Zeit. f. Sexual Wissenschaft. 1929, xvi, 242.

what features of personality are really admirable and mutually compatible. Especially is it true of youth that "It is not given to man to love and to be wise." A greater psychological education and the application of psychological testing would remove this objection and provide a true source of information and advice in matters which greatly affect society.

At present, there can be little doubt that, both from the point of view of individual happiness and from that of eugenic progress, the facilities for aiding mate selection are grossly inadequate. Whom does the average youth marry? The child of friends of his parents; the girl living a few streets away; the typist who is one of a small staff in his office; the girl he knew at college, and so on. In every case the choice of man or woman is from a most restricted group. Can there be any doubt but that, with a much larger universe of choice, each individual would be much better suited?

Many practical men have recognised the effects of this lack of social organisation which is much more obvious and pernicious in some walks of life than others[1] and leaves desirable types unmarried, starves the idealistic quest of youth and leaves all types ill-assorted. The Mayor of Durham a few years ago attempted to call public attention to the necessity of establishing opportunities, other than the purely frivolous ones of the dance hall and the street (or sectarian ones connected with the Church), which provide an unsatisfactory medium of assortment for a minority of the population, whereby the young might meet in social intercourse. Major Darwin speaking from the eugenic point of view, insists: "Great care should be taken to give to all young people of good stock ample opportunities of making friends with others of suitable age who are well endowed as regards character and health."[2] In every age there have been spasmodic attempts to cope with this problem. Possibly a more general appreciation of society's function in the matter, together with the rise of more mixed sports and cultural clubs, and aided by the growth of psychological science, will produce an improvement in sexual selection both as it effects individual happiness and the welfare of society.

[1] Particularly, for example, among young men in armies and navies, whose marriage is eugenically desirable. Again in the educated classes there is frequently a dearth of opportunities. Colleges are prevented from performing a useful assortative selection by reason of the late marriage of college types and the short-sightedness of authorities who attempt to suppress any sexual life in universities, believing that a woman's true life function is to obtain a paper certificate—not to get married.

[2] *Eugenic Reform*, p. 362.

It is the thesis of this chapter that the disproportion between the strength of the sex instinct and the amount of social expression granted to it results in strong prejudices and counter prejudices which, by preventing sane discussion, have rendered sexual conventions the most primitive features of civilised culture. Sexual ethics, like other moral rules, can be derived from biological considerations by careful research and reasoning. Although there is need for much more experiment, it seems safe to conclude that divorce by mutual consent, the institution of trial marriage, greater freedom in sexual relationships and other changes not involving dysgenic effects or loss of social purposefulness, ought to be socially recognised. Whatever sexual morality is adopted by adults, society must devise modified introductory phases suited to adolescent psychology, give a normal sexual education to all and, by studying the psychology of the sexual instinct, provide knowledge that will make mate selection more successful from the point of view of individual happiness and of community welfare. It is argued that the complete economic emancipation of women will be the prelude to valuable cultural advances and should be facilitated in every way.

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*These books together provide an all-round presentation of fact and reasoning.

CHAPTER SEVEN

FALSE BEACONS IN SOCIAL PROGRESS

"Vain wisdom all, and false philosophy,
Yet with a pleasing sorcery could charm
Pain for awhile, or anguish and excite
Fallacious hope, or arm the obdurèd breast
With stubborn patience as with triple steel."

MILTON.

"Quand celui à qui l'on parle ne comprend pas et celui qui parle ne se comprend pas, c'est de la métaphysique."

VOLTAIRE.

I. The Old Leadership and the New

OUR investigation reaches a turning point. Behind us lies a largely analytical discussion of social problems in which we have avoided as far as possible the temptation to proceed to instant syntheses, i.e. to interesting practical deductions and suggestions.

Before we can pass over from this contemplation of the dismantled elements of social structure to the constructive steps to which all this enquiry is but a necessary preliminary, we have one last and difficult task to perform. It is the analysis of social forces which themselves give practical leadership at the present time. Between us and the enjoyment of the fruits of rational synthesis for which we are prepared stands a rank growth of relatively fruitless forms of social creativeness. If the path of scientific enquiry along which we have passed here is the only true means of arriving at sound social guidance, it behoves us to show in what respects other ways of directing biological, economic and cultural progress are at fault.

Leadership has always been an attractive rôle for those who do not know the necessary agony of its responsibilities ; consequently the forces which attempt to guide social thought are many and highly varied. They extend from the naive and clamant efforts of the journalist to the obscure reveries of the philosopher; from the direct and conscious intentions of the politician to the unconsciously produced social revolutions of the mechanical inventor, from the deliberate and explicit academic discussions of the universities to the expedient and wilful measures of the market-place.

It may be objected that religion, which we have examined, and education, to be examined, are rightly among the forces guiding society, are indeed *the* leading forces. This is an all too common mistake. Religion psychologically has always been a conserving force, and history confirms this, for we see it everywhere making a firm stand against progressive and retrogressive forces. At its best, united with evolution, religion is the will to progress, but it cannot itself indicate the course to be taken, nor yet supply new ideas and break old customs.

And education is but a town crier announcing far and wide the news that has been brought to him. Education can only hand on to society the truth that has already been gained in other spheres. It is the faithful and indispensable servant of a vigorous society, not its master or leader.

II. Journalism, a Social Will-o'-the-Wisp

On the face of things, the press is at once the most confident and the most unsuitable claimant to the leadership of social thought. Beginning as a system of news retailing, it has become a parvenu politician and social philosopher with intellectual manners and powers, the pinchbeck qualities of which are obvious at some time or other to the meanest reader.

To say that the press merely reflects public opinion is the greatest humbug. It does to a considerable extent reflect the popular intelligence, the popular taste for slipshod methods of reasoning and unembarrassed ignorance, but through these contacts it endeavours to shape public opinion ruthlessly into forms which are rarely sympathetic to the potential sentiments and will present in the public.

Most newspapers, of course, are commercial concerns, and as such are primarily busied to propound views which will meet with public applause and so ensure a large sale. To this extent, newspapers are bound to echo public opinion. Now, anything in print appears to have the seal of mass approval behind it and carries with it all the powerful herd suggestion which is infinitely stronger than reasoned argument. For this reason the press renders a thousand times more strong the crude herd opinion already present and so holds in vice-like tentacles all attempts at enlightened action necessarily differing from the average viewpoint. It can play on one of many themes, but all of them must be sufficiently backward and crude to be widely accepted. It can impose opinion, but it is doomed to impose unintelligent opinion.

Yet always it can impose printed suggestion with a bias towards views adopted by the journalist, whence and why, no one understands.

If this shaping were only at the behest of a political party behind the newspaper, the thoughtful man could look on the matter with indifference, but the efforts at leadership extend far outside the political sphere, and even within it they frequently emanate from commercial powers or the arbitrary whims of newspaper magnates and captains of industry holding no votes from the people. And if the larger newspapers are under the sway of industry, the provincial newspapers of cathedral cities are equally directed from sane and progressive thought by hide-bound ecclesiastical influence. The editor of every picture paper is at liberty to estrange the people from their elected representatives and endanger at critical occasions the considered plans for national welfare of those whose business it is to handle government.

The average newspaper editor feels himself at liberty to contradict an authority in any field whatsoever. In a few minutes he will write a leading article refuting a book representing the work of a lifetime. But he is equal to even more than that. He will venture to put thousands of our democratic rulers—our electorate —hopelessly astray in any subject which he fancies himself at the moment to be an authority. He will invent facts and principles in politics, economics, medicine and psychology for the evening edition of a national time-waster. One could take up almost any newspaper at random and pick out authoritatively written articles which will not bear a moment's scientific examination. Incalculable damage to human progress is done by the newspaper ethics which permit this light treatment of important topics. I will not take an example here, since a blind statement is not to be refuted by an equally terse and confident contradiction, but only by a longer discussion of the necessary facts than would be possible here. I will refer the reader, however, to an example encountered by East (op. cit.), who, after a fine exposition of the facts in regard to population and agricultural resources, introduces by way of light relief the following editorial from the *New York Tribune*: " 'It has been computed that Texas alone, intensively cultivated, could feed every person on this planet. There is no lack of natural resources for the maintenance of life if humans were at all evenly distributed over the earth's surface, nor has it been demonstrated that any given territory is yet incapable of yielding sustenance to those within its borders. The desire for expansion of teeming peoples proceeds from surplus energy rather than from a losing struggle for existence.' It is extraordinary, it is even somewhat

amusing, that there should be persons without the slightest knowledge of the trend of population or the possibilities of agriculture who will write thus, but it is also serious."

The danger of the irresponsible incursions of the press into judgments of national problems—the full facts in regard of which can only be known by the appropriate government departments—is only paralleled in extent by the absurdity of its comments in the field of science.

At first one is struck by the extremely meagre attention given by the press to that science which is creating practically the only real news of our lives; later, one is thankful that for long periods it leaves at least one important human activity undistorted. Usually, especially on days when copy is scarce, it hails as a startling new discovery some fact which has long been common knowledge among scientists (generally in physics) or (generally in medicine) some "discovery" a few weeks old which has never been subjected to scientific confirmation. In either case it proceeds to a misplacement of emphasis which is positively ludicrous, embellishes what needs no artificial interest with sundry "amazing" adjectives and parodies the scientific spirit until it becomes intelligible in terms of journalistic ideas. In other facets, where science begins definitely to abut and trespass upon its field of irresponsibility, as in sociology, economics and psychology, it indulges in sly misrepresentations—as a bill poster might paste awrily and unattractively an advertisement for automatic bill posters. It is indeed interesting to observe that wherever science begins to approach human affairs in such a field as sociology and religion its course is impeded by smoke screens and the wild rush of non-scientific and strongly prejudiced persons into the field of discussion. It is like the sudden foray of a band of savages upon engineers building roads through the jungle. Priestley, the great chemist, fell foul of such primitive mentality in his support, some hundred and fifty years ago, of the new Unitarian movement. The historian (*Unitarianism*, p. 86) tells us that "Priestley had a way of expressing himself which was peculiarly irritating to the ignorant and intolerant. He said exactly what he thought; he concealed nothing; he palliated nothing. He did not try to score a victory by misrepresentations. He said simply in theology, as in science, what seemed to him to be the truth. That quiet firm temper is bitterly opposed by unreasonable men." It is universally opposed by the mass mind of journalism. Yet the dramatic quality of scientific discovery, the intensely fascinating struggle of science, so full of significance, hope and wonder for humanity as a whole, is the one field above all others which the

enlightened journalist could hope to develop in place of the sordid hackneyed drama of nationalised village gossip which now fills our newspapers.

Who are the writers for the press—the editors and sub-editors who utilise the simple device of the mass suggestion involved in print to obtain power over public opinion and social affairs? They are for the most part ill-educated men or men educated in a purely classical and literary tradition which prevents them from having any understanding of the age of unpretentious expression and scientific progress in which they live. Their one qualification which secures success in their profession is the ability to write quickly, easily and glibly, and to assume naturally in their own thought the tiny paces of the popular mind.

In the understanding of all manner of social happenings, a clear appreciation of the process which results in different professions having different mentalities is important. One needs to go right back to school, and watch the boys and girls making their choices of a profession. A large proportion of the most intelligent, steady and conscientious, especially among the introverted types, become teachers. Those extroverted temperaments with a lust for power, but without the steadiness of application and interest in the thing in itself which leads to success in some particular subject, are attracted by, or drift into, journalism. And so on, each occupation is constituted at the start by individuals with some particular temperamental make up. On top of this is imposed the lifelong influence of the occupation itself, which puts a premium on the acquisition of certain skills and attitudes and treats others as of no importance. As a result of this process, which we may study more fully in another situation, all kinds of special groups are shaped with mentalities which render them quite unsuited to obtaining a true view of life as a whole or to expressing by their own tastes the desires of society. The journalist who tries to reason for society as a whole is a particular and marked example of this unsuitability.

And the press has to stand not only the charge of distortion, but also of dilution of thought. The daily newspaper presents what is essentially village gossip on a large scale—a thing which every man who wants to do something with his mind strenuously avoids.[1] Yet it is almost certain that 90 per cent. of the popula-

[1] The continued damage which journalism is doing to moderate speech and precise expression by its staccato headlines, its gross exaggerations and conscienceless use of superlatives is a serious problem for education, though a side issue to our present discussion. By this shouting, the ear drums of the people become even more deaf to the level voice in which scientific complexities can alone be expressed. In general, a vigorous misstatement, a paradox, a

tion in this highly educated and self-governing nation has actually read more out of newspapers than out of all the great books of the past and the present. For many, this daily hash is the only mental nutriment, a fact which alone well accounts for the flabbiness of the mass mind.

With the exception of those with investments, most people could abolish the newspaper with advantage—a condensed weekly sheet of real news, a "tabloid *Times*" is quite enough—and I know of many intelligent men performing first rate social service who have dispensed with newspapers without disadvantage—indeed, with immense gain—to their minds. Meanwhile, for the rest of mankind, forests of immense natural beauty are sawn down week after week to make litter for dusty streets. Surely in the interests of the community mind some control of this commercialisation of thought and education should be obtained. As an immediate step some sort of tax on newspapers is indicated, in accordance with the practical principle we appear to have adopted of taxing all mildly undesirable practices—drinking, betting, feckless amusements and luxuries. A tax of twopence a copy on newspapers over a certain limited size would reduce considerably the practice among the purposeless of resorting to newspapers on every occasion and would yield a considerable revenue for increasing public libraries and creating leisure for dramatic education.

Of all social forces, the press is alone in touching so many lives, in dropping on them day after day like drops of a water on a stone, in serving up its propaganda insidiously mixed with attractives wares and in utilising consciously the unconscious and irrational force of herd suggestion. A journalist who was once one of a number of people to whom I had been speaking on primitive psychology and magic remarked to me afterwards that it was strange to find primitive people believing in magic when a little unbiased observation and a longer memory would have shown them that it failed to work—that the promised rain failed to come as often as not, and that the sick only recovered about as frequently as when no magic was applied (save for suggestion). He was in truth expressing naïve astonishment at the very weakness of the popular mind which makes the power of the press possible.

Yet it has frequently been remarked that the power of the press is illusory, for it fails to touch cultured opinion, misses the

pithy epigram, a confident reiteration of opinion is always more palatable even to a "well-educated" reader than an accurate statement proceeding as far as the facts will allow. This human weakness is so aggravated by journalists that the level tones of reason are less likely to be heard to-day than ever before.

really busy man of affairs and is discounted by those actually engaged in legislation. In short, though it is numerically effective, it misses just the minority that matters. This is in part true, but it is a cynical argument for a democratic country and an argument which is rapidly becoming invalidated by a relative levelling-up of culture and the better organisation of democracy.

To express hope that the press may become an educating force, maintaining from day to day the tonus of popular thought and interpreting sympathetically the conclusions of leaders in various fields of endeavour, is a feat of optimism ; for the press appears to have shown a steady decline since its early days, a decline which has gone even further with the yellow press of America than with the sensation newspaper of England. This decline from the level-headed, dignified news sheet of the Victorian age is a matter for comment on all sides and it is one of those things on which by no twist of the imagination can we congratulate ourselves. In the last sixty years, the leading article has become shorter and shorter ; the serial story and the law court articles longer and more detailed.

Perhaps the most dangerous quality of the press, however, is its superficiality. Current editorials never dream of looking farther than the immediate crisis and obvious appearances, however much a longer view and reference to sociological principles might do to make the thing intelligible. There are frequent references to national regeneration or decline without any serious attempt to treat the problem intelligently. "The nation is not growing old," concludes a recent leader, "it is only suffering from the growing pains of youth." When will writers begin to deal with something more tangible than metaphors ? When will they learn to look a little deeper than politics and economics ? The journalist either assumes that the average man is incapable of understanding questions of heredity and of the eugenic standing of the nation, or that his patriotism and religious sentiments are not sufficiently strong to cause him to be interested in the ultimate and real welfare of the nation generations hence. Or possibly the journalist has never had a chance to educate himself in these vital matters of social psychology and biology. It is manifestly his duty, as one who has succeeded in getting to grips with the non-reading population, to do his best to "get across" some hint of the wider viewpoint to these ignorant multitudes.

The press should be a force expressing the purposiveness of mankind, taking over some of the inspiring and heartening functions of the pulpit, reminding every man of the great common adventure in which all are serving. It should be a thing from

which one could quote facts as from a scientific journal. And it should utilise its great opportunities of putting the latest social ideas convincingly and fairly before the public, instead of holding the feeble minds of its readers on the see-saw of outworn categories and conceptions.

The press may become a valuable hormone in the body of society; it can never be a directing brain.

III. How Reliable are the Intuitive Solutions of Literary Essayists?

One of the most important forces which strives to shape social thought and which attracts educated men in their attempts to solve their confusions is the inspired leadership embodied in literature and drama.

A didactic and propagandist purpose in this sphere is not confined to our present age. The novels of Wells, Galsworthy and Mann, the essays of Mencken, and the dramas of Shaw and Ibsen are not new in their functions. Rarely perhaps has the reading public been so willing to accept argument from dramatists and to seek consciously for social guidance in literature, as it is to-day.

In the last century the political and moral essayist, however, was definitely a writer of essays mainly because he wrote for a more restricted public who were serious enough to accept argument in that form.

We, however, are not interested in the manner whereby literature has attained to this function, still less are we concerned with literature as such. Our concern is entirely with the method whereby the novelist, the essayist or dramatist, comes by the views which he is bent on teaching.

Relative to other social leaders, his methods are highly intuitive. He may reason at times like a philosopher, or apply common sense reasoning to social statistics like a scientist, but these are subsidiary to the emotional intuitive insight which he brings to the social need. If Shaw and Bergson posit a life force as an essential concept of their philosophies, we are not to suppose that they are biologists. If Tagore writes at great length on man's superiority to women, we must not assume that he has made numerous physiological and psychological tests. If Keyserling expatiates on psychological differences in the make-up of European nations we need not conclude that he has made or consulted any laborious anthropological enquiries. If Bergson achieves fame through talking much about an "Elan vital" we need not assume that he has made more contribution to biology thereby than has been

made by the shortest research article of the humblest research worker. And when Shaw argues that parents and children are not fitted to live together, we know, whatever arguments he may use, that his original objection is an intuitive one. By intuition, one means the process of arriving at a conclusion when presented with certain facts, without any clear or deliberate sequence of reasoning, and without any counting of the facts themselves. It is an intuition when one "estimates" the time on waking in the morning, when one judges the character of a person at a casual glance, and when one decides that man has an immortal soul. Many feats surpassing the bounds of human knowledge are described as intuition, but for such convictions some other name is more suitable.

Intuition has not yet received adequate psychological investigation, but there is no doubt that it is extremely liable to error as, e.g. in intuitive judgments of character.[1] Thus in saying that a certain man is cruel, I may be basing my judgment unconsciously on a picture of just such a face, illustrating the story of a cruel pirate, read in childhood. Or if I intuitively affirm the view that democracy is good, three-quarters of my convictions may derive from the confidence with which I have heard an admired teacher make that assertion. Since the bulk of the deduction process takes place unconsciously and sketchily, it appears that the emotional value attached to objects in autistic thought, in the mind governed not by the reality principle but by the pleasure principle, is of more weight than their real importance.

This extreme disadvantage of intuitive processes is, however, offset by certain respects in which it is superior to reasoning and scientific method. Intuition goes more swiftly and with less expenditure of mental energy than does logical reasoning. It is also possible that it can handle a greater miscellany of facts than can conscious attention. Consequently, intuition drives farther than reasoning into new realms. Robert Mayer arrived at the great principle of the conservation of energy by intuition, as did Kekulé at the notion of the benzine ring structure. Science is redundant of valuable discoveries which are the trophies of intuition, though the "sensational" populariser of science exaggerates and tries to reduce even the discoveries of Newton and Einstein to this romantic formula. It is not without due grounds that Graham Wallas has called intuition "the faculty above reason."[2] But the occasions when a happy balance of impulses

[1] See e.g., Valentine, "Relative Reliability of Male and Female Intuitive Judgments of Character," *Brit. J. Psych*, xix, 213.

[2] Graham Wallas's discussion of intuition in "The Art of Thought" under the name of Incubation and Illumination (Chapter IV, *Stages of Control*) cannot be bettered.

frees intuition of its liability to error are extremely rare. For every intuitively attained hypothesis in science which has been sound, there have been literally hundreds of which we never hear, which have proved false and absurd. "Mistress of error and falsehood," said the great Pascal, "it deceives the more because it does not always deceive."[1]

Consequently the method of intuition in social affairs is at once tempting and dangerous. At best it is a highly mobile skirmishing unit which can hold the enemy in action until the slow-moving forces of scientific method can manœuvre into position. At worst it is a headstrong force which can lead all mankind to annihilation—as when it calls for universal cessation of competition and a wholesale mixing of bloods. "A whole world of publicists," says Poincaré, "obstinately cultivates the art of writing, while relegating to second place any positive acquisition of ideas. We have writers, and we have men of science. They are, too, often separated by a water-tight partition. . . ." Our whole education is sick with this literary disease. Some are assiduously trained to be writers, others to think.

So poor has been our education, so pretentious and so lacking in intellectual sincerity, that the world has never risen enthusiastically to a "cold" intellectual intention or to a scientific formula. The foolish and misguided enthusiasms for simple passionate solutions to life's problems—solutions which evoke the earnest man's despair, have nevertheless their reassuring side in that they show the latent power of enthusiastic devotion to a cause, which still exists in human nature after centuries of disillusionment.

It is the task of a wise social guidance so to educate the people that they will no longer be a prey to the excessive control of emotional, intuitive leadership, but will demand the prosecution of vigorous scientific research into the difficulties which mar their lives.

The best literature and drama, then, has a valuable function in propounding solutions to social and intellectual problems. But these solutions must be prevented from gripping public opinion until they have been inspected by other methods; that is to say, intuitive solutions can serve mainly by evoking interest and promoting discussion.

[1] Quoted by Clemenceau, *In the Evening of My Thought*, p. 241. In taking up the subject further one would distinguish between two degrees of intuition; that which is an intuitive solution of scientifically correct data (as in the examples of Kekulé and Mayer cited above), and that in which both the reasoning and its premises are only subconsciously examined as in the intuitive judgment of character. In the former sense, scientific research itself may almost be regarded as a long process of testing bright ideas or intuitions, 999 out of every 1,000 of which turn out to be absurd.

Unfortunately, when one speaks, for purposes of recommendation or disparagement, of literature and the intuitive essayists, one is speaking not of the best sections, but of all of it. And the deluge of inferior literature so attenuates the value in general reading, that one is tempted to advise the young to curtail their literary reading very sharply, and to argue in general that the amount of time given by all people to reading is grossly excessive. Books vary from the few pages of a scientific monograph, containing the work and thought of a lifetime, to the bulky conversational novel written to the speed of a stenographer.

Novels appear, in this country alone, at the rate of over 2,000 a year. Yet the number of magnificent human documents already available from previous generations, the number of absorbing and invaluable books already written by the greatest geniuses, is such that no man could read through them all in his lifetime. Emerson has said that every age must write its own books. But what futile and superficial books are those which cannot transcend their own age! And one asks not for a cessation of novel writing, but for a preliminary sifting of books and some means of guiding a reading public which cannot find its way to a useful expenditure of its reading time. Women—idle married women, create the greatest demand for a flood of purely evanescent literature, according to the reports of librarians. Whenever there is any reasonable amount of leisure doled out to those educated in our present traditions, it is grossly abused. There must be thousands upon thousands of pounds spent on poor literature, on commercialised, vicarious sport, on newspaper competitions and so forth. While science is standing bereft of support for highly necessary research in psychology and medicine, our newspapers dole out tens of thousands of pounds in order to distract people into pointless waste of time. There is among a vast proportion of our population a general purposelessness and inability to find adventure in real life. There is going on in this generation a great drama for the whole of humanity—a close race between progress and catastrophe. There is a tremendous need for people of purpose, and there is for such, a life of absorbing adventure. Our present educational and religious ideals are preventing the man in the street from gaining any conception of this historical drama or any sense of real community adventure. Instead of leisure being used for purposes gravely needing reinforcement, it is abused beyond measure. Against the drug of novel reading, only a purposive scientific and social education can provide immunity. The motives of both readers and writers are perverse. For many of the unfortunate readers this reading is an opiate, an escape from life, a

means of preventing thought. The writing of a book, of a sensational and easily-read book, preferably dealing with direct sexual expression or gruesome murder, is a simple commercial proposition. One can almost see a time when a wise government, faced with the threat of some popular writer to produce another book, will, in the interests of its better educational and dramatic culture, pay the author the price of his silence.

The majority of our novels are extremely artificial, showing no organic connection with the vital trends of our times, and an excessive disregard of the low standards, the brutality and the makeshift existence of the majority of our people. Except in patches they are snobbishly unreal. Above all, they fail completely to incorporate the new spirit of scientific purpose in their conceptions of human life and drama.[1] A. N. Whitehead remarks: "so far as the mass of literature is concerned, science might never have been heard of" (*Science and the Modern World*, p. 111). There comes a certain point in the dilution of literature when reading loses value. One must devour so much worthless material in order to get an ounce of nourishment that reading is a waste of time. When that point is truly reached the writing profession becomes damned as a whole by educated but busy men, for it has begun to waste a man's time and to charge him for doing so.

Again the writing of a novel has become a social plume sought after by almost everyone of leisure and a love of print. Is a man or woman to be permitted to write books to earn a living or to convince people of something that is untrue. If so, why? The man who prides himself on his liberal mind will say: "By all means let people take up novel writing purely to earn a living, if they can earn money in that way." But we forbid a man to steal or to sell drugs, however much he may plead that he only wishes to earn a living. And are not these paltry novelists stealing from the people the spiritual satisfaction of classical writers and introducing them to the drug of shallow "thrillers"?

I recently heard a most successful modern novelist address a university literary society—one of many societies designed for the lionising of minor authors and the increased sale of their books —with the injunction: "All young men and all young women ought to be writing novels." What an attitude to the needs of the community! The only resultant as every psychologist could foresee, would be an increase of literary dilletanti, of people with a hobby of consuming novels.

Hugh Walpole has recently taken up the challenge of the

[1] With the outstanding exceptions, of course, of such men as H. G. Wells, Aldous Huxley and a few other writers of to-day.

writer who "feels sick when he beholds the number of novels written to-day." He reviews the opinions that novelists write because of a desire for fame, because of a desire for money, because of a desire to do people good, because of a desire to do people harm, because they cannot help it, and because they have nothing better to do, and concludes that good novelists write because they must do so.

Many novels are undoubtedly nothing but a therapeutic device to heal the maladjustments of their writers. Surely a book is written only through a creative love of beauty and art, or a desire to serve truth and social welfare! And the essayist is always struggling frantically for originality. However true some previous analysis has been, he must say something different. He must discover some new definition of Art or Wit, or whichever of the numerous things he deals with he pretends to understand.

The whole situation is illustrated by a recent incident in which a London doctor gave up his practice at which he was heavily overworked, in order to take up some less gruelling occupation. He wrote at once a highly successful novel, which received the distinction of being chosen by the Book Society from the books of the year. So very mixed is the quality of those who now write novels that it seems probable that almost any member of the learned professions who turned to that occupation, would make a relatively great success of it.[1] But society is grievously at fault when it begins to pay a man more for such entertainment than he could earn in the sound service of the community in healing, teaching, or scientific research; and the successful society will be that which most quickly finds means of deflecting superfluous wealth from such objects to the services of which it is urgently in need. This reform, like so many others, depends on education.

During the recent world-wide industrial depression, publishing is the one industry which has gone unchecked to greater and greater prosperity, and many have thought this a matter for congratulation. It might well be so, it might indicate a relative increase in intellectual as opposed to material interests (if such a separation can be made), but in fact it shows nothing but the deplorable dilution of good literature by printed pulp demanded by those educated sufficiently to read, but not to think. Wells may be right about the educational value of the best literature, when he says: "After all, in spite of the pretentious impostors who trade upon the claim, literature—contemporary literature—is the breath of civilised life, and those who sincerely think and

[1] See apropos of the novel writing vice, an excellent little essay in H. L. Mencken's *Selected Prejudices*.

write, the salt of the social body." Unfortunately, these writers do not fill our lending libraries. He is on less certain ground when he remarks: "The man trained only in science falls easily into a superstitious attitude; he is overdone with classification. He believes in the possibility of exact knowledge everywhere. What is not exact, he declares is not knowledge." The scientist is, in the end, right in this assertion, but he must be prepared to act on less exact knowledge before the more exact can be attained. He must be prepared to act, in some things, on the most obscure intuitions of the essayist and poet. But he must not be satisfied with them. Possibly many conclusions of social science have been apprehended intuitively at an early stage, but how should we have distinguished then, between these intuitions and the discordant but equally plausible intuitions of other writers?

"Poets," concluded Shelley in his *Defence of Poetry*, "are the unacknowledged legislators of the world," and that is a happy truth. But even the finest literature and the greatest drama can offer but a tentative solution to life's problems. Yet the lofty intelligence and the selfless purpose of the finest essayists and dramatists must make their intuitive solutions something to which the scientist can turn with respect in his own slower, but more fundamental attempts at construction.

IV. History: An Uncertain Light from the Past

It is frequently asserted that the study of history can serve as a guide to social evolution, and this suggestion is, on the face of it, a very reasonable one. Every individual has gained guidance for his actions by reference to his own past experience, why should not nations do the same? Mainly because though a man is sufficiently the same being, and his life situations are sufficiently similar in their recurrence, to justify reasoning from earlier experiences, the life-history of whole peoples provides only very approximately similar recurrences. History never repeats itself. Peoples change in their inborn character; customs change; the very scale of civilisation changes. Entirely new economic problems and conditions evolve. Invention calls forth unprecedented conditions.

So long as the study of history remains a broad narrative description, it can only give the roughest guidance, and that merely by the reasoning of analogy. For this reason, its guidance is rough and approximate in proportion to the extent to which fundamental conditions have changed. There can be no separate

science and methodology of history and the popular success of many predictions using historical argument, as e.g. Spengler's *Decline of the West*, only evidences the fundamental wrongness of the general attitude to reality produced by present education. From these considerations it is clear that history as narrative, as a qualitative representative of the past, can never be of use in constructive social design and guidance.

If now history ceases to be a study of broad outlines on a qualitative level, it becomes a retrospective, post-mortem sociology and as such, a science. But historians in the mass have not yet dreamt of treating it in this way.

True, the germs of this attitude are to be found in Buckle, but in his day there was no psychology or sociology to suggest the thoroughgoing re-interpretation of history which is now becoming possible.

In such a view, one would see historical happenings as scientifically determined, by measured psychological traits of racial character, by assessable economic factors, by particular quantitative relations of natural and acquired ability among social classes, by measurable physiological effects of climate, etc. The whole thing becomes a psycho-economic calculation. Such a reinterpretation of history would be an enormous undertaking, for which, indeed, psychology and economics are not yet sufficiently finished tools. But historians, who, by natural professional selection, are of retrovert temperament, are still unawake (with the possible exception of such writers as Karl Lamprecht, Dilthey, J. M. Robinson,[1] Dr. H. E. Barnes, Frederick Turner and Charles Beard) to the contribution that these sciences can already make to a better understanding of their problems. I have seen, for example, no professional historical study which has yet invoked the Nordic-Mediterranean racial differences to explain the phenomenon of the Reformation, especially in assigning the precise reason for the boundaries it assumed. Even the most obviously applicable ideas of psychology remain unapplied. The introduction of new methods has been left to psychologists and sociologists, like McDougall, Le Bon, Woods and others. The latter remarks (*Mental and Moral Heredity in Royalty*, p. 12, 1906, Holt): "History is really but a branch of biology. Some of the most difficult problems in evolution . . . are to-day, just beginning to be dealt with by mathematical methods and the results already warrant the hope that we may by carefully collecting facts, and not by mere theorising and essay writing, arrive at conclusions which all must agree

[1] Whose book *Mind in the Making*, is a valuable contribution to the new outlook on history.

upon." Even the relatively simple task of obtaining a psycho-analytic understanding of those outstanding personalities on whom vast historical movements have hinged, has been relatively neglected. Professor Barnes remarks, "Nothing has been more consequential for subsequent intellectual and social history of mankind than Augustine's notorious 'impurity complex,' which he fastened upon European thought so successfully, and so deeply that we have not yet recovered from it. Even our (American) archaic anti-birth-control legislation directly reflects its influence. It is now well understood that this was wholly a psychic compensation for Augustine's own wild youth and his varied and extensive sexual experiences"; or again, "The psycho-analyst would have little difficulty in grasping the significance of Abelard's abnormal tendency towards doubting, his revolt against the authority of the Church Fathers, his inability to meet the adult sexual situation in matrimony and his rationalization in a delusion of persecution."[1] Kretschmer's[2] psychological analyses of the characters of Bismarck, Robespierre and Rousseau, and Freud's psycho-analysis of Michel Angelo, are also valuable contributors to historical science.

This is perhaps the most attractive side of psychological application to history, because it involves research almost as easy as that of traditional history, consequently it will be the first to be exploited. Truly the difficulties in the post-mortem examination of the social psychology of past civilisations are very great. Professor Barnes rightly insists in this respect: "Writers have attempted to psycho-analyse figures from ancient history, but as far as the reviewer knows, no one has yet been rash enough to estimate the I.Q., mental age or endocrine balance of Julius Caesar or Theodosius, and it is scarcely a demonstrable fact that Goliath was a victim of hyperpituitarism. Hence it would seem that if we desire reliable biographies, we must require all eminent men to submit to mental testing, psycho-analysis and neurological examination. . . . Historical biography must continue to be either irrelevant or unreliable or both, to a disconcerting degree."[3] He concludes (p. 193): "Whatever value one may assign to the psychological interpretation of history, it must be admitted that

[1] H. E. Barnes, *Psychology and History*. New York, 1925, p. 155.

[2] *The Psychology of Men of Genius*. London, 1931.

[3] H. E. Barnes, op. cit., who continues (p. 152): "It is further common knowledge that the great individualists of the last century, Jefferson, Spencer and Mill, passed their childhood under an abnormally complete and severe domination and control by their male parents or some older male relative. . . . It is not unlikely that we shall one day learn that the obsessed attachment of Cecil Rhodes and Rudyard Kipling for the British Empire symbolised by Britannia, was motivated by an exceedingly vigorous mother transference."

it is yet but in its initial stages, and it would be rash to hope that it will gain in strength and volume with phenomenal rapidity in the near future."

History as it is traditionally studied and taught can give no reliable guidance on social problems, though it may point with the utmost vagueness to a probability.

As it may become understood in the future, it will offer true guidance, for it will be a science founded in truthful causality. But is there any reason to believe it will then be of any more value to the politician and social-scientist than the study of fossils and extinct forms of life has been to the biologist and physiologist?

Biology and physiology are themselves sufficient bases for the science of medicine, and they have given far more to the understanding of evolutionary life than the latter has given to them. Similarly psychology and economics give all the direct guidance necessary in social affairs, and contribute to the understanding of history far more than it can give back to them. They provide a direct illumination which can be used without first being reflected from the dusty mirrors of history.

V. The Limitations of Political Leadership and Verbal Argument

Although political activities are apparently the leading forces, par excellence, in social affairs, a moment's reflection will show that they are not really so. In politics we have in the main a machinery for deciding between certain courses of action. These courses of action have almost invariably been in the air long before they became a question of practical politics and have originated at the hands of essayists—intuitive thinkers—and from the press and social philosophers.

But the decision and the method of decision practiced by the politician are so important for social evolution that we shall enquire independently into their validity.

Moreover, quite apart from his decisions on alternatives proposed by others, the politician is in a minor degree a true originator. What are the qualities which his leadership is likely to have?

Cox, in his study of outstanding men,[1] found that as regards the Intelligence Quotient, scientists, statesmen and religious leaders

[1] Op. cit., Vol. II. The thoroughness with which the data were collected for these estimates, makes the study of considerable historical value.

were approximately of equal standing. They were higher than artists and soldiers, but lower than philosophers and essayists. Revolutionary radical statesmen, however, formed a group with distinctly higher intelligence than statesmen in general.

The present methods of selection of politicians, therefore, are entirely satisfactory as far as native intelligence is concerned; but they are far from selecting the most desirable acquired educational habits and native temperament types.

We have already had occasion to stress the importance of occupational selection. Wherever any single group designs satisfactions for the community as a whole, it will be found that the satisfactions are such as to be entirely correct for the special group, but incorrect for the community to the extent that the special group differs from it in psychological characteristics. And this is but one example of the principle that each type tends even in its most unconscious and undirected actions to further and promote the dominance and welfare of its own type. An extravert will so order society that extraverts will most easily find their way about and succeed in it. It will, moreover, become an environment in which extraverts will have a greater survival rate, so that the inherited type is changed in the same direction. This principle, deduced from simple psychological observations, needs fuller sociological and psychological investigation, for it must undoubtedly modify some of our present tolerances.[1] Now, the whole parliamentary system favours the unabashed, extreme extravert; the man who can speak glibly, mix easily, remain insensitive to subtler urges

[1] An interesting example that occurs to my mind is that of the tailoring profession Surely in no field has there been such conservatism as in this. Our clothes are ugly, unhygienic and excessive, yet only in the last few years has any movement arisen for reform, and then it has appeared outside the tailoring trade. This psychological situation is largely the result of the herd instinct, petrifying habits to which man gives insufficient thought and attention, but it is also, in no small measure, a result of the peculiar selection of types to carry on this profession What youth of intelligence and ambition deliberately chooses such a calling? It is as dignified and worthy as any other in adult eyes, yet it is left for those who show no aptitude for other professions and those youths whose extravert dandyism causes them to be interested in external show. Consequently, even apart from herd suggestion, tailoring is in the hands of those least likely to be enterprising, to be interested in science and hygiene or any wider human issue. "Can anything be imagined more ugly than a pair of trousers?" asks Dr. Jordan, secretary of Mens Dress Reform Party. "Men have always been adverse to startling innovations in dress," replies Mr. Montague Burton, the well-known tailor, "only the younger men are fond of extremes and even they are finding out that the unusual in cut and cloth is but a short lived fancy."

"Every tailor as well as the younger members of the public will support gradual and authorised changes in cut, style, design and shades, but . . ." and those who are used to looking at everything from the narrow standpoint of superficial living hasten to put dress fashions back where they were and ensure an undisturbed reign of habit.

and express emotion with natural ease. Such a man must have also the defects of the extravert temperament; lack of sustained rumination, a love of expediency rather than of principles and a liability to emotional change of attitude. The politician stands at the extravert extreme of temperament just as the philosopher stands at the introvert extreme. That is why there have been thousands of great politicians and an equal number of great philosophers interested mainly in the same set of facts.

The number of men who have any claim at all to be considered both as philosophers and politicians could be counted on the fingers of one hand. Both extreme types are ill-fitted for a sane guidance of society by reason of their biological abnormality.

The psychologist is inclined to regard extreme introversion as the greater abnormality (compatible with residence outside an asylum) and for that reason the philosopher, in spite of his greater intelligence, is less fitted to lead society than the politician.

Considering next the acquired characters of the political type, we find that the majority of politicians have received a predominantly classical and literary education which fits them for the oratorical necessities of our present system, but makes them the most impossible controllers in the science of government.

One might imagine, for example, that the politician would be trained at least in social psychology and economics. Yet as Graham Wallas has said: "The study of human nature by psychologists has . . . advanced enormously since the discovery of human evolution; but it has advanced without affecting or being affected by the study of politics." Elsewhere he shows a far-sighted recognition of the need of a new manner of educating the politician, namely, in psychology and sociology, which has been emphasized here again and again. He proceeds: "The next step in the course of political training which I am advocating would be the quantitative study of the inherited variations of individual men when compared with the 'normal' or 'average' man, who has so far served for the study of the type."

Even men taught to think in biological terms might go astray in the situation into which we force the politician. The most earnest politician is forced to realise at last, as Graham Wallas has discovered, that "Proposals are only to be brought into the sphere of practical politics which are simple, striking and carefully adapted to the half-conscious memories, likes and dislikes of busy men." He is constrained to play up to an electorate even less educated than himself! How can he hope to take a long scientific view on such questions as natural mineral resources, education, eugenics, agricultural needs, economic systems, and

scientific organisation? Leonard Darwin well reminds us "politicians inevitably are driven to pay great attention to vote catching; and as posterity has now no votes, the interests of future generations are certain to be more or less neglected by all democratic legislation."[1]

In short, unfit as the politician is by reason of his native temperament and education to govern, he is compelled to use methods—the oratorical and discussion method—which unfit "political science" still more for any wise control of society.

So much for the nature of the politician himself and the situation in which he is placed. What of the methods of verbal debate and persuasion which he is traditionally expected to adopt? In the following section on philosophy, we shall see a more thorough demonstration of the fallacy of verbal thinking; here, it is only necessary to refer to the more obvious errors. Almost all the problems which politicians have to handle are really not questions of "this" or "that," but of "this much" or "that much." Graham Wallas[2] remarks apropos of a relative question recently debated: "Instead of one man reiterating that the great Parliament Hall of the Empire ought to represent the dignity of its task, and another man answering that a debating assembly that cannot debate is of no use, both should be forced to ask 'How much dignity?' and 'How much debating convenience?' "

Language is not adapted to purposes of measurement. Neither is it adapted to precise communication, largely because of the woolliness of more abstract terms—e.g. National self-realisation, Freedom, Justice, etc. Again, owing to the chance associations and connotations of words, the possibilities of deliberate misrepresentation of facts and theories are immense. We may like to imagine that educated people are rarely susceptible to this last deception, but education as we know it predisposes to such infirmity and as Rivers[3] insists: "It is exceptional to find people who are not liable to be misled by verbal resemblances."

Quite apart from the nature of the words themselves, there are gross possibilities of error in the oratorical practices and the method of discussion. These reside mainly in emotional suggestion, prestige suggesiont of the speaker, the use of fallacious, but habitual thought mechanisms,[4] and the intellectual snobbishness

[1] *Eugenic Reform*, p. 37. [2] *Human Nature and Politics*, p. 145.
[3] *Psychology and Politics*, p. 71.
[4] E.g., Reasoning by analogy, loyalty to persons and symbols as such, Graham Wallas, that rare combination of a practical politician and a philosopher, remarks "Most of the political opinions of most men are the result, not of reasoning tested by experience, but of unconscious or half conscious inference fixed by habit." Op cit., p. 103.

which causes people to worship an idea and employ the corresponding phrase without in the least understanding it. These errors may be encountered in profusion in all forms of group verbal conference from the fashionable "tea-table intellectualism" of Oxford picnic parties to the most serious parliamentary debate. Too much discussion of profound matters by minds not trained to cope with them by scientific methods, may, and generally does, lead to perplexity and cynicism. Our English education which trains a man to be unintellectual, sportsmanlike and morally innocuous has at least enabled us to avoid relatively the "logic-born" sickness of ideals of some other countries. The belief that the most complex psychological and material problems are susceptible of complete solution by purely verbal argument has, however, even in such an "illogical" people as the English, led to the undermining of many ideals and values, which more complete scientific enquiry would have demonstrated to be sound and desirable.

Much public discussion is vitiated, too, by conventions tabooing clear speaking in many fields. There are repressions in society as a whole which, like repressions in individuals, prevent clear thinking. Rivers refers to "definite defence mechanisms of which a good example is the well-established convention of polite society according to which it is bad form to make unpleasant social matters the subject of conversation."[1] Political abstractions—or rather the words supposed to correspond to abstractions—are no proper substitute for the infinite complexity of the real world. Neither is a debating society with its unconscious goals of antagonism, self-display and vocal exercise the right atmosphere in which to attain the goal of truth. Politics can only become a science when the participants forget about the debating society tradition and say, in response to the advice of Sir Percy Nunn to the rhetorical-minded, "Let us sit down and calculate." A deeper analysis of the pitfalls of verbal problem-solving must await the later discussion on philosophy, where we shall see that the method that the politician uses to deceive others has itself deceived the philosopher. Meanwhile, it is clear that the method of guiding social affairs which we at present permit, is only the most haphazard approximation to the best that society could devise.

[1] *Psychology and Politics.*

VI. Creeping Paralysis in Endowed Institutions of Learning

The forces which at present seek to lead society have largely come into existence without society's official and deliberate action. Philosophers, the press, literary essayists, and mechanical inventors are such unappointed but powerful leaders of social change. But society has its deliberately and systematically appointed intelligences in political organisation and such institutions as universities, schools and churches.

Now the psychology of established institutions is an interesting one, since, for no apparent reason, they all suffer in time from a disease with symptoms similar to old age in man. They become stiff, conservative, resistant to change, and sterile. They are also liable to a host of defects in organisation and choice of personnel which Francis Bacon has adequately dealt with in the *Advancement of Learning*. Some of these, after more than three centuries, have been eliminated, but others remain just as Bacon described them. To his analysis we have added the general tendency of endowed centres to become conservative and impotent. One of the happiest suggestions Shaw has ever made was to the effect that all institutions should be periodically disendowed. If they were still supplying a real need of the community, they would become re-endowed quickly enough. If, on the other hand, the need for their particular form had passed, the money they had held, the locked up resources of community energy they possessed, would be liberated for new creations. How far is this a really wise suggestion ?

Let us examine these institutions more closely. The psychology of their all-too-frequent senility is, I say, obscure, for there is no reason why many endowments should not go on modifying themselves in sympathy with the new demands. Our churches might be transformed into libraries, centres of musical culture, psychotherapeutic clinics and research institutions in human characterology. Our universities instead of becoming unduly weighted with ancient learning and centres of all reactionary systems in the intellectual life of the nation, might theoretically continue always at the head of intellectual enlightenment, lopping off old branches and continually putting forward new shoots in accordance with the cultural needs of the time.

But these things do not happen, indeed, in some endowed institutions of learning—the old grammar schools—conditions became such a scandal that even a conservative government had twice to step in and enforce wholesale reforms. The same has twice been necessary with Oxford, which not only ceased to fulfil the University function of leading thought, but even failed to

perform satisfactorily the functions of teaching and examining. Yet a recent writer cheerfully asserts "that the continuous appraisal of the governmental institutions of Oxford, regarded impartially and as a whole, by those actually engaged in running them or privately concerned with their success, was much preferable to the spasmodic investigation by Royal Commissions, by which method large reforms in the government of Oxford have been initiated hitherto,"[1] and later adds that the vice-chancellor "is responsible to no electorate and reaches his position by a process which, for the University as a whole, is much akin to lottery." Is it difficult to see why such institutions are predestined to old age while independent intellectuals on the one hand, and the technical side of commercial institution on the other continually move with the times? One can safely seek the causes in (1) lack of any objective means of judging results among Universities, where the competitive spirit, working in a void, is incapable of producing any advance. (2) The type of man who gets into academic work. The selective process has favoured those capable of passing examinations, not those possessing initiative. Moreover there arises in University communities, whose members are closely engaged in watching each other's intellectual conduct, a standard of negative virtue and conformity which the average man would find hard to attain. We have here typically the unfortunate community, so difficult to avoid in official, salaried institutions, in which the individual has everything to lose and nothing to gain by initiative. William James in the freshness of his own academic mind was moved to resent these musty individuals, to disparage them as, "the clerico-academic-scientific type, the officially and conventionally 'correct' type, for which to ignore others is a besetting sin." This ignoring of others and of external facts is one great cause of the silting up of these institutions. The greatest geniuses of art and literature would not have been able to hold their places in a university for more than a term—without losing their lively genius. Even in our own time, universities have turned their backs on brilliant men for such mild degrees of unusualness as implication in divorce, advanced, left-wing opinions in religion and social life, conscientious objection during the war, and for matters of private life with which the university should have no concern. The inevitable result is that these institutions fall into the hands of, and become increasingly organised by, tame spirits selected for their lack of originality or independence of mind. Scientists practising new sciences are frowned upon to such an extent for their eccentricity that their very work is made more

[1] *The Government of Oxford.* (H. Milford, Oxford University Press.)

difficult. McDougall who held a lesser post in psychology reluctantly instituted at Oxford could only remark in his autobiography: "It was, I think, T. H. Huxley who said that if he had to devise a punishment for a very wicked scientist, he would condemn him to be a professor of science at Oxford. . . . Psychology had no place in the curriculum and examinations. For some years I was not even a member of the University."[1] Dr. C. S. Myers in his appreciation of the work of Dr. W. H. R. Rivers ("The Influence of the Late W. H. R. Rivers," *Psychology and Politics*, 1923, p. 154), cited the peculiarly parallel case of Cambridge: "In 1897 he was officially recognised by the University, being elected to the newly established lectureship in 'Physiological and Experimental Psychology.' But the welcome and encouragement he received from cognate branches of study at Cambridge could hardly be called embarrassing. Even to-day, practical work is not deemed essential for Cambridge Honours candidates in elementary psychology; psychology is not admitted among the subjects of the Natural Science Tripos; and no provision is made for teaching the subject at Cambridge to medical students." The figures in the next chapter (p. 355), representing the number of professors and lecturers maintained in various branches of learning and research, best evidence the extent to which these older universities have failed to re-orientate themselves with the passage of time.[2] At the other extreme of university type, we find that the American universities, though avoiding the grosser features of fossilisation, do not appear to have escaped from the essential diseases of such institutions, to judge by the following witness from inside. "There are in the university too many charming friends who must not be offended; too many temporal negotiations that call for discreet management; too many lectures to be delivered; too many promotions requiring emphasis on the amenities of life rather than on its thinking processes; too many alumni eager to apply in 1928 what they learned in 1888; too much routine, not enough peace; too much calm, not enough passion; above all, too many sacred traditions that must be conserved; too many theories, not enough theory; too many books, not enough strife

[1] *History of Psychology in Autobiography*, p. 207; Clark University Press.

[2] In any full appraisal of this particular example of institutional conservatism, one must give credit to Oxford and Cambridge for much fine provision in physiology, biochemistry and physics. The list of grants of various public institutions, e.g., the D.S.I.R., Beit Memorial, Royal Society, Chemical Society, M.R.C., etc., shows a high proportion of grants to Oxford and Cambridge, so that one can safely deduce that work in these subjects is being effectively prosecuted there. Nevertheless, it is to the redistribution of actual university funds in response to changing needs that one looks for an index of intelligent social leadership in these institutions.

of experience; too many students, not enough seekers. Yet with all its handicaps to thought, the university must supply the training for most of our political thinkers, and with all its limitations it furnishes the most favourable climate for creative work in America."[1] As another clear source of backwardness, we must face the fact that universities and other institutions are more concerned with the maintaining of certain "traditions" than with the maintenance of the one tradition of leading the community in the search of truth. This is possible because the choosing of new teachers is in the hands of a body of men, which on an average is older and more confirmed in the conservatism bred of security, than is any other body (with the exception of medical and religious bodies).

In spite of these defects, the universities remain the chief providers of sane guidance in social evolution. Further psychological investigation may one day lead to the perfection of a system of organisation whereby the grosser features of inefficiency and stagnation attending endowed institutional life may be largely avoided.

At present, the fate of our intellectual and social life depends upon the rare independence of a few progressive old men, among the many ordinary old men from the generation before last, who constitute the university councils and control university policies. And within the teaching and research ranks of the university it depends on the existence of men so devoted to their work that external incitement would be unnecessary and impudent; and men so far-sighted as to see that the furthering of research is more important than the show of teaching, the maintenance of pretentious discussion and the "duties" of social life.

Whether these objects are fully attained or not, the organised centre of learning—whether it be a research institute or a university, because of its resources of knowledge, its opportunities for purposeful discussion and calculation by the acutest minds, and its possession of individuals devoted to understanding for its own sake—is bound to remain the soil which produces the finest and most abundant crop of new social ideas and ideals.

Meanwhile, if those associated with endowed institutions of all kinds bearing intellectual fruit could be brought to a greater realisation of the peculiar infirmities to which they are liable and the great responsibilities for social welfare which they hold endangered, we might even now avoid much postponement of social improvement.

[1] *Political Science.* Infra.

VII. The Great Illusion of Philosophy

Yet, when all these forces have been surveyed, there will remain many thoughtful individuals who will remark that they have never looked for ultimate guidance to any one of them. These have always regarded the press as an empty clashing of cymbals, politics as a futile game of expediency, didactic literature as a form of idle guesswork, history as nothing but a plain record of the past, and the academic world as a sterile wilderness of gowned and hooded hermits. Some of these more sophisticated ones have, nevertheless, found a serious world of patient thinking, apparently free from worldly errors, in the writings of the philosophers. With Plato they believe that the state should be managed by philosophers. The prestige of "philosophy" in the intellectual world is apparently immense and it is only natural that the vast body of thoughtful men entering this atmosphere should look to philosophy, as the ancient fount of intellectual activities, for solutions to their most difficult problems.

Unfortunately for the clarity of this discussion, philosophy is a term which has been and still is applied to the strangest collection of studies, differing widely in subject matter, methods and personnel.

It has included much science. It might even be said that philosophy is the matrix from which the sciences have one by one separated themselves. But it has also been applied solely to metaphysics and ethics, to epistemology and religion, and to the flimsiest discussions in sociology, education, and even art and literature.

But the sciences have distinguished themselves more and more from philosophy by their strictly empirical outlook, by their constant appeal to the facts, by their willingness to restrict themselves to whatever can be precisely defined and measured, and by the use of scientific method. Ethics is still treated in philosophy, but as we have seen, has no right to be there, falling properly within sociology. Indeed, the term philosophy ought, in the interests of clarity of thought to be restricted to metaphysics, i.e. ontology, epistemology, and logic.

It is all the more unfortunate then that professional philosophers do not restrict their speculations to these spheres, but invite the popular usage of the word by writing on any subject—physical science, ethics, sociology, religion, psychology, art—which attracts their interest. Bergson in this way makes essentially amateurish

excursions into psychology and biology, Croce into art, Hegel into sociology.[1]

For every Russell and Whitehead, persevering in the legitimate spheres of their study with one philosophical method, and with scientific methods in others, there are thousands like Collingwood prepared to apply the dialectic method of philosophy anywhere and everywhere. In the *Journal of Philosophic Studies* itself[2] I find this view clearly repeated by Dr. Wrinch, who writes: "The domain of philosophy is so vast and broad that little of value can be said about it as a whole. In the past it has suffered too much from the tendency of philosophers to treat, on broad and comprehensive lines, topics and problems which would appear to need careful analysis into a host of subsidiary problems."

Immense harm is thereby wrought within the sciences, and to the whole healthy body of real knowledge, which attempts to ally itself to action and human applications. The greatest harm results from the undoubted fact that men of affairs, perceiving that a small and precious body of knowledge, e.g. sociology, education, and psychology, is lost in an immense overgrowth of philosophical speculation, cannot afford the labour of disinterring it, and so turn back once more to the coarser methods of trial and error, or the conservative rule of thumb.

What then, are the precise objections which stand in the way of the extension of philosophy to a broader realm, and why do we want to bring the reign of the "Queen of the Sciences" to an end?

[1] I have endeavoured to get some idea of what the term philosophy really means for us to-day, by analysing the contents of the *Journal of Philosophical Studies* over rather more than four years. (From its commencement up to April 1930 inclusive.)

The 131 articles published in that period are devoted to the following subjects in the frequency indicated. I have grouped the articles together according to the classification suggested in a later section of this chapter.

39	Metaphysics	18	46	Psychology	12
	Epistemology	19		Anthropology	3
	Logic	2		Sociology	12
				Ethics	13
				Biology	6
11	Integrative Science (Interpretations in Science)	2	23	Purpose of Philosophy	5
	Relation of Sciences to themselves and to philosophy	9		Historical Aspects of Philosophy	13
				Systematising and Word Defining	2
9	Religion	9	3	Art	3

Of the 131 articles, 39 are strictly philosophy, i.e. metaphysics; 46 belong to sciences which ought to be separately recognised; 23 are—vanity of vanities—concerned with philosophising about what philosophy is; 11 articles are devoted to wider speculations in science and perform a desirable function as "Integrative Science"—which certainly needs a place as a subject to itself.

[2] D. Wrinch, D.Sc., *The Relations of Science and Philosophy*, II, 6, 1927, p. 153.

In a few words: because philosophy itself has made no progress and is succeeding by its pretensions in obstructing the progress of real enquiries into the universe. "The advance of science," says Dean Matthews,[1] "seems like the assured march of an army of many battalions, never turning back, each element supporting and supplementing the efforts of all the others. Philosophers, on the other hand, appear to be a collection of warring partisans proceeding in different directions. They are discussing the same questions as those which occupied them when philosophy first began."

Philosophy, like art,[2] and polite fashions, has tended through the centuries to move in circles, and for reasons which will become evident as we proceed.

VIII. Analytic, Philosophical Methods Essentially Sterile

Firstly, philosophy is founded in futile methods, notably in methods which do not trouble themselves with measurement. It is possible, for example, for a philosopher to lecture on the subject "Heredity and Environment" and for his audience to go away feeling that the subject has been brought "no forrarder." He will blame the non-intellectuality of his audience, but in truth they are in the right. He has probably "defined" heredity, environment, etc., at great length and on an *a priori* basis, and discussed the abstract principles involved. The listeners rightly feel disappointed, for he has done nothing but make explicit and wordy, the ideas which were already actively present in their own minds. This elaboration in explicit language of concepts of ideas already universally employed in reasoning is of no use to anyone when greater control of environment is aimed at. The persons "instructed" in this way feel no nearer the possibility of wise action, just as an engineer about to build a bridge is not aided by an abstract discussion of distances and strains, but wants to know in what actual dimensions force, elasticity, etc., can be expressed and exactly what distances, what coefficients of expression, and what weights are to be considered in his calculation. The scientist, of course, has his abstractions, but he is not content to stop with them, and they are shaped on exact empirical investigations, not elaborated from general experience.[3]

[1] *Philosophy in Mind*, p. 153. Longmans, 1927.

[2] Vide artists themselves on this fact, e.g. Rodin's utterances.

[3] Indeed, science is tending more and more to drop its vaguer concepts and deal only with equations expressing observed relationships, except for convenience of verbal discussion, e.g., the idea of "force."

This absence of the quantitative attitude in philosophy effectively prevents it coming to grips with all the problems that concern man, but there is a still more deadly fallacy in philosophical method—the complete surrender to the verbal method of thinking.

Abstraction is an eduction of relations. We know from psychological investigations that no verbal labelling can enable any intellect to utilise a relationship which it cannot grasp (when indicated) independently of verbal aids. Neither does the absence of verbal labelling make the relation less clear. Correlate education alone results in new mental content,[1] and that, too, can proceed without any verbal assistance. Moreover most abstract thinking is in some way false thinking, for abstraction rarely proceeds without doing damage to particulars, and the only reality resides in particulars (save for medieval realists).

The mind works with abstractions to save energy and time, but the most economical thinking is not necessarily the best.

Philosophers have always regarded the dialectic method as their particular distinction. At times the whole of philosophy has hinged on verbal distinctions, on the precise definition of words, without philosophers apparently being aware of the emptiness of their occupation. The Greeks and the Scholastics alike exercised themselves vastly on problems that existed only in words and sought truth entirely by wordy debate, ignoring the obvious fact that it is impossible to get more out of verbal symbols than humanity has put into them.

Apart from the notoriously jejune minor discussions related of the scholastics, the larger problems, as, e.g. Nominalism and Realism, which hinge on the meaning one gives to the symbol "exist," had in essence the same basis.

To-day, the philosopher is rather more awake to the artificiality of his enquiries, he begins to realise that he has been exploring in his own park, not in an untrodden jungle, but the whole fallacious outlook of the verbal thinker remains. To seek examples, to show the ludicrous verbal pomposity and innocent self-deception in the works of the Greek philosophers,[2] the medieval schoolmen, and in the philosophies of Leibnitz, Schelling, Nietzsche and Hegel, would be a tremendous undertaking, and one full of dangers. For to treat these questions in the way they deserve would require an immense amount of study of these dry, forgotten and useless pages, in which the student would become lost from the world from which he started. There is a story of a biologist who went

[1] See Spearman, *Creative Mind*, or in more complete form, *The Abilities of Man*.

[2] See examples in Westermarck's *Scientific Method*.

into the jungle to study apes and was lost. Fifteen years later, when he was found by passing explorers, he had no clothes, and swinging about in the trees, jabbered like an ape. The fate of those who set out to study the errors of philosophers is all too frequently a parallel one, for in all philosophical systems there is an element of truth which forbids complete rejection, so that the reasonable scientist, forgetting that he is attacking a method and a manner of representing ideas rather than the ideas themselves, begins to temporise and to enter into negotiations with the philosopher in his own language. Once he does so he is lost.

"They who have learned least of all that has hitherto been distinguished by the name of philosophy," said Descartes, "are the most fitted for the apprehension of truth." But Descartes proceeded forthwith to build a philosophic system which, though free from the downright futility of earlier philosophy, remained beset by the errors of the philosophic method.

Yet the task of analysing the past errors of philosophy is a necessary one in demonstrating that the present teachings of philosophy, which may themselves be beyond the scientist's intellectual grasp, and so secure from direct refutation, are false. I do not doubt that such a study will one day be made and form a chapter in the psychology of the philosopher.

It was Auguste Comte who remarked : "It is, indeed, very noticeable how the most insoluble questions—such as the inner nature of objects, or the origin and purpose of all phenomena—are precisely those which the human mind proposes to itself, in preference to all others, in its primitive state ; all really soluble problems being looked upon as hardly worthy of serious thought."

On the whole, the most striking feature of philosophy to the scientist looking back on it, is the fact that its problems have not so much been solved as deserted. They are problems which never really existed, which would never have been propounded in their precise form had the philosopher been less ignorant of his own ignorance. "How many angels can dance on the point of a pin ?" asks the medieval philosopher. "How can God be omnipotent if he unwillingly suffers evil to exist ?" asks another. "How can we square the circle ?" asks Hobbes. They are like the voices of people talking in sleep, dealing with unreal entities, and in terms of infantile mental life. But what precisely are these methods of thought and this verbalism which deceive the philosopher ? A recent writer,[1] who happened to be attacking the view of Sir Arthur Keith and wishing to refute the idea of evolution, brings in again and again as his proof such statements as that :

[1] G. H. Bonner in *The Nineteenth Century and After*, Nov., 1927.

"The fallacy . . . of evolution is to make the lower produce the higher, which is impossible." "The circle is the most perfect figure," proceeds Aristotle, "the Heavens admit only of perfect forms. Therefore, the motion of the heavenly bodies must be in a circle." We all know the "argument from design." God exists because "one cannot have a design without a designer." Why not?

IX. The Ancient Pitfall of Research by Words

The first error of philosophy, we have seen, is in starting with a "self-evident" proposition—in short with an *a priori* approach. The second is the dependence upon rules of logic which are felt to be absolute.

For the scientist—strictly the biologist—the laws of logic are particular verbal reaction patterns in the species "homo sapiens," which have been acquired through trial and error interaction with a restricted environment. There is no more guarantee that these habits will suit the larger environment becoming known to science than that our evolved equipment of kineaesthetic organs will fit us all to become good aeronauts. The philosopher will doubtless reply that the laws of logic have been so reduced to fundamentals that it is improbable that these will ever be disproved by our experience (e.g. that the same thing cannot both exist and not exist). Possibly not, but laws of this degree of fundamentality are so obvious that in practical thinking they are scarcely ever explicitly employed; the logical arguments which philosophers do use are much more complicated, as e.g.: "Two simultaneous omnipotences cannot exist," "Space cannot be both finite and infinite" (from philosophers of pre-Einstein days), "I am conscious, therefore I exist," "What we call bodies—material or extended things—are proved by their infinite divisibility not to be real; for you can never come to any real component of them," "The only activity which can be attributed to a perfect being, in need of nothing beyond itself, is that of knowledge, therefore, God is an unmoved contemplator of the universe." And so on through the endless presumptions that constitute philosophic argument. Fortunately the end of this aspect of philosophical error is at hand. Modern science, particularly through the discoveries associated with the special theory of relativity and with the new notion of discontinuity appearing in physics, is showing the complete superficiality of philosophic method. In metaphysics there is bound to come about, under the guidance of science, a totally new outlook which will lead to stricter reasoning, more attention to the properties of matter and

a more sophisticated attitude to the natural tendencies of the mind revealed by psychology.

Thirdly, the innocent use of words—by that I mean any argument in which words are the sole means of communicating and representing reality—is beset with innumerable errors arising from the nature of verbal symbolism. A word such as "evil," "higher," "liberty," "material," etc., is used in any logical argument as if it were a fixed symbol for an integral element or relation in the external world. In truth, neither is the object proved to exist, nor is the reference constant. In any philosophical work one cares to pick up, the terms slip and slide, expand and contract without end. Referring to this phase of reasoning, so prominent in the middle ages, Clemenceau adds: "It was a vagary of thought. Thought, unaware how easily words slip from one meaning to another, wandered from the right path."[1]

And if words are defined, they are defined (i.e. invented), in an arbitrary way, as the early psychologists defined intelligence or the early zoologists the unicorn and the leviathan. The comic manœuvres of religious philosophers with the word "God" is a case in point.[2] So, too, is Herbart's definition of æsthetic as "all that has to do with approval and disapproval" (including ethics). (Yet the excellence of morality among excellent artists has always been regarded as questionable!) Again, let us listen to the thoughts of a great practical Frenchman, Clemenceau (who has grappled wisely with reality but written little), on another admired Frenchman who has written much—Bergson: "Is nothing, then, created except words? Bergson does not say so. He declares that EVOLUTION CREATES *as our need requires, not only the forms of life but the IDEAS that enable the mind to understand both it and the terms that serve to express it.* These are high sounding phrases. They all come from inability to tell us what is meant by the word 'creation'!" The philosopher's methodological fallacy is as rampant to-day as ever it was. Again, whenever the philosopher is seized with some "logical" division, distinction or resemblance, which can be easily indicated by some impressive verbal formula, but which may have no existence outside his own mind, it is always "so much the worse for the facts."

[1] *In the Evening of My Thought*, p. 91.

[2] Is it right for the philosopher, for example, to disfigure an ancient coinage of words in the following manner? "The inclusion of God in every creature shows itself in the determination whereby a definite result is emergent. God is that non-temporal actuality which has to be taken account of in every creative phase (i.e. a principle deduced from observation of succession in material natural events)." This may be an analysis revealing an important new concept; but why make off with the homely idea of God to label this new concept? *Religion in the Making*, p. 94, A. N. Whitehead.

Moreover, it is doubtful if the finest and the subtlest thought can be expressed in words. Talking has developed as a social necessity, but it is not necessarily man's highest or best mental function, nor is it necessarily man's best tool for reasoning about the universe. Here psychology can tell us much. Much thinking is carried on with visual imagery,[1] and if, for example, I wish to show someone how to find his way home, or if one surgeon wishes to demonstrate some difficult point to another, it is better done by means of a sketch than by talking. True, abstract thinking is more frequently done by means of verbal images, though not invariably so,[2] but abstract thinking which deals only with the solid counters of words, is a process of piling one inaccuracy crazily upon another.

It seems certain that all the abstract and complex reasoning of philosophy will, in the future, have to be done in a new and precise symbolism which is a branch of mathematics, abandoning the fluid and battered coinage of words which has to be used by the market-place, the stage, the poet and the child. This will have a salutary and revolutionary effect throughout philosophy. It will abolish the irresponsible speculation of the amateur and require a stiffening and confinement of philosophic thought within metaphysics and perhaps logic, which will release science from an intolerable incubus.

However, it is possible that there will arise yet other methods of communicating and discussing ideas. Between the quickness and wholeness of a thought and the tedious expression of its partial aspects in words, there is too great a gap.[3] The thinker communicating an idea is like an artist striving to render sunset in the medium of a mosaic with large uncouth tesseræ and a limited range of colours. At present, most thinkers give too much attention to the technique of rendering in an unsuitable medium—in short, to literary style—forgetting that their real task is to understand and control the original itself.

Thought is almost certainly modified to a slight but significant degree by its expression in language, and those who have allowed

[1] See Pear., *The Significance of Visual Imagery.*

[2] *The Psychology of Language.* Pillsbury and Meader. Appleton. London, 1928, p. 164: "Much of the clearest thinking in concrete problems is imaginal. Images are frequently representative of abstract or general thinking."
See also Aveling, *The Consciousness of the Universal.*

[3] Pillsbury and Meader, op. cit., p. 160: "The thought is more simple than the layman would be led to judge by the number of words employed to express it. The spoken sentence is, after all, quite a cumbrous affair." And p. 263: ". . . the best modern investigations agree that there are ideas that come without language, ideas for which we have no words even, but they occur more when one is solving problems for themselves."

their hearts to become enamoured entirely of the facility of verbal expression—i.e. the excessively writing and lecturing philosophers—have to a large extent sold their birthright of real thought for a display of juggling with verbal habits. To tho unacquainted with the psychology of thought processes, who are doubtful of the alien quality of words to thought, one may mention the well-known experience of discovering that the same idea expressed in different languages, e.g. in German and French, takes on in spite of all attempts at clearer rendering slightly, but significantly, different connotations. Again every student has been struck at some time or other by finding in foreign languages, a word for which there is no equivalent in his own and which yet expresses an idea he has frequently enjoyed, but has been unable to use owing to the need of awkward circumlocutions in expressing it. Finally, language is still evolving: our present language can express but a fraction of the relationships possible in the external world, and it will probably always lag behind the world of ideas which our minds produce by interaction with the objective world. All along the line, the philosophical tradition puts a premium upon facility of verbal expression. There are two major reasons why this has had a pernicious effect on intellectual progress: (1) because it forces thought into an alien, conventional and relatively trivial mould; (2) because according to the principle of constant mental energy,[1] the deflection of interest into the technique of cumbersome expression must result in an impoverishment of the true thought processes themselves.

X. *Philosophy Further Vitiated by the Unusual Mentality of the Philosopher*

A fourth source of error in philosophy is its neglect of detail. In the broad prospects beloved of the philosopher, the neglect of detailed facts, of ill-fitting particulars and exceptions to the rule, is not a process of approximation to the truth such as is practised by the mathematician in applying a best fitting curve, but frequently is an overlooking of minor but proven facts which later assume significant proportions.

In any case, the philosopher is not interested in searching for fresh facts, but believes that all can be done by reasoning. This has led him to make sweeping generalisations in and about sciences in which the first patient collection of facts has only just begun. Thus Kant asserted that there could be no science of chemistry

[1] See Spearman's evidence in *The Principles of Cognition*.

because the subject matter would never admit of measurement; and there are many philosophers to-day making the same confident assertions in regard to psychology and sociology. The mistake of the intellectual world all along the line is to give too great honour to intelligence and reasoning whilst underestimating the intellectual value of ruminative perseverance, the acquisition of knowledge and sincerity of thinking. Psychological research has shown that intelligence or "g," ceases to grow at about the age of fifteen. The schoolboy of fifteen is quite as intelligent as the man of forty. All the greater "savoir faire," ability and soundness of judgment in the mature man of forty is due to his greater knowledge and experience. The same difference explains why scientists of moderate intelligence, but fine intellectual character and great knowledge, like Darwin, have gone a hundred times farther than the most brilliant philosophers in leading us to an understanding of the universe.[1] Those broad fields which are now left to philosophers must eventually come under the hands of men with the scientist's love of his material and a greater, not a lesser, power of handling accurately a vast amount of data. Then only, with the application of scientific method, will a science of the sciences attain an honourable place in the eyes of thinking men.

The fifth and last weakness in philosophic thought which can be regarded as serious is the philosopher himself. Doubtless the fallacies of philosophic method which we have been describing have been derived in part from the psychology of the philosopher, but they can be regarded as having an existence apart from the individuals who are philosophers.

There is no broad highway leading to the profession of a philosopher and those who arrive there must be possessed of distinct peculiarities of character pattern. It may well be that these qualities automatically unfit them for true research.

Plato, desiring government by philosophers, was quick to point out that he did not mean government by the people who actually were philosophers, but by others to be selected in a way which he described. His account of the circumstances which

[1] There is somewhere a poem by Nietzsche which runs (I quote from memory):

"A fool this honest Britisher was not;
But a philosopher?
As that you justly rate him?
Set Darwin up by Goethe's side?
But majesty you thus deride,
Genii majestatem!"

This will illustrate the philosophic attitude which stands as a bar to all true intellectual advance. The philosopher, having advertised the superior quality of philosophic thought which his peculiar subjectivity deceives him into imagining, comes to believe in the real objective existence of such superiority

prevent the right type of person falling into philosophy, has never been bettered. The able youth of strong personality and physique is not likely to become a philosopher—human nature being what it is, he will grasp at the more tangible honours and riches which his powers readily bring him. Misfortune is a good soil for producing the repressed and tortuous thought processes of a philosopher and that is a condition which seldom comes uninvited by some weakness or incompetence. Again, as Kretschmer has well demonstrated,[1] the specific native temperament make-up is all important in any individual's attempt to understand his environment. Now philosophers are almost entirely schizothyme in temperament, i.e. introverted, reserved, little interested in the external world and given to building up delusional paranoiac systems. The psychology of the philosopher has yet to be written. Herzberg's preliminary attempt,[2] criticised for its insufficiency, has probably gone as far as the facts yet gathered can justify. He sees the philosopher primarily as a highly repressed mentality with a strong emotional undercurrent.

Cox's study of the intelligence of genius[3] (from Terman's laboratory) shows that philosophers have on an average a higher intelligence than almost all other groups, e.g. than great scientists, politicians or soldiers.

Now intelligence is not the sole determinant of worldly success, nor of real service to the community in the realm of knowledge and leadership. Most enquiries have shown that, on an average, lunatics are by no means less intelligent than the normal population. They are prevented, however, from understanding and reacting effectively to their environment by emotional abnormalities and weaknesses of character structure.

Clearly, from the conclusions cited above, the vitiation of the philosopher's attempt at intellectual service or leadership arises from a mild degree of the same emotional disabilities, from a faulty emotional adjustment of the philosopher to reality which prevents him using the fine machinery of his brain to good purpose.

In the first place, the philosopher, like many another schizothyme, seeks in his study an escape from reality, not an approach to it. Consequently, as psycho-analytical practice shows, whatever method he adopts, since his life pattern is directed away from external reality, a true grasp of things will be subtly evaded. Secondly, he sees in it a relatively obscure corner in which he can safely hope to assert himself without rebuff and so build up his

[1] *The Psychology of Men of Genius*, London, 1931.
[2] *The Psychology of the Philosopher*, Kegan Paul.
[3] C. M. Cox, *Genetic Studies of Genius*, Vol. II.

own autistic world, thereby escaping from the necessity of attempting to alter, by greater expenditure of energy and personal suffering, the stubborn facts of real life. Here Tansley's summary psychological comments are worthy of quotation: "Philosophy is unquestionably the most difficult branch of human knowledge, but nevertheless, philosophising, however fallacious, which satisfies the philosopher, may well be easier and more exciting than attempts at scientific discovery constantly thwarted by the intractability of the material world. In reality, the world of abstract thought is much harder to conquer, but the feeling of conquest, a different thing, is easier to attain. That the conquest in the past was far from being wholly successful, is sufficiently shown by the notorious and fundamental disagreement between the leading thinkers and most strikingly evidenced by the recent suggestion of one of the most eminent and acute of contemporary philosophers, that a large part of existing philosophy is based on illusion and fallacy."[1]

The philosopher, like the scientist, professes to start with the facts of nature, but unlike the latter, he is not bound to square his account with nature at the end of his cogitations; the physician is required not only to have good arguments to support his theory, but also to cure patients by applying it; the engineer must not merely argue that the composition of his new alloy is based on sound principles, but he must put it to the test. This lack of an objective check is alone sufficient to account for the existence of extravagant absurdities in the realm of philosophy. The philosopher is primarily concerned to elaborate a system of his own, not to study nature; his whole emotional make-up unfits him for the latter strenuous, patient and open-minded task.

Again, an immense amount of philosophy springs from the same "pleasure principle" roots as religion and poetry. Here, frankly avowed as poetry we have the *Rubáiyát of Omar Khayyám* and the dreamy Fitzgerald. Philosophy is primarily not a virile attack on the secrets of the universe but a spiritual solace. Such works may be noble poetry and on that account superior to philosophy; for a great many philosophers, as Nietzsche, are essentially poets without the æsthetic skill and technique which would enable them to write good poetry.

Mystical religio-poetic ideas, wrapt in polysyllabic rationalisations, abound in philosophic writings. The mystical element in philosophic thought has been asserted by no less a person than Bradley. William James[2] remarked: "What reader of Hegel

[1] Tansley, *The New Psychology*, p. 82 (1st edition).
[2] *The Psychology of Religious Experience*, p. 389.

can doubt that the sense of a perfected Being, with all its otherness soaked up into itself, which dominates his whole philosophy, must have come from the prominence in his consciousness of mystical moods like this, in most persons kept subliminal?" One might add Hegel's notion of each manifestation being swallowed up in the next antithesis. How like the thought processes of a paranoiac is this! Here is the peculiar disease of the philosopher, of the man with hypertrophied cognitive functions. It is a mental disorder which relates itself to the animism of the primitive mind and the over systematisation of the schizoid lunatic, by the tendency to work entirely with abstractions which have taken on the reality and personalised form of concrete things and beings, and by the passion for linking up in a complete system an array of facts having no such true connection.

In expecting progress in things of the mind, we must remember that the most abstract entities only live in a number of actual mind-personalities and that progress is actually entirely at the mercy of these personalities. Perceptions once clear can be obscured by later trivial additions, can be distorted, can be lost—even when the verbal forms remain. For philosophers knowledge has not been an heirloom to be carefully consolidated and improved, but a perennial playground in which to exercise self-expression. By emphasizing through verbal self-deception, now this aspect, and now that, of some original truth, it is possible to set up an illusory appearance of progress. When the cycle is completed some little difficulty arises as the later school of philosophy perceives itself to be exactly in the same position as an earlier one, but by styling themselves "neo" something or other, they avoid a full realisation of their futility, and the merry-go-round is enabled to proceed with no abatement of their dignified enjoyment.

How true is Comte's description of the evolutionary course of human thought through, "the theological or fictitious state, the metaphysical or abstract state, and the scientific or positive state!" And it is almost equally true when he adds: "Each of us . . . has been . . . a theologian in childhood, a metaphysician in youth, and a natural philosopher in manhood. . . ."[1] Unfortunately for human knowledge some individuals of great intelligence have only been able to pass through one or two stages of emotional development.

At this point we must conclude our rather long and necessarily digressive examination of the claims of philosophy to be a means of increasing human understanding. In fact we see this last

[1] *Cours de Philosophie Positive.*

claimant to leadership to be beset with flaws in every direction. It begins with an analytic and deductive method which can only lead the mind back to its starting place; it relies on an artificial logic; it attempts to handle complex reality with nothing more complex than words and is blind to the shifting foundations of verbal representation. Finally, it is followed by those seeking mystical self-expression rather than truth.

XI. The True Rôle of Philosophy in the Advance of Learning: as Metaphysics, Natural Speculation and Integrative Science

Intellectuals love greatly to exaggerate the effect of philosophy on history. It is far more likely that philosophy is determined by economic and historic conditions than that history is a reflection of philosophy. Many able books have been written, for example, on the thesis that German philosophical thought, principally Hegelian Idealism, was responsible for the Great War. That German philosophy had no such effect and was indeed opposed to the social processes making for war, has been sufficiently demonstrated by Professor Muirhead in his investigation *German Philosophy in Relation to the War.*

If any class of man has done more than another, up to the present to shape the social, political and cultural destiny of mankind, it is the least articulate class of all, comprising men generally omitted from the calculations of the intellectuals—namely, the inventors and discoverers. Professor Soddy has whispered an immensely important observation, all too seldom regarded, when he says: "I should ascribe more real importance to the humblest inventor of some new device for lightening the abour of living—whether to the unknown discoverers of the art of smelting bronze and iron who inaugurated new eras, or to the inventor, say of the modern vacuum cleaner—than to any emperor, statesman, priest or prophet that ever lived. The one creates while the other merely locates history."[1] But here, in truth, we have but a later perception of what Bacon had long before asserted to incredulous intellectuals, when he wrote: "No empire, sect or star appears to have exercised a greater power or influence on human affairs than these mechanical discoveries."[2] In the minds which consider only abstract reasoning as worthy of the intellect, there is an intellectual snobbishness which brings its own reward

[1] *The Impact of Science upon an Old Civilization*, p. 8. See also Cox, *Mechanical Aptitude*, p. 169.
[2] *Novum Organum*, 129.

in the form of a mental astigmatism preventing once and for all any true perception of reality.

Philosophy then, has been metaphysical speculation, poetry, æsthetics, sociology, psychology, religion and the mother, but a very misguided, domineering mother, of the sciences.

At the present moment the danger of philosophic relapse in the sciences is particularly great, because many of the sciences are coming to deal with increasingly abstract conceptions. Such a situation has already attracted many philosophers to physics, whereas if the subject is to develop it must continue to deal only with the abstractions which researches into nature show to be necessary and must continue to regard ingenious experiment and precise reasoning as the most admirable manifestations of intellectual and social worth.

For this reason, if not only for the sake of intellectual tidiness, philosophy ought properly to be restricted to (*a*) metaphysics, and (*b*) speculations in entirely new fields likely to develop as sciences. There is also room for a science of the sciences—an integration of scientific concepts, but that is better done by trained scientists than by philosophers.[1]

By metaphysics, I mean a study beyond any of the sciences. What its content and method shall be, can well be left to the decision of philosophers, but there can be no doubt that its future progress depends upon its first being invaded by the sciences as they have been invaded by metaphysics. Metaphysics must clearly be guided by what psychology shall have shown to be the persistent tendencies and natural errors of the human mind.

[1] Such a movement of synthesis, I find, has recently been proposed by one of our leading chemists (Professor F. G. Donnan in a letter to *Nature* June 7th, 1930), who writes: "My proposal is that poets, philosophers, psychologists, biologists, mathematicians, physicists, and chemists should be brought together to discuss this matter and, if possible to elucidate it. There is urgent need to bring such men together and to do something towards a synthesis of thought and the advancement of a true 'philosophie scientifique.'"

This letter was of sufficient significance to provoke an editorial article on the subject, voicing the opinion of most scientists, in which the editor concluded: "Many scientific workers felt alarm and discouragement at the tendency of physical science towards metaphysics; they feared that the doubt and obscurity which have characterised much of the metaphysics of the last centuries would invade their science. . . . The old hard and fast distinction between science and philosophy can no longer be sustained; and the time has come when it should be explicitly recognised that philosophy is in truth a branch of science. . . ." He proceeded to the practical suggestion: "There is at present no section of the British Association devoted to what may be called scientific philosophy, but philosophic minds are to be found in all sections; and it should be possible to arrange a special meeting for a discussion of the basis of all knowledge." There is both hope and danger in such a movement, danger of scientists being seduced from their valuable work, hope of metaphysics being put on a more rigorous basis.

The metaphysician needs to study first the instrument with which he is working. Only when the new metaphysics has been built on a greater foundation of psychological knowledge than we possess to-day, will it make any significant advance. Trotter, commenting in a letter to *Nature* on the reconciliation of science and philosophy, discussed in the footnote above, properly reminds scientists of the insidious dangers in this proposal. "A philosophy is an attempt to bring into harmony the veritable truth of science and the intuitive truth of the mind. That these two categories are, at whatever depth, identical is the assumption of the philosopher; it is also the assumption of the naïve intellect, but the notorious effect of secular experience is to make the supposed identity less and less superficially obvious. . . ." He then stresses the need for psychological study as a preliminary to true metaphysical advances: "In the reconciliation of verifiable and intuitive truth, the mind, if we may use a legal metaphor, is not only one of the parties to the action, but also the judge. The knowledge that the last thirty years have given us of the limitations and liability to error of the mind in what we may call its judicial capacity, is therefore highly relevant and certainly not less so than the advances in physics, which in relation to philosophy have attracted so much more attention. That the wish is apt to be father to the thought, even in the highest and austerest activities of the mind, is no longer a mere proverbial tag, but a scientific fact, and we now know that in appropriate circumstances, desire can override all evidence. The work of Pavlov, again, little as its implications for man have been followed out, and strangely ignored as it has been by the philosopher, contains matter that may well have to be reckoned with in estimating the validity of human judgment, especially perhaps in regard to our sense of causation" (*Nature*, June 21st, 1930). With this expression I find myself entirely in accord.

A fine beginning in the application of psychological principles to metaphysics has been made by Aveling in his masterly work *The Psychological Approach to Reality*. But psychology must be advanced all along the line before any wholesale revision of metaphysical thought can be undertaken. For metaphysics, as the true and legitimate core in what we now call philosophy, there is clearly a great future in man's intellectual life.

The second function to which the term philosophy may be applied, but for which I prefer the expression Natural Speculation, is this activity of exploring fields not yet advanced enough to be considered by scientists. Here, Natural Speculation or philosophy is the growing point of a stem of knowledge, which has given off

in turn the leaves of biology, anthropology, psychology and sociology (but perhaps not chemistry, physics and economics which had sturdy independent origins too).

In all other manifestations, philosophy and the activities of philosophers are an immense hindrance to progress at the points where hindrance can be least tolerated. Even natural speculation has its dangerous aspects, for the Titan philosophy has a habit of devouring its immature offspring. Almost every science has suffered from philosophic regulation, but some, naturally more susceptible than others, have been completely crippled in their growth. Sociology, and its important extension, ethics, have long been held in a sterile condition by philosophical methods. Comte in contemplating their sad condition under the influence of philosophy, exclaimed indignantly: "But these discarded methods (philosophical methods) are, on the contrary, still used exclusively for both purposes (investigation and reasoning) in everything which concerns social phenomena."

The stagnation of psychology under the old dominion of philosophy has become a byword among scientists. That scientist who remarked two generations ago: "For the last two thousand years the metaphysicians have been in this way cultivating psychology, and yet they have not been able to agree on one intelligible and sound proposition" was voicing the united opinion of those unpopular psychologists who have since removed this stigma. Yet even to-day one meets complaints from psychologists like the following: "A source of still more difficulty and confusion has been the influence of philosophy and particularly logic, not merely in the sense in which 'meaning' has been understood by the psychologists, but even in the direction from which, and the manner in which problems of the psychology of meaning have been approached. The confusion of psychology with logic and with its sister study, epistemology has frequently retarded and distorted the development of the psychology of thought, but in no case has this confusion been so harmful as in the case of meaning. One is less likely to fall into error by taking both epistemology and logic as branches of psychology, than by treating psychology as a branch of either." From another aspect an ethnologist speaks of "the jargon that for more than half a century did duty for serious argument (in psychology) and inhibited real investigation."[1] Clemenceau, speaking of the failure of Müller, in his great anthropological studies of language, to finish his task scientifically, remarks: "Spurred on by his impelling metaphysics, Müller did

[1] Rivers, *Psychology and Politics*, p. 144; Elliott Smith, *A Note on the Aims of Ethnology*.

not stop to notice the many instructive sign posts along the road."

How extensive is the desolation that the old metaphysical ways of thinking have wrought in the new constructions of science! How long will it be before our intelligentsia have realised that the only path to continued progress in mental outlook lies in verified observations followed by thinking; not thinking adorned with careless observation? Academic conservatism, especially obvious in Germany, has chained psychology to philosophy even to this day although it has long been recognised that psychology must break away and establish its connections with other sciences where they are most necessary.[1] In all too many subjects, even to-day, one meets this same situation of a science still struggling for independent existence free from the dogmatic prescriptions of philosophy.

Philosophy had a true unity and a place of honour in purposeful intellectual life in ancient days, when it veritably contained the germs of all the sciences, but to-day it can offer no such excuse for its unwieldy existence. The persistence of ancient notions of the divisions of learning is obstructing the growth of modern knowledge. For the academic mind seldom moves with the times and hates new subjects above all things, whilst the temptation to wander in the easy paths of philosophy keeps even a number of scientists paying lip service to the outworn philosophic category and its traditions. Thus philosophy, apart from these scattered survivals, persists as the name of a kingdom that has been annexed piecemeal by its neighbours, and we may live to see the last portion, metaphysics, annexed to the domain of cognitive psychology. Here Professor W. Brown[2] remarks, apropos of borderline metaphysics: "It is as if we come to a blank wall and can but say 'How good,' 'How beautiful,' 'How true.' But we need to go further. We need to show the conditions under which beauty is appreciated and the conditions under which it is created. It is the same with goodness and with truth. And here we have to come back from philosophy to psychology. Philosophy itself is barren. It is through psychology, through observation of actual life and conduct, that one may obtain even deeper knowledge of these values." Intellectuals have continued in their worship of a name when indeed a radical reversal of government in the intellectual world has long been due and when practical steps towards rearrangement are necessary for social welfare.

[1] The recently published autobiographies of a number of German psychologists disclose that they even considered philosophy as a higher and more important branch of their adopted subject and devoted more time and thought to its problems than to investigations in psychology proper.

[2] "Religion and Science," *Journal of Philosophical Study*, IV, 13, p. 44.

We see now that much of the scorn of, and prejudice against, philosophy, among governing classes and active people, has a sound basis, even though these people have never troubled to make their objections explicit.

XII. Philosophy or Intellectual Progress?

Philosophy then, is no guide in cultural progress nor a vital instrument of learning, but a decomposing body athwart the path of progress from which we should deflect our footsteps. The traditional philosophy supported by university endowments and idolised by a host of dilletanti, is but a heap of refuse which the new metaphysician and the scientist would only waste their time in sifting and risk their mental health in examining.

The English and the Americans, as Dean Inge[1] and Keyserling[2] have reminded us, have frequently been held up as unintellectual by continental neighbours, on account of their faint interest in philosophy. English philosophy has always been regarded by the Alpine peoples as lacking in "profundity"—"clear, logical, if not always profound" as a German philosopher has politely labelled it. This "profundity" is more a matter of unanalysed feelings in the philosopher than of any objective complexity of his ideas or acuteness of his discernment. Surveyed from a more enlightened standpoint, gained by broad scientific consideration, this suspicion of philosophy is a very wise one. Throughout the biological world, thought is always an interim process between a situation and an appropriate response. The response may be long delayed and it may be nothing more than a move to understand the situation more fully (as in the instinct of curiosity), but it is essentially never lacking. In man, the inordinate development of the capacity to think invites a disorder which consists in cognitive hyperfunction—thinking for its own sake—without the objective of ultimate action or fuller understanding. Most intellectual leaderships are sick with this disease. Yet we continue to regard philosophy as a desirable guiding force in social evolution, and to put philosophers at the head of our institutions of learning to the grave detriment of social health.

If one small fraction of the energy and ability devoted to philosophic writing had been devoted, with a little perseverance and ingenuity, to experimental science, human knowledge would have been much further advanced than it now is, and the sum of human suffering would have been considerably lessened. Unfor-

[1] *England.* [2] *Europa.*

tunately the very people who profess to lead the intellectual life of society, are most responsible for the persistence of philosophic traditions. Error among the poor and ignorant is excusable; among those who idly discharge the responsibilities of intellectual leadership, it rightly invites the sharpest public criticism. Our universities which control the fate of most of the community's sources of intellectual advance, have never revised the medieval divisions of learning in accordance with modern needs. They maintain and even increase their staffing in philosophy (whatever that may be). They make no chairs specifically in metaphysics, natural speculation or integrative science. Still less have they catered for the outgrowth of sociology and psychology as vast separate subjects from the old fields of general philosophy. It may be argued that though this may be disastrous from the point of view of the advancement of learning, it is in accordance with the teaching function of the universities, since philosophy is a fine cultural training. Our previous discussions on the nature of philosophy must make the fallacy of this argument abundantly clear. Logic does not help our powers of reasoning, neither does constant pre-occupation with comprehensive abstraction increase our knowledge of the universe. Add to this the fact that true metaphysics is a study which, as Plato recognised, can only profitably be undertaken, with interest and understanding, later in life than adolescence. On the other hand, among all the subjects taught in the university, sociology, anthropology, and psychology offer, on closer examination, the most liberal and cultural education.

If, however, metaphysics and the anthropological sciences are compared not from the point of view of teaching, but from that of the advancement of knowledge, which is at least equally important to the community, the present state of affairs is perceived to be absurdly anomalous. Metaphysics can progress best with a relatively much restricted personnel, for research in philosophy and the progress of metaphysics does not depend, as does science progress, upon the output of many minds, but on the cogitations of one or two superlatively clear minds. Society does not require an army of metaphysicians as it needs scientists. A handful of first rate minds maintained by the universities would give greater progress than is now maintained. For that matter, of the three or four minds in Europe and America, which are making contributions to metaphysics, only one is supported by academic funds.

In this subject, clearly, it is the task of organised learning to replace a host of mediocre minds, teaching a highly abstract and

superficial knowledge which very few students can profitably study, by a few men chosen for great intelligence, but manifesting insufficient temperamental ballast to enable them to perform more profitable work in advanced sciences.

For philosophy in the older sense, as a verbal, deductive method handling false abstractions, there can, with safety, be no place in the shaping of society's strivings towards enlightenment. Yet such a study still darkens the issues of understanding and sets the young on a false scent in their attempts to solve social problems.

. . . . .

In this chapter we have examined a number of agencies which purport to give direction to society in its development. The majority of them as constituted by the press, political organisations, and the study of history are totally unsuited by their methods for offering any sure constructive guidance. Institutions specially devoted to learning can offer such guidance according to their attention to the social sciences, but in general, owing to their internal structure, they tend to lag behind social thought and cultural needs rather than to lead them. The most advanced leadership, with society's present organisation of its brains, lies with the essayists and dramatists, who, however, by being compelled to use intuitive methods, are bound to be almost as often wrong as right. Philosophy, long looked to as the leading branch of assured knowledge, is in fact the least reliable and profitable of all. At present it remains an empty shell, whence all the progressive parts of learning have departed, and merely offers an unfortunate obstruction entangled around the feet of empirical, progressive approaches to reality.

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CHAPTER EIGHT

THE CONTROL OF DESTINY

"Yet I doubt not through the ages one increasing purpose runs
And the thoughts of men are widened with the process of the suns."
TENNYSON.

"Saüme nicht, dich zu erdreisen
Wenn die Menge zaudernd schweift
Alles kann der Edle leisten
Der versteht und rasch ergreift."
GOETHE.

I. Civilisation at the Cross Roads

LONG voyages in remote realms of thought are only of value to the homeland of everyday life when they bring us back, laden or empty, to the port of human needs from which we started. Thought which wallows in itself, having no aim of increased knowledge or greater control of environment, is a biological absurdity. And because the common man cannot easily discern the quality of those activities which deal with pure knowledge, he is inclined to endure none of them and so to excite the contempt of those who perceive the immense value to humanity of many seemingly unpractical studies.

We have followed a path of enquiry into social affairs which has at times been relatively abstract, remote from practical interests, and somewhat difficult. Yet even with the very incomplete foundation of knowledge which the few who pursue the social sciences can yet offer us, we have gained many viewpoints which should be of the utmost value in directing social evolution. We must now crystallise those conclusions into a series of proposals and prognostications.

When a man undertakes an enquiry into the drama of living things, he easily falls, by overlooking the temporary nature of his detachment, into a state of complacent fatalism. Philosophical interest as a spectator, and human despair at our own impotence, combine to blind us here to an error of logic which permits us to believe that the phenomena before us are all working inevitably for good without our intervention. If tribe wars against tribe, is it

not leading to the survival of a more able people, less petty and vulnerable in their mental life? If wars persist into the stage of highly civilised societies, is it not clear evidence that man's disposition is not yet ripe for satisfaction in peaceable life? And if he has insufficient intelligence to perceive this, if he has insufficient power of inhibition over a too pugnacious disposition, then by the beautifully self-correcting, beneficent processes of nature he will be removed, and after a while, a type better fitted to civilisation will appear. Nations die out at the top. Why? Partly because the most able are not also invariably the far-sighted, the unselfish and the meek. Very well; our civilisations will continue to bloom and fade until a social structure is hit upon which will carry mankind over this difficult point, or until a new type of mental structure appears which combines the advantages of the self-assertive mentality with an immunity to its excessive, diseased manifestations. Our ideal of human beauty goes down before that of another age or race. Has, then, anything of permanent value died? The people of other ages and other races will necessarily find the highest expression of beauty in their own type. Beauty has not been lost. It has become a richer experience in the richer mentality of later-evolved races. Thus does all the process of change reveal itself to the detached scientific mind. Every evil carries the seed of its own destruction. Everything is pre-determined for ultimate good. Everything is predetermined in any case. "Why struggle?" asks the naive mind. "Why live?" rejoins the more comprehensive mind of the scientist philosopher.

Bewilderment has arisen because the spectator has forgotten the trance state of his detachment. In a moment we are again part of the play from which we have unnaturally stepped aside. We find ourselves impelled again by our own living natures to strive for our own particular conceptions of happiness. Elsewhere, in the discussions on ethics, we have contemplated how the biological energy in each one of us strives for the persistence of its own forms, and have clarified the basic rightness of this active assertive attitude. Knowledge of the larger scheme, once attained, gives us on the one hand a new emotional stability, a religious certainty of purpose in the realisation that greater and nobler forms of life are bound to emerge. We see that they are fashioned, moreover, in some degree from the rough texture of our own desires and thoughts. On the other hand, that survey fits us better for the struggle, gives us guidance in the attempt to develop our own life-forms, the attempt in which it is our desire and duty to persevere. The very fact that we have gained this or any other knowledge hitherto unpossessed, is an earnest of intellectual progress

and an instant right to its use in furthering the advance of the peoples that have attained it.

And what is the arresting feature of this picture of biological events which we have fitted together? Surely it is in the critical nature of the present phase of human history. Mankind, according to the verdict of all able investigators, stands at the crossroads. In a sense, of course, every moment in the history of man has been critical—as a decisive point at which a change of will one way or another would have had momentous results for the moulding of the future. Yet some turning-points are far more weighted than others with mighty issues, and this half-century in which we live is indeed just such a one.

A new power in history—scientific investigation—has introduced unprecedented forces and strains into our social development. We have suddenly become wise in our grasp of the external physical world, but have remained naïve and ignorant in regard to the biological world and ourselves. That is an unavoidable result of the natural progress of science from less difficult to more difficult fields. Having learnt to control the physical world, to frustrate flood and famine, to constrain immense natural forces to work for us, bringing light and warmth, we stand impotent before our own blind natures. We are tossed hither and thither by social forces, economic and psychological, which we do not understand. We are liable to disastrous unemployment, to waves of crime, to suicidal wars and religious manias, whilst our civilisations, burdened with increasing feeble-mindedness and insanity, threaten to collapse as completely as those of pre-scientific eras, and of the same old disease.

A few wide-awake scientific intellects controlled the physical world and handed that control to their more numerous neighbours. They find that they have handed loaded pistols to a community of somnambulists. Can they be made to wake up in time? Can they be roused to a sobered wakefulness? Can the community be brought to realise that until we have gained biological knowledge, equivalent to our present physical mastery, we shall not only remain at the mercy of inexorable social forces of decay, but shall stand in imminent danger of destroying ourselves instantly?

As our political and social life staggers under the swift onset of currents which it does not understand those in authority can only respond by making readjustments in the material world and by panic stricken prayers and exhortations. They ring the changes on the old habitual group reactions of democracy and dictatorship, armament and disarmament, economic interference and *laissez-faire*, religious revival and religious disestablishment. Yet these

leaders—politicians and priests—are not the incompetent humbugs which some scientists believe them to be. They are men who have started out with a wrong attitude to their universe and are unable in later life to readjust themselves to that respect for nature, that regard for distant consequences of present processes, and that love of knowledge which guides scientific endeavour.

Already the social sciences have opened up new possibilities in understanding and controlling the social forces affecting human progress and general happiness. The control of human destiny may become a reality here and now. Are there enough purposeful minds to grasp the fleeting opportunity before we slip back once more into a blind human struggle ?

II. The Advance of Man : Eugenic Evolutionary Groups

Human improvement can be ensured firstly by fostering the evolution of finer inborn capacities, and secondly by rearranging the cultural growth of acquired knowledge and belief in a way calculated to permit the most vital social life.

The first task is at present, and perhaps always, worthy of more concern. Now eugenics, the science of improving inborn type, cannot, in communities competing with each other, cease with the merely negative function of arresting bad strains of population. It must proceed to positive attempts at improving the race.

Naturally the policy of eugenics, the policy of encouraging a higher breeding-rate of those strains possessing highly desirable qualities, has always met with criticism : "Who is to decide what qualities are desirable ?" This ancient obstacle thrust forward by conservative minds turns out to be a very negligible one. Our present communities decide not merely who shall breed, but who shall live and who shall die. They reward certain kinds of behaviour, and stigmatise other kinds as undesirable, imprisoning or executing those who persist in them. The answer is that the community shall decide what traits are desirable and what undesirable. At present we do not know enough about psychological traits and their far-ranging results in society to pass judgment on all aspects of mentality. But even now, all are agreed that certain physical and psychological characteristics are desirable. Greater health and physical fitness, greater intelligence and mental energy, are preferable to their opposites.

Beyond these few simple but highly important qualities which could be fostered to a considerable extent by selective breeding, there are others about which there would be differences of opinion. For example, do we want the race to grow taller or shorter ? Do

we want more introvert temperaments or more extravert ones? Will the nation profit by more steady, reliable, persevering dispositions or more erratic but original and entertaining ones? Do our aesthetic ideals favour blue-eyed, blonde types, or olive-skinned brunettes?[1]

Now these further differences of opinion can be met theoretically by dividing up larger groups into smaller ones differing in minor respects in their eugenic ideals, so that every individual will be able to unite himself in a group with the ideals of which he finds himself in agreement.

The practical result would be a number of communities agreeing to differ in eugenic ideals, each shaping its eugenic programme according to the standards and directions of evolution which it has adopted and which have been worked out technically on genetic principles by the psychological and medical knowledge available at the time.

An incidental result of considerable social value arising from this organisation would be the production of a greater uniformity of type within each group, and therewith a greater sympathy and agreement of different parts of the group in general social ideals.

"Likeness of inborn nature," observes McDougall, "facilitates the path of development of national life: and the lack of it puts in that path obstacles and difficulties, the magnitude and subtle influence of which it is very difficult to estimate." Indeed, as we shall discuss more fully later, an important aspect of the control of inborn characters within the groups will concern the gauging of the optimum range of inborn differences within each group. There can be little doubt that the desirable range will be found to be less than now exists in most nations. The social ideals, the tempo of life, the recreations, the ways of thinking, the virtues and sins that excite attention, are all dependent in a considerable measure on the inborn characters.[2] Whenever a nation has been forcibly put together from differing races, we find a social life unnecessarily disjointed, weak, and feverish. There are thousands of misunderstandings, produced by individuals working for different goals in different ways and at different speeds. Think of the English in Ireland. Examine more closely the contacts of English and Welsh

[1] It is no answer to say that we want all types: the normal scatter in biological qualities will provide them in any case. Every person who asserts the necessity for variety still has a preference for certain qualities in the average type, e.g. with respect to the last question above, he may answer that he likes to see around him fair-skinned people, olive-skinned people, and negroes, but he will still favour some degree of nigrescence for the average.

[2] How much of the remarkable rapprochement of America, England, and Germany since the war is due to the underlying racial sympathy breaking through the crust of unfavourable circumstances?

in business, politics, and education. Think of the Jews anywhere. Turn to France, of which Le Bon wrote: "s'il n'existe pas encore un type moyen du Français, il existe au moins des types moyens des certaines regions. Ces types sont malheureusement fort séparés encore par les idées et le caractère. Il est donc par conséquent difficile de trouver des institutions qui leur conviennent également, et seule une centralisation énergique peut leur donner quelque communauté de pensée. Nos divergences profondes de sentiments et de croyances, et les bouleversements politiques qui en sont la conséquence, tiennent principalement à des différences de constitution mentale que l'avenir seul pourra peut-être effacer." How much of the alarming criminality in America is due to the disillusionment and dissatisfaction of racial types with differing ideals? (And how much to the "warring heredities" and unstable temperaments of half-breeds?) One of the first tasks of social reform in the near future must be to investigate these effects and to reorganise glaring instances of heterogeneous groups on a happier plan.[1]

Such an arrangement of groups differing in innate basis, and exploring all the possible avenues of evolution in co-operative competition, could certainly bring about unprecedented rapidity of human improvement in inborn powers in the centuries that lie ahead of us. But how is such a scheme related to existing old-established configurations, and how is the change to these new conditions to be brought about?

On examining the present state of affairs, we shall be surprised to find that this theoretically desirable scheme actually exists, and requires only certain trimmings and prunings—prunings, however, which will only be brought about with the utmost difficulty unless a sense of unified purpose in a conscious shaping of destiny can be made to infect with enthusiasm all people.

We find the peoples of the world divided up into practically non-intermarrying national groups. Some of these groups are racially homogeneous, others are bundles of distinct races. Many homogeneous nations, as Norway, Sweden, Denmark, Iceland (Nordic); or Austria, Yugo-Slavia, Czecho-Slovakia, and Greece (Alpine) are separated groups of some single race. These diverge, therefore, not in their present innate constitutions but to a slight extent in their cultural developments, and so in their direction of evolution of innate types.

[1] Any single alien individual, of course, will tend to profit by residence in a group of different race. He is something of an enigma to all normal citizens, to whom he is an exception, whilst they to him are a constantly recurring type. Like a left-handed player in tennis, he meets nothing new in each fresh opponent while they always encounter him as something unexpected.

Within any one group all the suggestive forces of literature, pictorial illustration, and general discussion tend to hold up a fairly clear-cut type—the racial type—for admiration. Such a consciousness of the approved type does not, of course, tend so forcefully to produce it as would a definite eugenic programme, but in many indirect ways too numerous to discuss it favours that type. In England the type tends roughly to be a tall, blond, athletic hero, individualistic, not too sensitive, and only mildly religious and that in a practical way. Such is the ancestral type of our picture galleries, the hero of popular stories (the villain is a very different physical and mental type), and the predominant conception of a normal healthy individual.

The judgments of thousands of people respond unconsciously to these suggestions. The employer, for example, having to choose between a number of applicants for a position, is likely to be relatively favourably impressed by the person approximating to that appearance. The fact that every nation favours the lives of those having its own type and rejects "foreign looking" and thinking people might indeed work strongly in favour of the normal type, and give us reason to expect in a mixed nation that the "sub-races" asserted by some anthropologists to be under development, would actually come into existence. But let us not overlook the fact that favouring the "life," i.e. increasing the comfort, social and economic status, of an individual all too frequently results in the converse effect on actual breeding-rate.

Nevertheless, as we have seen in Chapter II, there are far too many nations existing merely as racial mixtures or partnerships to allow us to contemplate the present scheme as a perfect basis for eugenic competition.

Yet to hope or to expect that there will be any large-scale national surgery, dividing regions which ought never to have been linked together, and joining up in national life populations with great affinities now cruelly separated and opposed, is underestimating the estranging tendencies of language-barriers, the might of national traditions, and the obsession with economic factors which blinds politicians to more sacred values.

Such direct and deliberate action, in the present state of our popular education, is highly improbable. Nevertheless there are tendencies working to bring about that desirable state of affairs in an indirect way. On every hand there are signs of the breaking up of mixed nations, in their cultural strivings, into the original racial component groups.

Southern Ireland, a racially distinct group, has gained its administrative independence, a step opposed by political theory

and the imposed patriotic ideals, but a necessary consequence of the natural laws of racial individualism which we have elucidated. Recently in Spain the province of Catalonia—a slightly Nordicised region in the pure Mediterranean area of Spain—has demanded a recognition of its independence. A sharp difference of ideals has revealed itself too in the Basque race provinces. The annihilation of distance and the immense powers of organisation bequeathed by science, may also be expected to favour racial values, by linking up into a unity geographically scattered sections of the same race, as e.g. the British Empire.

Since the war the unnatural union of Nordic and Alpine Germany has again and again been threatened by the natural forces of racial self-consciousness. As we have seen in Chapter II, Bavaria and Austria are almost purely Alpine compared with the rest of Germany. Bismarck, we may remember, was moved to restrict Germany to the Prussian Nordic type. In an acute psychological discussion of type differences in Germany and their far-reaching effects, Henning (*Jahrb. d. Charakterologie*, vi, p. 256, 1929) asserted: "Durch das gesamte deutsche Volk und das letzte Jahrtausend seiner Kultur geht ein Riss, eine polare Gegensätlichkeit; die Werthaltinger sind in zwei feindlich Lager getrennt. Eine Gruppe blickt nach Süden und Westen, auf die Klassische und Frankreich, auf Ostereich und den deutschen Süden, und sie kehrt dem Norden und osten den Rücken. Die zweite Gruppe wählt gegenteilig: der Süden gilt wenig oder nichts, er verblasst vor dem Wertem von Skandinavien, England, Russland und dem deutschen Norden."

All over Europe racial groups are maintaining and reviving their own cultures, even though they be within a larger nation. Regionalism is the policy of the day. Wales and Ireland have become more group-conscious, and proposed separate parliaments. There is no race difference making a separation of Scotland desirable, but any step which would decrease the Welsh immigration into England and call a halt to the mutual imposition of inappropriate ideals by Welsh and English would be a great advance.

As we shall see later, there are so many possibilities of evolutionary divergence, that a relatively large number of groups would be required to meet all demands. These groups would consist of communities differing widely in racial type and racial ideals and others differing hardly at all in racial type and only slightly in eugenic ideals.

The development of our present natural groups of a greater number of racial sub-groups would satisfy the above conditions by providing a large number of groups and by providing similar racial groups with slightly differing eugenic ideals. For with

similarly constituted peoples, there can yet be divergences of aim.

Now always there must ultimately come a parting of the ways at which scientific knowledge and reasoning can give no further guidance. Then is the time for conscious adventure and for faith. The ethical principles already laid down make it clear that the finest moral action consists not in inertia, when knowledge and reasoning can go no further, but in carrying the search for knowledge to the uttermost and then bravely going beyond it to the deliberate adoption of a speculative course. In this way we perish or suffer if our course is wrong, and flourish if it is right, but the truth, for those who come after, emerges from our strivings. We have done the ultimate personal service to truth by staking our happiness upon a guess. Those who adopt views subsequently proved to be erroneous, have, provided they have exploited those views to the utmost, done as much service to progress as those who, by luck, have associated themselves with the sounder beliefs. "In the end maybe," says Wells, "we shall find we have been anvil and not hammer in the purpose of God. Then will come the time for faith, for the last work of faith, to say still steadfastly, defeated or discredited, disgraced or dying, that all is well."

The necessary groups for experimentation could be brought into existence, we have said, by divisions already tending to show themselves in present nations. The Baltic Nordic groups formed by North Germany would entertain a slightly different eugenic goal and cultural aim from the Nordic group formed by Northern England or by Sweden. The Mediterranean race group in Spain would desire different goals from the Mediterranean group in Catalonia, the Alpine-tinged Mediterraneans of Southern Italy, or the Nordic-tinged Mediterraneans of Southern Ireland.

What the administrative and political relationships of these provinces would be to the nations from which they arise it is difficult to foretell at present. Highly centralised nations like France and Italy, would undoubtedly oppose local autonomy and "inbreeding," but in so doing they would set their faces against a movement which, rightly controlled, would be to their own advantage.

III. The Advance of Culture: Experimental Sociological Units

Some such organisation of communities as that just sketched seems to be the most suitable, indeed the only machinery which will ensure steady improvement of inborn qualities. But there is another and very vital reason for the existence of more numerous

independent groups than now exist: namely, the improvement of cultural life itself.

In any considerable degree, cultural progress can only take place through conscious sociological experiment. In our investigations and discussions on customs, and institutions regarding social organisation, sex, education, forms of government, and indeed any social phenomena, we eventually concluded that though a large initial adjustment can be made with certainty through the fuller study and application of psychological and economic knowledge, the finest adjustment can only be made by true, large-scale sociological experiment.

When disagreements arise between a reform party and a conservative one, or between two divergent novel propositions, the state of argumentative uncertainty and administrative impotence which usually supervenes under present circumstances can be largely solved by the specialist's application of the psychological and economic principles which have emerged from research in those sciences. If only the suggestions of Bentham and of Mill as to the application of experimental methods to sociology had been heeded in their time! What a different face sociology would wear to-day, and what fine assistance it would have been able to render in our present political problems!

Even so there will always remain problems difficult to solve in that way, problems such as those involved in the modification of economic incentives or the abolition of certain sexual restrictions. These can only be solved by putting two groups of similar people, living in comparable regions, under the two different systems of morals (or economic practice, or education, or whatsoever be concerned). And it must be no haphazard experiment, but one watched over and recorded by sociologists, economists, and psychologists, in order that a decisive issue may be obtained.

We see something of this kind going on, without the effectiveness of a deliberate experiment however, in the United States. The various states are of substantially the same racial composition, and some of them are very alike economically and socially. But there exist slight differences in moral legality and conventional rules the effects of which are even now watched in a relatively haphazard way in so far as the results of legislation in one state, if obviously successful, lead to similar legislation in other states.

The system of sociological experimental groups dovetails naturally in the racial evolutionary scheme. Where several groups now exist having the same racial composition, they could, perceiving the suitability of such a situation for experimental purposes, agree to adopt customs differing in respects beyond the appraise-

ment of theoretical sociological science. Occasionally a eugenic evolutionary group, wishing to discover the effect of certain changes in ways of living and so make a new step forward in cultural evolution, might divide itself into experimental and control groups. All these steps are not to be regarded as artificial conditions brought about on a plastic and passive populace by a dictatorial legislative power. They would happen naturally, but none the less deliberately, in any community when a good proportion of the citizens were in favour of an arrangement differing from that already existing. The conservative remainder would persist as a self-contained control group, closely but amicably comparing itself with the experimental society. It would be an entirely controlled and constitutional step designed to arrive at real knowledge and practical decision in the matter concerned.

Now how would the provision of such sociological experimental groups work out in practice in such a region as Great Britain and Ireland? In the first place there would probably be four racial groups: (1) Southern Ireland, (2) Wales and Cornwall, (3) England and the Scottish Lowlands, (4) The Scottish Highlands. Let us suppose these again divided into eugenic evolutionary groups (actually all areas but England and Scotland would be too small for such division). England and Scotland might have decided to adopt a dual group formation—a northern and a southern community—differing in slight details of eugenic purpose with regard to physique,[1] temperament, and the ratio of mechanical to verbal ability deemed to be optimum. Then there might be mooted in the southern group the question as to whether the existent rate of increase of income tax with salary was the best socially and eugenically, or again whether the school-leaving age ought or ought not to be raised by one year, or whether divorce ought to be granted on demand or only after twelve months' notice. Two counties might be chosen sufficiently similar in economic condition, such as Dorset and Somerset. One would then be put under the first system, and the other under the second. The people desiring one system would, as far as possible, migrate to the county in which their preferred system was at work. Then the social and economic effects of the two systems could be accurately compared over a period as long as one or two generations if necessary. Not

[1] There is not the slightest reason to suppose that physique will not evolve further. Conklin, in his work *The Direction of Human Evolution*, Oxford University Press, 1921, remarks: "The limits of physical evolution have apparently been reached in the most perfect specimens of mankind." There is no ground for this belief. No major changes may be necessary, but the foot, for example, may develop more effectively and we may assume the upright position more completely.

only would this lead to surer social progress with an absence of the present friction and stagnation, but it would mean far greater self-realisation for individuals than is now possible.

It is not certain that the experimental culture groups, the eugenic evolutionary groups, or even the racial groups need inhabit geographically fixed and restricted areas. They could preserve their unity without this. We see in the Jews a non-localised group which has preserved its racial unity (or rather, particular racial alloy)[1] over thousands of years, even before any explicit and welcome recognition of the principle which we are asserting had existed. Probably, however, for purposes of economic comparison, and to ensure that each group reaped fully the reward of its ways, a geographical home would be a necessary condition.

Deliberate experimentation and absolute control of population, with the increasing "socialism" which that implies, can alone put mankind in charge of its destiny. And this can only go on in units which are firstly of uniform racial type, and secondly clearly conscious of accepted common goals. As the medieval reign of force, as such, is superseded, and as the sense of insecurity and armed vigilance passes away, all the finer differences of viewpoint due to innate racial differences will begin to break through the hard, uniform crust of imposed state culture in those countries where the state is a blanket to cover different racial bedfellows. Then the sociologist must be ready to come forward with the relatively complete constructive suggestions for controlled experiment.

IV. Newer Organisations Rooted in the Old: Competition and War

As this notion of organised eugenic and cultural experiment groups in a state of agreed competition becomes more precise, we may begin to ask what the relation of this new system would be to older historical structures, particularly to nationalism.

The autonomy demanded by these new units is primarily in the matters of social customs and eugenic self-development, neither of which are at present concerns of national government directly. Both, however, would require or lead to a condition in which considerable economic and legislative independence would exist.

In all organic evolution, as e.g. in the evolution of mind, we see finer and more highly developed forms growing out of a basis of coarser and stronger primitive structures to which, during a recrudescence of primitive situations, the organism can return.

[1] Though, of course, Jews fought against Jews in the Great War, and in other ways have frustrated a true weighing of their worth.

Similarly, it is essential for these new units to develop out of national groups, to rise above but not to destroy national boundaries, national loyalties and the national organisation of those activities which belong to more primitive levels of group life. Principal among these is defence in time of war. For this reason the nation or empire must remain the unit of defensive organisation, and the economic and cultural independence of the new units must always develop in such a way as to permit of rapid return to more primitive solidarities in times of extreme emergency. At present, apart from the absence of eugenic control and of supervision in cultural experiment, the British Empire constitutes the best example of a group of units on a common racial basis diverging in eugenic and cultural aims (and therefore having a parallel economic independence) but united in defence and to some extent in commercial life.

Meanwhile, since all investigation shows war under conditions of modern social organisation to be almost in every way a disaster and a lasting set-back to human progress, every step must be taken to remove that likelihood of war which renders the supersession of older group structures so difficult.

In the history of individual nations, as in the history of human individuals, there must be progress from a state of anarchy, in which each individual's strength is his highest right, to one in which, though competition still prevails, there exists a co-operative atmosphere designed to abolish cruder antagonisms and lift competitive activity into a higher plane of expression which can bring advantages to all. A conscience must grow in each national mind reflecting the ethics of a group life among the nations.

The analogy must not be carried too far. Individual human consciences were developed partly in response for the demand for effective group organisation, for group competition of human beings. National ethics will be developed within the group formed by nations of the world outside which there can be no other group, and the aim of this morality will be not to restrict the energy devoted to inter-individual competition, as in human groups, but to press it into forms which, without reducing individual differences in national success, will result in a common constructive gain and provide that assurance of security from violence in which all the finer elements can appear.

The new morality can best develop with nations and with individuals when it has behind it the promise of force, of a machinery to compel, in the last resort, obedience to the group will. It is the noblest task in political life to-day to engineer such a force in the interests of international peace.

Now a number of modern writers, notably H. G. Wells, have argued that a league of nations is not thorough-going enough in its outlook, and that world peace can only be ensured by a true commonwealth of all mankind. Doubtless peace could be more easily assured by engendering such a state of complete unity, but the maintenance of distinct self-contained units of racial evolution is an absolute necessity to general progress. Variety cannot be sacrificed, and we must be prepared to ensure peace by the more difficult path of uniting these groups in a league of nations.[1]

War and armaments are more than unnecessary in evolution. War conditions evolve most effectively the types fitted for war: constructive industrial, economic and cultural competition will evolve types best innately fitted for the great constructive purposes of civilisation.[2]

Professor McDougall in his *Ethics and some Modern World Problems* has dealt in an interesting and definite manner with the issues and problems confronting disarmament and has proposed that the necessity of policing international life be met by the formation of an international air force, a threat of overwhelming force, behind the police action of the League of Nations.[3] Lord Riddell seems to regard the scheme as rather impracticable and liable to the danger of being abused by the commander of such a police force. These difficulties have, I think, been satisfactorily dealt with by the proposers of the scheme, and it seems one to be

[1] I notice with considerable interest a happening which is a good index of popular mentality at the present time. Sir Arthur Keith, in his rectorial address at Aberdeen University, has asserted with his characteristic sincerity, and in the face of much hostile and shallow criticism from newspapers and divines, the point of view to which all clear-thinking biological scientists are finding their way. Speaking of the schemes for a commonwealth of man in which "black, brown, yellow, and white must give and take in marriage, and distribute in a common progeny the inheritance which each has come by in its uphill struggle through the leagues of prehistoric time towards the present," he remarks: "If this scheme of universal deracialisation ever comes before you as a matter of practical politics—as the sole way of establishing peace and goodwill in all parts of the world—I feel certain both head and heart will rise against it. Race prejudice has to be given a recognised place in our modern civilisation." According to the line of thought which I have set out here, he makes only the mistake of assuming that this competition must take the form of war, for he remarks: "Nature keeps her human orchard healthy by pruning: war is her pruning-hook. We cannot dispense with her services." If the politicians can devise a mechanism of mutual insurance war need be no part of the scheme of competition.

[2] For example, it is no exaggeration to say that one-tenth of the expenditure now made by various nations on armaments would put the biological sciences on such a footing that human health and efficiency would enter on a new era and social problems now beyond our control would be solved with ease.

[3] See *Janus, or the Conquest of War*, Kegan Paul. In *The Problem of the Twentieth Century*, Benn, a fuller argument on the same lines will be found.

brought into practical politics.[1] All the varied attempts to rule out certain weapons, such as poison gas, bacteria, attacks on the civil populace in time of war, are deserving of nothing but ridicule. When national life is at stake and passions are roused, agreements confining war to a sportsmanlike game are thrown to the winds. Besides, as Wells has pointed out in a trenchant essay,[2] war must be made not less but more terrible and revolting if unthinking people are to give it the reputation it deserves.

The armament question deserves consideration from another point of view, even by those who are not interested in purely international securities. Is it not open to question whether heavy expenditure of national resources in armaments instead of in education, scientific research, and national hygiene is not productive of diminished rather than greater effectiveness in time of war? I am aware that the notion of a nation maintaining itself unarmed and unmilitarised but so organised that all its forces can quickly be turned to the production of war material and trained men, has been subject to much criticism of late, notably by Lefebure.[3] It is, however, a matter requiring quantitative investigation. Consider the nation that does not have to disorganise and deplete its industrial activities year after year for conscriptive military training, does not continually have to be building and scrapping enormous amounts of war material, and does not need to impoverish its educational and social services. What an enormous amount of wealth, of productive efficiency, and cultural eminence it is bound to accumulate in a generation of peace! And what a decisive factor these gains are likely to be in attracting allies, in providing sources of raw material, and in providing a high level of skill, morale, and educability in its citizens.

For the same reason a transference of national interest from armaments to pure scientific research is no military mistake. The expenditure in maintaining an army of research workers in pure science which at first glance is, nationally speaking, a waste of energy, since the results of pure science become soon the property of all the world, proves on closer examination to be a wise investment of purely national funds. In the first place, the industrial, agricultural, and social efficiency of the nation is maintained a little ahead of other nations by the closer application of science. Secondly, in time of war a trained army of the right kind is available, an army of research workers such as cannot be trained in the

[1] Since these lines were written a definite proposal for such a force has come from the French Government; but there are no other nations logical enough in outlook to accept it.

[2] *The Way the World is Going*, chap. xii, "Changes in the Arts of War."

[3] Victor Lefebure, *Scientific Disarmament*, Gollancz.

few months required for training infantry. The late war showed very clearly that all the machinery and tactics so assiduously elaborated during the years of peace became hopelessly out of date and useless after the first few months. The turning of the brains of a whole nation to warlike purposes results at once in an immensely greater progress in warfare than is achieved by the relatively small number of professional war minds—mediocre minds at that—engaged in the problems of war during times of peace. Indeed the existence of a large organised pre-war military caste which cannot easily be supplanted in time of war by the greater brains that have been solving the problems of civilisation in time of peace, positively hinders the development of efficient military action. Success lies, then, with the nation that has the more highly educated civilian population and the largest active army of scientific research workers. Providing the League of Nations can perfect a machinery which can prevent the sudden onslaught of armed military nations upon peaceful neighbours, the nation that is wisely organised for peace is sure of victory in the long run over the nation that stands continually with weapons in its hands. The task of the League of Nations—to reduce war to a negligible contingency by maintaining an armed police force, by providing resources to prevent the sudden onslaught of one nation upon another, and by pursuing active educational measures in all countries—is going to be of the greatest value to human evolution.

V. Group Selection by Economic and Cultural Competition

If war is successfully eliminated from international life, what is to be the mode of self-assertion among these groups whereby the effectiveness of different innate patterns and cultural directions is to be demonstrated? Selective processes, the favouring of certain units and the reduction of others, will now take place between the eugenic evolutionary groups, largely by competition, in which a premium is placed on intelligence, inventiveness, skill, education, health, wisdom, and industry. There will also be cultural competition, though at first sight it is difficult to see what use cultural competition can be to the groups concerned, or how it can lead to any real natural selection among groups.

The fact that Germany has produced many of the world's greatest musicians, or England many of the greatest dramatists, may be apparently of no material economic value to either country, but it is a matter for pride and emulation. The pride and ambition which spring from man's self-assertive instinct naturally go out in this way, even though no tangible economic reward

to the group is forthcoming. But from the teleological point of view, from the point of view of group natural selection, cultural competition cannot, apparently, have the tangible, real, character of economic competition and war. A man may assert that German philosophy is superior to French philosophy and a nearer approach to truth. No one can decide this: discussions with that purpose are only so much more philosophy. On the other hand, if a German asserts that German tactics and man power and technical skill are superior to French, the truth automatically emerges from the test of action in war or in commercial competition. Similarly, our press may assert that the British workmen are the best in the world, but if, with the same available sources of raw material, they cannot produce goods to compete with other nations, the truth emerges with economic failure.[1]

No such decision is possible in cultural matters, neither does the long perspective of history help, for to-day there are still the greatest differences of opinion as to cultural levels in historical civilisations. Not only practically, but also theoretically, is a decision impossible; for the value assigned to a culture depends on subjective factors of inborn constitution by which it is appreciated, and these are different for different peoples. Particularly is this true of art. Chinese painting or music is not better or worse than European art; it is different, and we Europeans can have no claim to judge its worth.

What then can be the object and value of cultural competition? If group competition becomes acute—and it is more acute at some times than at others, though constant on an average—will nations be ready to deflect valuable interest into purely cultural activities which drain reserves of human energy and ability from the material struggle? Let us make sure in all this discussion what we really mean by "culture." It is a none too precise term covering the arts and the sciences, religion, morals, and conventions, institutions, ways of living, eating and working.[2] Of these activities the sciences have a direct economic resultant by their commercial and medical applications, and an indirect one through the saner organisation of individual sentiment resulting from scientific education and ways of thought. Again, all that has to do with invention, with material aspects of daily life and standards of

[1] I am by no means espousing a critical view of the British workman, but merely illustrating the unreal nature of cultural opinions by a topical example.

[2] I could include in this meaning even such activities as competing in the Schneider Trophy, climbing Mount Everest, or winning an international golf competition. Of what economic value, to all appearances, are these cultural activities to the nation concerned?

hygienic living, has an immediate result in increased personal, and therefore national, economic success. Thirdly, there is a positively beneficial effect of culture on economic success through moral culture itself. After our discussions on the greatest progress of the greatest number this connection needs no discussion, for the criterion of the soundness of an ethical system is nothing other than group success or failure. Lastly, one must consider all those elements of culture which we include under art, which appear to have no relation whatever to national safety and material success. In truth, though the relationships are here less obvious and more in the psychological realm, the effect on group survival is no less real. Firstly, art is an aid to sublimational education: it raises the general level of expression of instinctive energy, makes possible nobler integrations of character, and thereby results in a better directing of national mental activity and greater "wisdom" in all fields. Secondly, it increases national prestige in the eyes of other nations, producing an attitude which reacts favourably in economic spheres, favours the formation of alliances in time of war, and assists potently in the direct spread of that nation's culture.[1] Thus the prestige of German culture at the outbreak of the Great War produced among the intelligentsia of many countries, e.g. America, a "prejudice" in her favour, an oscillation of loyalties, and an urge to join their lot to Germany. That others preferred British culture, and that greater forces and loyalties drew America into the Allied ranks, does not disprove the existence of this social force.

Culture, then, which is itself in many ways an outgrowth of economic success, favours economic success and national survival. The nation which, developing a culture that grows from to its own emotional endowment, attains the highest intellectual expression possible, is at the same time developing a force which acts at a great "mechanical advantage" on its material success, and causes it to forge ahead of groups concentrating only on the economic struggle as such.

Competition in economic and cultural realms is a true continuation of evolutionary processes, and is the great need of our time.

[1] Here is a totally different purpose: not the survival of the real group but of its culture. This is a kind of immortality which is less satisfying from the biological standpoint than true survival, but yet of great value to evolution. Greece fell before the superior power of Rome, but its culture was largely accepted and copied by the conquerors. *Apropos* of this, Graham Wallas remarks (p. 291): "Our victory over the German Empire, for instance, would mean, it is said, a victory for the idea of political liberty. But in the ancient world Greek culture spread most rapidly after the fall of the Greek Empire" (*Human Nature in Politics*). The important point is that an imposed culture (perhaps self-imposed) must necessarily mould the inborn natures of the people into closer conformity with it. Cultural immortality is therefore to some extent physical immortality without the mediation of the germ plasm.

VI. How will the Groups direct their Eugenic Competition?

Although the success of each group is in fact assayed by economic and cultural resultants we can expect that, as soon as a scientific possibility exists, attention will be paid to eugenic causes which are among the most important underlying factors of success. Eugenic competition will then take an important place in the concerns of each group, for on the improvement of inborn characters will largely depend economic and cultural advances. The original units, as already indicated, will probably be eugenic evolutionary units and they will desire not only to shape the inborn character in the approved direction but to shape it powerfully and effectively.

As psychology and medicine progress and the possibility of precise measurement of inborn mental structures becomes more apparent, a political policy of practical eugenics and racial control will be adopted by the more progressive countries or eugenic units. The nation which first adopts such a policy will win an enormous advantage over its neighbours, and they will be forced to adopt similar social services or fall into insignificance. An increase of the average intelligence of a nation of forty millions by one per cent. only would (with the maintenance of the normal distribution) result in the disappearance of all those now regarded as mentally deficient, would produce many thousands of minds with the character of genius, and bring an increased efficiency and capacity for happiness throughout the body of the nation. There can be no doubt that the results of eugenic reform will dwarf the results of all other reforms, for they strike at the root of systematic and chronic impoverishment in national ability and vigour.

Yet what prospect of such constructive developments exists at present? A small body of eugenic reformers has worked for over a generation without gaining the slightest attention from politicians, press, or populace. Consequently all the practical eugenic steps suggested, as for example those of Leonard Darwin in his *Eugenic Reform*, are unduly tentative, modest in scope and diffident in tone.

There is a certain gloom about eugenics in the present sad state of racial affairs which makes it as unwelcome a subject of conversation as is finance in a period of trade depression or disease during an epidemic. But over and above that emotionally-determined ostrich policy there is an absence of biological knowledge and interest, even among so-called cultured people, which makes discussion lame and unprofitable. Eugenic ideas will never receive intensive discussion in press and from platform until the

popular mind can be called off false scents in political and religious philosophies and from seeking culture in whatever shallow intellectual dissipation is fashionable at the time.

Suffice it that stagnation broods over the scene and that eugenic projects have aimed merely at removing the outermost edge of grossly defective and abnormal individuals. No hope of new and effective methods is held out: we persist with ideas as primitive but less ingenious than those of Plato. That modern society is entirely different in structure; that education is universal; that immense strides have been made in biology and psychology—these facts do not seem to have been taken into account in planning a bold and constructive eugenic project. Notably is this apparent in that Darwin and others have suggested essentially that we should leave eugenic selection to social selection—should say that those who have made themselves well-off are the best types for the civilisation of to-morrow and should require them to contribute a larger percentage of children to the next generation than do less successful strains. At present the upper classes do not do so; hence it is proposed to subsidise the well-off so that they will be encouraged to bring up more children. The many arguments for considering eugenic worth as directly or indirectly a function of economic success are favourably discussed by Leonard Darwin, who concludes (p. 270): "To make fertility vary with wage-earning capacity would promote the appearance of a great variety of natural endowments in future generations and promote them somewhat in proportion to the needs of the nation." Such an arrangement is far better than no arrangement at all, but I cannot agree that it represents the best possible mode of selection to-day. My objections to the scheme are: (1) Social selection is only very roughly a selection of the fittest. (2) If the possession of a relatively high standard of living is a cause of sterility, surely it is a mistake to raise that standard still more in the expectation of increasing fertility.[1] The real solution here lies in these people realising that their standard of living is higher (more expensive) than civilisation can yet support for those who want to live a normal family life, that it is built upon false assumptions and the servility of others. A good deal of middle-class expenditure, for

[1] It is very gratifying to find, as this book goes to the press, that these matters are receiving considerable attention at the centenary meeting of the British Association for the Advancement of Science, and that Professor Julian Huxley has attacked this very weakness in arguments about the economic value of the child! He asserts essentially as I have done here, that the excessive fertility of the less successful strains is best checked, not by depriving them still further of state support through transferring it to the classes now restricting births, but by giving them still better conditions of living and making birth-restriction an attractive proposition.

example, goes to maintaining children in expensive private schools instead of leaving them to get higher or elementary education, according to their abilities, in state schools. (3) At present it is, in any case, impossible to subsidise these classes without ceasing to subsidise the excessively large families of the poor. These families should not exist but, since they do exist, common humanity and social security demand that they should receive a free minimum education and food and clothing if necessary. Society has rejected the alternative of allowing the children of the poor to die.

In the end, doubtless, the more desirable families will need to be better financed, but not directly, and not according to the measures of social success of parents. Rather must this be done through subsidising the education of the able children themselves.[1]

The proposition requires a careful scrutiny of the inborn qualities which tend to become associated with wealth or greater earning capacity. These, as we have seen in Chapter II, may in fact be desirable or undesirable qualities. One set of qualities concerned in the acquisition of wealth (and probably heritable to some degree) which as yet cannot be assessed accurately by direct psychological or medical examination, and which is of the greatest importance in human evolution resides in the set of qualities which determines its possessor to think more of the future than of to-day, to have a sense of biological continuity, and be willing to think and work intensively for the next generation and for children unborn. It is precisely this set of qualities which is most lacking in modern man relative to his complex civilisation and which is most strongly needed at the present time, if civilisation is to survive.

Among those qualities not obviously antisocial which are favourable to wordly success yet undesirable in a progressive civilisation one may instance that comfortable conformity to social conventions, born of dullness and lack of initiative, which prospers where independence fails. Now there are two kinds of people who are ill-adapted to society, those who are too far ahead and those who are too far behind.[2] We penalise those of low intelli-

[1] How deplorable and retrograde, therefore, is the present decision of the Board of Education to bestow scholarships only on the poorest families, however bright the child. If the economic value of the child is a factor in its production (much evidence points that way) the economic value of the bright child must be made greater than the dull. If parents of a very intelligent child find his education less of a burden than they had expected—owing to liberal state scholarships—they will (in moderate circumstances) more readily embark on having a second and third child, who will, in all biological probability, be of the same calibre. Conversely, producers of unintelligent children will be held in leash.

[2] We know little about the social effects of other qualities, but it is certain that in intelligence the persons who get on best with their fellows—those likely to succeed socially—are the relatively average intelligences, not the

gence and those of primitive and criminal mentality; we also penalise with ostracism and poverty the genius and the man who refuses to put any value on ancient and traditional goals. When all the world admired brute force, religious men were penalised. When the world became ruled by the religious and philosophic spirit of medieval times, scientific men were the new persecuted outsiders. We do not want to breed those adapted to the present—to slums and ignorance and expediency—but those adapted to the future. The unguided and unheeded birth-rate tendencies now existing will breed us quickly enough into a race of beings passively and stably adapted to the cramped and futile life-plan of the present world. Not only is socio-economic success, on this and other accounts, too rough a criterion of social worth to be applied in a social science of eugenics, but the quantitative differences of wealth bear no relation to quantitative differences in capability and eugenic desirability.

The scale of economic success is quite arbitrarily adjusted to the scale of ability.[1] Let us take three men, A, B and C, of increasing degrees of ability and capacity for social services, earning respectively £100, £500 and £1,000 per year. Although these rewards may be arranged in the same order as the citizens' abilities and their readiness to serve, the actual ratios are quite otherwise determined, for in another type of civilisation, e.g. agricultural,

highest or the lowest. Hollingworth, reporting on psychological investigation, tells us (*Special Talents and Defects*, p. 193): "The optimum range for leadership appears to fall between 110 and 130, when the total group has a median of 100. Children of I.Q. over 160 have little chance, children of I.Q. over 180 have almost no chance, in the observations of the present writer, to be popular leaders. . . . Why should too much intelligence militate against the achievement of popular leadership? It is clear that in order to organise and lead others, the individual must comprehend and share the interests of those led, and must in turn be understood by them. He must not consider their pursuits to be fatuous and without substance. They must not regard his interests as eccentric and unfathomable."

[1] In this book I have not given much direct attention to the problem of reform of wage scales because it seems to me that other problems, notably eugenics, religion, and education, are of much greater importance. With the exception of activities which are not intrinsically self-supporting, e.g. education and scientific research, wage conditions can justly be left to occupational group competition, for occupational selection will attract to each calling the best people for the given rate of wages, so that though wages will not be adapted to ability, ability will soon be adapted to wages. Justice or fairness may not of course be the prime consideration. For eugenic and other reasons, we need to interfere with this national equilibrium, largely via income tax. Again, there is nothing to prevent (see above) an exaggeration of the differences in wealth which arises from the fixed differences in ability. The circumstances permitting such disproportionate wealth are complex—Karl Marx dealt at length with some of them. The survival of societies, however, will in the end assure the predominance of the society with the happiest adjustment of wage differences, i.e. a scale which does not plunge the less able into hopelessness and terror, whilst giving the able a luxury which they cannot withstand or, on the other hand, discourage the more able from effort whilst permitting the inefficient to wallow in their inefficiency.

instead of industrial, their actual earnings might be £100, £150, and £200.[1]

We must look for a totally different criterion of the individual's probable value in the future state as a producer of children if positive eugenics is to be as effective as it might be.

That long-sought power of objective judgment lies to hand in the possibilities of measurement which are now being developed in psychology and medicine, and which will open a new stage in eugenic progress.

VII. A Simple Mechanism for Constructive Eugenic Racial Control

In essence the scheme which I am proposing consists of a direct psychological and medical assessment of each member of the community and the assignment to everyone, on the basis of this examination, of a precise factor of fertility. To the objection that such selection, in the present state of our psychological knowledge, would be less effective than the selection made by life itself I will return later. For the present, too, I am assuming the simplest mathematics of personality: that a total valuation may be gained by a plain summation of desirable and undesirable qualities.

Imagine this system introduced into a community which had decided to keep its total citizenship stable and constant in numbers, so that each pair of parents on an average would have two children. All parents scoring below average in this biological assessment would be recommended to bring up fewer than two children whilst those above would be recommended to have three or more children according to their biological standing. Actually the factor of parental desirability could best be assigned to individuals before adulthood and marriage. The desirable number of offspring from each marriage would then be decided by compounding the fertility factors assigned to each of the parents. Thus a woman of average physique and mental capacity with a fertility factor of approximately one, who married a man of unusual gifts with a fertility factor of about two would normally bear three children.

Earlier eugenists were more acutely concerned with the problem not of raising the general level, but of so mating individuals that the weaknesses of one parent were compensated by the strong points of the other. All this was an unfortunate direction of eugenic effort, for in practice the likelihood of mating beings

[1] I am using wealth in terms of purchasing power (in respect to goods and energy). There is, of course, from the present viewpoint nothing to be said for the theory of equal wages for all, so long as wages are used for the present purposes of education and medical attention. For they are the only selecting forces until eugenic selection is instituted.

biologically monstrous is relatively rare and attempts to avoid it would involve an unhappy interference with individual liberty in a field where individual liberty is most prized. Moreover, it would lead logically to the mating of the strong with the weak and so to frustration of evolutionary aims. An American professor was led to suggest that professors should marry chorus girls and Bernard Shaw was reputed to have laid bare the weakness of the plan in a well-known witty rejoinder to a proposal of marriage. Such aims are not part of a true eugenic programme. Indeed, since the welfare of society frequently depends on the existence of a few men of very high ability, the reverse procedure—mating of the highly intelligent with the highly intelligent—is rather indicated.

If it be objected, as it undoubtedly will, that all this regulation of human individual birth-rate sounds fantastic and is technically impossible, I reply that that is not the slightest reason to reject it. Electric light is fantastic, aeroplanes are fantastic, and both were considered technically impossible. Vaccines, anæsthetics, and X-rays are fantastic, so is the idea that the sun is millions of miles away. Surely science must not be bidden to halt its progress whenever its findings are judged to be alarming by the popular mind.

Next, what of the cost of organising such a census? For even when we know more than now about the structure of the mind and can perfect relatively sure and rapid methods of measurement and diagnosis, there will always remain the enormous calculation as to how various aggregates of psychological and physical qualities in the population are destined to affect social and cultural evolution.

Now, in a properly organised society there will already exist several other reasons for requiring a thorough mental and physical examination and indexing of all citizens.[1] Let us see briefly what they will be.

If our education system is to become really effective, we must have a surer selection of scholarship children and of children for special schools. Especially shall we need provision for making this selection at earlier ages than now if children are to be drafted into different schools according to their own abilities instead of

[1] See, e.g., the article by E. N. Fallaize (Sec., Roy. Anthrop. Soc.), "Why Britain Needs a Race Survey," *Discovery*, Sept., 1929. Again, Leonard Darwin, discussing the orientation of social reforms and the need of improved social surveys writes: "A reform in our cumbrous and complicated system of registration is an essential first step for progress in many directions." There are indeed already many potent reasons for putting our national registration on a totally new footing.

according to the paying capacity of their parents. The scholarship examination as an intelligence test must direct children into various streams of education from the beginning. Then again, actual education of intellect and of character if it is to be an effective science must be based upon an exact knowledge of the innate tendencies and capacities of each and every child in the state system. Education will become correspondingly directed to individuals.

Secondly, we may expect sound vocational guidance schemes, based on appreciation of social needs and on exact individual psychological testing, to replace the present haphazard methods of choosing employment and employees. Such vocational guidance is already becoming a reality in the hands of the National Institute of Industrial Psychology and various psychological clinics. Such schemes must be extended to every area, so that, to the benefit of the nation and the happiness of the individual, each citizen shall find himself in an occupation offering the fullest scope for his own intellectual, emotional, and physical capacities.

Thirdly, if the democratic system of government is to be retained, it may become necessary to restrict the electorate in accordance with psychological tests of mental capacity. To that problem we shall return in a later section.

Finally, it is possible that in all sorts of situations of emotional adjustment, particularly in regard to prospective marriage, people will wish to obtain psychological advice as to temperamental suitability and general compatibility.

There are thus at least four important fields in which a thorough psychological and medical examination of all individuals is a prerequisite for advance to new levels of social effectiveness. What objection can there be to the expense of such an undertaking? At present there exists a wholesale re-duplication and wasteful overlapping of unorganised mental and physical examinations in connection with schools, insurance companies, and the entrance to various callings. The institution of a national registration system accessible to all services described would actually reduce, not increase, present expenditure.

But the primary need for such a system of exact psychological and medical assessment of citizens lies in the possibility of eugenic and cultural self-direction which will be grasped by the social group of the future. Then a census will not be a mere counting of heads, but a survey of the physical and mental resources of the nation. A great society different from anything we yet know, can only be built by a new breed of social engineers supplied with exact biological measurements.

We have outlined a constructive scheme which began as an

alternative to basing eugenic recommendations on mere outward evidence of the socio-financial success of individuals. The objections raised to the latter scheme were that the correlation of wealth with psychological qualities was at best very low, i.e. there were a great number of exceptions to a proportional relationship; and that wealth, although related to many good social qualities, also tended to connect itself with traits in some way undesirable.

There are, however, general objections to the substitution of economic terms for psychological ones. Firstly, in sociological and political theory, especially in the hands of economists, there is a tendency to simplify the individual to the status of the "economic man," against the fallacy of which McDougall has already objected. To suppose that all the psychological urges of man are integrated into a single desire for financial gain is to suppose both that man is more rational and less idealistic than he really is.[1] That attitude is bound to be productive of false impressions of social life and abortive efforts to control it. It has been suggested that in America where motives get relatively standardised and where, according to Murchison,[2] wealth is the greatest psychological prime mover, every man may be infallibly led by his purse strings. It is one of the aims of education to breed a certain obstinate immunity to such simple social responsiveness because a rich social life cannot long be built up on so uniform and mechanical a system of motivation. There is every temptation to run society on such lines. How delightfully simple is the prospect of making wealth correspond to virtue and ability so that thereafter we may esteem a man according to his wealth, deal with him at the bar of justice according to his wealth, and assess his eugenic desirability on the same basis? But on whatever system society is organised, there will always be values outside wealth, unpaid tasks to be performed that are vital to the very existence of the community, and principles to be upheld in the face of financial loss.

A great scientist, who has made contributions of immense value to his subject recently, made the immodest but truthful confession: "Possessions, outward success, publicity, luxury—to me these have always been contemptible. I believe that a simple and unassuming manner of life is best."[3] The best things which we enjoy to-day have not been produced by men striving for

[1] Tawney (*The Acquisitive Society*, p. 194) after discussing this question concludes: "It would be foolish to suggest that any considerable body of men are uninfluenced by economic considerations. But to represent them as amenable to such incentives only is to give a quite unreal and bookish picture of the actual conditions under which the work of the world is carried on."

[2] *Social Psychology*, p. 48: "The wealthy man is more universally admired by all conditions of men than any other type."

[3] Albert Einstein, "I Believe," *Sunday Dispatch*, 2nd Nov., 1930.

simple economic success, and so economic success cannot wisely be held up as an ideal to youth. The more eloquent words of William James can best remind us that the measuring-rod of monetary success is not to be used to assess social worth. "Think of the strength which personal indifference to poverty would give us if we were devoted to unpopular causes. We need no longer hold our tongues or fear to vote the revolutionary or reformatory ticket. Our stocks might fall, our hopes of promotion vanish, our salaries stop, our club doors close in our faces ; yet while we lived we would imperturbably bear witness to the spirit, and our example would help to set free our generation . . . I recommend this matter to your serious pondering, for it is certain that the prevalent fear of poverty among educated classes is the worst moral disease from which our civilisation suffers."

For these reasons, economic control of social affairs is a coarse tool which primarily affects the movements and views of large masses of people but misses any effective action on the leading points of thought and becomes less and less effective as more people come to possess without struggle the necessities of life.

I am not suggesting that economic changes have not been of immense importance in cultural life—even the spread of Christianity owes much to the poverty of the lower classes in ancient Rome—I am only reminding economists that it is impossible to think wholly in economic terms, and that we are moving towards conditions in which economic factors will be of diminishing importance in relation to originally psychological factors.

Now with respect to the operation of economic factors on eugenic processes, Professor Pearson has found that in England the laws preventing child labour caused a clear reduction of the birth-rate of the proletariat.

I nevertheless believe that the birth-rates will be very little affected by economic change from the economic standards existing to-day. Economic factors act well only under crude conditions and over certain ranges of poverty but the very poor and the moderately affluent, for example, are relatively indifferent to possibilities of saving and so are little affected by monetary incentives. Consequently I believe that economic conditions are to be regarded in themselves neither as indicators of parental desirability nor as means of influencing birth-rates in the desired directions.

Instead, a more progressive plan should be adopted in which individuals receive, as a result of psychological and medical examinations, a recommendation as to the number of children which the community considers they should have for the best fulfilment of its purposes.

Now, in practice, will a recommendation be enough ? Individual conscience has never yet been found to work effectively for the common good without a remnant of external safeguarding. What external force can be applied by the state to those individuals who make no effort to conform ? It might pay for the education of the advised number of children but refuse to pay anything for children in excess of that number. Such a procedure would be nonsensical, penalising the child instead of the parent. It might fine or imprison the parent. That is a suggestion to be considered.

Incidentally there will be critics to assure me that all this is an impossible infringement of individual liberty, and that indeed the psychological examination and assessment is itself an assault on adult dignity. Such a criticism will arise from an unclear perception of social principles and a false jumble of ideas in regard to human dignity. Every man is being examined by others, superiors and inferiors alike, at every moment of his life. His employer examines his mental and physical work and "passes" or "fails" him on it. The medical man examines him for insurance and professional entrance. The law courts are at liberty to examine him as to his integrity of character. Essential human dignity is the first right of every civilised man, but we must not be misled into petty ideas as to what dignity consists of.[1] And, as to constraint by society, has it not become so necessary a feature of civilised life and so much a part of ourselves through the influence of habit that we notice it only when it is new, ignoring the thousand other restrictions ? Moreover, every restriction which we in society impose on ourselves for the common good, brings with it new and greater liberties and powers. The philosophic discussions of liberty are too well known among educated people to need discussion here. The savage in the jungle has less freedom of action than the member of a savage tribe. The civilised citizen in a large metropolis has more freedom for true self-expression in spite of a thousand willingly-adopted "restrictions" than the tribal savage, and so on.

The first step for the nation that would achieve greater control of its destiny ; that would give its citizens freedom from poverty, purposelessness and cultural backwardness : is to control the number and quality of its citizens. And that control can come

[1] There are still an enormous number of savage survivals in regard to the idea of dignity, making it purely a matter of external show, e.g. an academic man is regarded as more dignified in a gown and hood than in any other costume, a man with beard and whiskers more so than without. The majority of the associations of dignity are as accidental and inessential as the rituals of religion. The essential dignity springing only from a consciousness of moral integrity can afford to dispense with these aids and with any "touchy" oversensitiveness with regard to the demands of the community.

through the individual conscience. Granted improvements in education which will enable all to perceive the religious significance of eugenic aims, we may expect a nation of citizens who can be depended upon, apart from accident and illness, to respond to recommendation as to the number of children they should bring up. Of course there will be criminals in this as in every sphere, and for those who repeatedly bring weakly, diseased and mentally-backward children into the world in face of recommendations to the contrary, there can be nothing but segregation or sterilisation.

One outstanding result of a nationally adopted scheme of racial control would be the abolition of many class distinctions in wealth and privilege, the maintenance of which is now rightly justified by their faintly favourable action on eugenic tendencies.

Let no one imagine that his views as to the necessary permanence of classes receive any support from the discussion on class distinctions in Chapter III. We gave attention to them simply as objects of our present social structure, a full examination of which is necessary in trying to understand the origin of dsygenic processes or the basis of social structure and the functioning of government.

The psychological examination I have just described would result in each individual being treated in all social, professional, and educational contacts, entirely on his own merits. Class distinctions which are at present a clumsy socially-evolved attempt to credit differences in innate and acquired ability and worth, would no longer have any function. Moreover, the decrease of "scatter" of native ability which eugenics would aim at, would remove the gross differences of capacity at present causing lack of sympathy between classes. A scheme of racial control would make true democracy possible for the first time.

VIII. The Organisation and the Initial Trends of Eugenic Competition

If such eugenic competition develops as an aspect of group cultural competition—and nothing but historical accident can prevent its doing so—we may well ask what further effects are likely to be produced, and where indeed such competition is likely to end.

The limit of eugenic application is likely to be reached when, and only when, relatively to cultural and economic activities, the energy and thought devoted to eugenic concentration ceases to yield an adequate return. That is to say, eugenic progress will

be the greatest that each nation can maintain.[1] It need be limited by economic factors only. Too sharp an orientation of eugenic selection towards a type will be prevented by an awareness that eugenic effort and the eugenic goal may actually be going astray in finer points. Too slack a selection will be prevented by the knowledge that with the scientific information available more definite steps could be taken, and are being taken by others, to improve the racial type. Possibly a time will come when, all harmful and deficient genes having been eliminated from the racial inheritance, progress will have to wait upon the appearance of fresh mutations to be examined and adopted or rejected as research shall indicate.

The fundamental eugenic goals, we have said, must be decided upon by the eugenic evolutionary group itself. Doubtless all groups will aim at an increase of general intelligence,[2] and an increase of the ability to store and handle facts—since this is a necessity of our complex civilisation to which few minds are now equal. Then perhaps an increase in mechanical aptitude relative to general intelligence will be aimed at, since our civilisation is bound increasingly to demand it ; and so on. An increased health and freedom from constitutional liabilities to disease and weakness will also, in all probability, be a universally adopted goal.

Doubtless when increased psychological and sociological knowledge is available, it will be found profitable to select also according to temperament differences, for although some temperamental

[1] We have discussed in an earlier chapter the theoretical question of the speed of progress in any direction. We encountered there an idea of a limiting speed to progress. That limit is set by the demand for happiness through expression of instinctive energy in less round-about ways than highly progressive conditions permit. A limit to the rigour of all forms of competition is set by that demand. Much individual competition is limited in the same way. Of two boys studying for a competitive examination, that one is favoured who can remain sufficiently happy to work at his study without excessive demands for relaxation and recreation (involving a more direct outlet for instinctive energy). It may be greater intelligence which gives one boy greater possibilities of such work than the other. But for every boy, there is a certain equilibrium point between simple and complex instinctive satisfaction. We compete in the economic sphere to the point when our boredom and unhappiness in gruelling work begins to balance our desire to succeed.

[2] There is already objective evidence that a slightly higher average of general intelligence in large groups results in a markedly enhanced standard of living and cultural progress. Alexander (see *Foundations of Experimental Psychology*, Murchison, p. 764) calculated the average intelligence of recruits from each of 41 states of the U.S.A., and correlated the results with various social data and with a total index of social progress in each state. He found the following coefficients: With percentage of literacy, .64. ; with number of citizens in *Who's Who*, .79 ; with educational status, .72 ; with percentage of people owning their homes, .68. All these figures show the closest connection of the average intelligence of a community with the social progress that it is capable of attaining.

factors are themselves determinants of the very ideals and eugenic standards for which the people as a whole will strive, i.e. are creators of values and are beyond the scope of assessment from the point of view of efficiencies in attaining goals, yet others are susceptible of objective assessment in regard to the extent to which they fit us for attaining goals already decided by other fundamentals of psychological and physical make-up. Thus, for example, accepting the conception that temperament differences derived from various patterns in the functioning of the glands of internal secretion (the conception sketched rather speculatively by Berman and others), one would surmise that a slightly enhanced thyroid functioning would fit most people somewhat better for the demands of modern life. It is to be hoped that such problems will soon be susceptible to an experimental solution. To discuss this and allied questions more fully would be of considerable psychological interest, but out of proportion to the main trend of our argument, and not justified by the extent of true knowledge in these matters yet available.

I know that there are those who will question the desirability even of some of the above qualities. Such people need not, of course, participate in any eugenic scheme. There are those who, seeing the demands which still exist for unskilled labour, deny that we need any general increase of inborn intelligence. Curiously enough, it is the same people who constantly complain of our "machine age"; that it is making life mechanical and that it "is deleting thought, initiative, and personal responsibility." Incidentally one may hasten to point out that the machine age is actually doing none of these things. By handing over mechanical work—digging, knitting, adding, sweeping—to machines, it renders us free from being ourselves machine-like beings. By drawing attention to the rewards awaiting machine invention, this spirit of mechanical improvement is encouraging the most intensive thought, initiative, and personal responsibility in a growing army of inventors who can never give us enough of their work. We need more and more inborn intelligence to rescue us still further from the slavery of being machines and to make the low-grade intelligences even more superfluous than they now undoubtedly are. Yet in a recent book (*University Education for Business*, Bossard and Dewhurst) the authors, finding that high intelligence is not conducive to good salesmanship (its possessors lose interest and go to other occupations), question the "widespread assumption that bigger and better brains are needed for all life's callings." Bigger and better brains in the community as a whole might do away with the necessity for all the futility of

advertising and salesmanship which now is so heavy and unnecessary a burden on productive industry.

Now, in addition to racial control directed to improving the average level of inborn qualities in the group as a whole, there will be attempts to improve the welfare of the community by deliberately producing the best possible distribution of inborn abilities, the optimum "scatter" for the conditions with which the community has to deal. At present there is every reason to suppose that a society with less scatter—with a less extreme range of ability—than now exists in most nations would be a happier and more efficient one.

In Chapter III we saw that democracy had found a home in those groups where the scatter of ability was relatively slight, where each man was aware of an approximate equality to his fellows.

The first premise of democracy, that "all men are born equal" is patently false, to an extent which we have already assessed. It must be civilisation's next act of wisdom to perceive that a desirable democracy is one in which we have first made this premise of democratic theory a reality by eugenic planning. We may, of course, decide, for reasons beyond our present survey, that a wide scatter of ability within a nation is actually desirable, in which case we must prepare to give up democracy and return to a humanitarian and enlightened system of castes, aristocracies, and serfdoms, or some social form not yet known to us.

I believe, however, that a fuller enquiry will merely confirm the superiority of a group in which all members are of approximately equal ability. (It is almost certain that in a successful group there must be similarity of temperament.) Such an arrangement would facilitate all social organisation. It would draw all together into a class unity, for it would eliminate those big differences of ability resulting in vast gaps in culture and social standing between classes which make life now so full of invidious situations for the poor, desolating and revolting ones for the cultured, and an enervating existence of triviality for the rich.

In almost every direction these real differences of innate ability, which become magnified by the resulting differences in educational opportunity, result in disruptive cleavages within the state. The reader who has followed the investigation of Chapter III closely will probably have concluded that many of our past or existing class distinctions and privileges are in fact justifiable and necessary reactions to very significant differences of average innate capacity. Older, conservative opinion, proceeding intuitively and illogically, in every way countenances cliques and exclusive rings. When Russell complains, for example, that Mrs.

Sanger's book on birth control was banned because anyone would read it, whereas Dr. Marie Stopes' books were not illegal because only educated people could follow her language, he was struggling against but one of the many unwritten regulations emanating from class differences. In this case, society judges that certain views and information are only safely to be propounded to those with a certain amount of ballast in the way of education, so it insists that medical and highly controversial social matters shall be written in a form only accessible to the highly-educated. That the highly-educated are often the badly-educated is beside the point in the present issue. Philosophers have frequently screened themselves from more purposeful and less rational popular interests by such means. "By a few deft phrases," said a famous philosopher at the commencement of a public lecture, "we draw a screen between ourselves and the philistines."

When such mechanisms arise from true differences between strata in the same society they are necessary but unfortunate consequences of those differences which weaken the unity of spiritual development in that society and cripple its offensive and defensive vitality. One example of the awkwardness of this cleavage weakness is seen in the way in which public opinion is rendered an unsuitable tool of moral control owing to class differences in ethics. Modes of behaviour rightly accepted in the conditions of the upper-class life are rightly frowned upon in the lower middle classes, and vice versa. Until these compartments within the nation are abolished, all ethical questions will remain complicated and obscured to a degree incompatible with the best life of the nation. But when difficulties arise simply from a grafting of these exclusive class-distinction habits (themselves to some extent legitimate) on to entirely artificial groups created simply and solely for the sake of maintaining an esoteric group, they are a social abomination.

There are to-day in America and Germany, perhaps less so in England and France, all sorts of cliques and societies satisfying no other purpose than the childish desire of half-grown adults for a gang life of boyhood. Possibly this stage of boyish development was omitted from their childhood education. On a more dignified plane we have an Oxford and Cambridge clique—an unwritten law according to which members appoint brother members to positions within their control in face of better qualified individuals outside the brotherhood. Similarly, Welsh Universities favour those of Welsh origin, though the English Universities exercise no opposed selection and so have a greater collection of ability from which to select.

These bodies have no useful function and only interfere with the smooth and effective running of the larger national group to which they are parasitic. A rearrangement of national population with a view to avoiding sharp differences of temperament and ability would leave no justification for these or any other lines of separation within the body politic.

Human sympathy is everywhere rent by these differences. What university-educated man can feel himself at home with a crowd of our bank holiday proletarians moving like locusts across our countryside. His human feeling and the consciousness that he is rather lucky than superior, may help him to mix with all and sundry, but he can find no satisfying companionship with a man whose reading extends to a credulous devouring of newspapers, whose hobbies are betting and newspaper competitions, and whose ideas on all subjects are grossly immature. These differences are only to be moved at root by a selection of inborn qualities in accordance with a better general equality.

Again, the society that attempts to maintain a small class of able and educated people, whilst neglecting the degeneration of its lower members, pursues a course which all history shows to be highly dangerous. Sooner or later this upper stratum becomes ineffective through gradual admixture with the despised lower types. India and Greece leave behind little but the record of classes which were undoubtedly of first-rate ability. In our democratic non-caste societies an even shorter period would suffice to degrade a highly able class living in contact with extensive low-grade elements. Civilisations which imagine that the principle of aristocracy is anything more than an unhappy makeshift are harbouring a fatal delusion.

The objections to employing racial control to reduce these unhappy differences of inborn calibre among individuals bound in the same state are mainly in the economic sphere. Machinery requires minds of immense ingenuity for its invention, but almost sub-human minds for its operation. Two distinct levels of mentality are apparently required. To which one can reply that, were the able inventive minds a little more able and of greater numerical strength, they could produce such inventions as to do away with the need of sub-human occupations almost entirely. Moreover, though there are bound to remain many occupations, especially in the domestic sphere and agriculture, which do not take up an able person's full attention, their existence is not entirely a burden or a degradation to those able people forced to undertake them. They will occupy, in any case, only a fraction of the worker's day, and leave him with so much more energy available for the educa-

tional and recreational activities with which he will learn to fill his leisure. In this respect it is worthy of note that an intelligent railway worker or pit hand often has more mental energy available for enjoying his own liberal education than has a school teacher.

Although most arguments favour the fashioning of a well-sorted population containing no lower extremes of capacity—no social tail of relatively subnormal beings—there are certain considerations favouring a good scatter upwards, i.e. in the direction of extremely high ability. For example, it may be asserted that in war and in industrial undertakings a mass of relatively low-grade population having a few very able leaders, is bound to be more successful than a group composed of individuals all midway between the extremes of the first group. The decision in such matters seems a matter for psychological experiment with small groups arranged to present various constellations of ability. Intuitive thought and human feeling would incline most groups, I think, to believe in the greater desirability of a society representing a humanity well-knit by a community of intellectual abilities and comparable life tasks. Scientific evidence in favour of either development is as yet lacking. In any case, the production of greater intellects will probably be as rapid as possible in all groups, so that the particular form of frequency distribution which appears in the uppermost levels will not permit of further control.

IX. Government by Scientists—the Government of the Future

To such a plan of evolution our investigation of social progress leads us. The first concern of the constructive sociologist must be to show how progress in inborn characters can be brought about; for on the continuation of such evolution under civilised conditions depends advance in all other spheres of human activity. But, having described in some detail the requisite mechanism for that purpose, we must pass on to see what psychology can offer towards the improvement of cultural evolution and the maintenance of progress in social structures themselves. Every reform, every progressive step in social life, is at present gained only at the cost of an absurd fight with stupidity, and with unnecessarily great expenditure of energy. Innovations that have the approval of reason and scientific knowledge meet with just as much obstruction as those which arise from freaks of fashion and popular delusion. It is in the first realisation of the immense stupid inertia of the popular mind when it is faced with changes clearly productive of human betterment, that many thoughtful people turn to

the study of psychology, with the hope of understanding and alleviating such social paralysis. As they acquire the psychological point of view and come to appreciate the beautiful orderliness of the group mental mechanisms underlying this social confusion, they all too frequently end by ranging themselves against the reformers, imagining that by understanding the irrational opposition they have justified it. They are like carpenters who, finding the wood refractory to their purposes, set out to study the grain of their material and as a result, abandon the intention of their original construction. Their study should in truth show them how, with greater knowledge of their material, to attain their original goal in spite of its difficulty ; to attain in fact to rational progress and education in spite of the possibilities of irrationality latent in the mass mind.

Generally our reforms arrive too late to meet the conditions which called them into being (especially if it is a matter of parliamentary legislation). Wells's whimsical notion of the "Theory of the perpetual discomfort of the majority," according to which each reform arrives just in time to harrass the reformers now passing on to the next reform, is no very fantastical reflection of present reality.

Some answer to this strange riddle of apparent apathy, obtuseness, and wilful opposition we have sought in our enquiries. We have found that prejudice, for example, is a defence not only of stupid notions but of many valuable attitudes not to be comprehended by a hasty and ignorant philosophical rationalism. Macchiavelli, I believe, maintained that the ruler who wished successfully to introduce a reform should do so by dressing it in an old guise. Trotter, in his valuable but partial psychological interpretation of society, has suggested something similar. This is where psychological expediency begins to threaten society's intellectual integrity. Such direct countering of the psychological forces of prejudice with equally irrational ones may appeal to the psychologist as strong drugs once appealed to the medical man. But the desirable remedy is prevention through the inauguration of a healthy social mechanism which will enable society to produce new ideas to test them and to digest them without difficulty.

There can be no doubt that in every sphere of social life the balance between conservatism and enterprise is set too far towards conservatism. For one evil that arises from rash innovation, there are ten arising from stupid conservatism. Bagehot said long ago :[1] "The great difficulty which history records is not the difficulty of getting a fixed law ; not of cementing a cake of custom, but of

[1] *Physics and Politics.*

breaking the cake of custom ; not of making the first preservative habit, but of breaking through it and reaching something better."

The psychological roots of this are many and strong. They may be briefly analysed as follows: Firstly, natural physiological conservatism inherent in all living matter, and related to the fact that far less energy is used in performing an accustomed action than a new one. This conservatism increases in age and sickness when energy becomes less. Secondly, conservatism due to herd persecution of whatever is eccentric. Thirdly, conservatism due to older customs becoming wrapt up with the prestige and self-assertive satisfaction of the older people in power. None of these is a biological force shaped by group selection and primarily designed by nature to maintain a necessary social conservatism. The only things that will ensure freedom from conservative timidity are intelligence and knowledge, for these ensure fine judgment and adjustment to changing conditions. With the cultivation of these must go the setting of control in the hands of those least likely to be conservative from the above causes. Especially we need consciously to counteract the constant tendency for power to fall into the hands of the aged. Throughout Europe this danger is very great at the present time, owing to the relatively young having perished in the war and owing to the restriction of the birth-rate compared with the rate of fifty years ago. "It seems to me probable," says Professor Lionel Robins, "that in the past there have been too many old people in positions of authority. But if there is anything at all in the statistical tendencies I have been discussing (increase of numbers in upper age groups), it seems likely that this preponderance of older people will be increased." This outlook surely demands every compensating mechanism to be put into action if stagnation and conservatism are to be avoided in this country. Otherwise, as Barker says, "We may become, as it were, a little more Chinese in our characteristics—unless, indeed, the young set the fashion, and the old, resolved to protract their youth, study to continue a youthful temper."

Before society can set about removing this dangerously excessive ballast of conservatism, or begin a new era of cultural development, a new social guiding force must be instituted. Our enquiry leaves no doubt as to the essential nature of this new mechanism.

In Chapter VI we examined the clumsy attempts of the press, the platform, and philosopher's library to lead an increasingly complex civilisation by outworn and dangerous intuitive and pseudo-rational methods. A totally new possibility appears with the application of science itself to social life.

We come at last to Plato's government by philosophers (for Plato's philosophers are scientists), or Bacon's government by an institute of sociological research with a system of democratic representation.

How absurd is the huge gap which has always existed between the men whose business it is to know and the men whose business it is to act.

To-day, many a scientist spends his life solving problems relative to the psychological, sociological, and economic life of the community, only to find, when at last he stands with the solution in his hands, that he is in no position to bring it into effect. Many political problems are matters for prolonged research. The true scientist-politician proceeds to undertake that research, but the magnitude of the task takes him away from politics into science for the greater part of his life, and his devotion to truth simply leaves him in a position for which it is impossible for him to translate his wisdom into political actuality. We want a bridge over the chasm between science and politics.

This does not mean that the goals of social endeavour are to be independently chosen by a body of social scientists. There the democratic mechanism plays its rôle. We have seen that, in a general way, the goals striven for by different races of men are inherent and potentially defined in their native constitutions. It may be the scientist's duty to be a midwife to the true needs of those he serves; it is not his task to invent their feelings and intuitions. Government, like everything else, must eventually be left to specialists, but it must not be taken out of the hands of an intelligent citizen who cannot afford the time to acquaint himself with the immense number of facts available to the specialist. The wishes of all must be respected and honestly interpreted. But when the general natures of the social goals have been fixed, probably by a psychological survey in which each individual's expression of opinion—his vote—will be only a minor part, it is certainly the task of the social scientist to find out the best means of achieving these goals. To the suggestion that there should be government by scientists, J. W. N. Sullivan replies: "With the majority of scientific men their habit of cautious weighing of evidence, their ingenuity in reducing a problem to its essentials, their lack of prejudice in coming to results, do not noticeably extend to their political opinions. They read newspapers as uncritically as does any other kind of uneducated man, and far more uncritically than the most insignificant Fleet Street journalist." Scientific method, it is true, does not extend with equal effectiveness outside the field in which it has been learnt.

With the scientist, as with the philosopher, it is possible to over-estimate the powers of intelligence and to under-estimate the wisdom that comes from a thorough knowledge of the facts in a particular field. Political problems must be left largely to scientists trained in the sciences concerned with politics—psychology, biology, and economics. Nevertheless, the mind of every scientist does, to an appreciable extent, carry over scientific method to other fields.

When one considers, too, the selection for ability and good judgment through which men of science have gone, the introduction of scientists as a whole to a part in the government of the country is seen to be of the first importance. The above philosophic writer has also argued that science cannot afford to have its best men drafted into administrative positions. "Was it a gain," he says, "that Newton should have become an industrious and conscientious Master of the Mint, seeing that he produced no more original work in science for the rest of his life?" This is a reflection, not on Newton's wisdom, but on the ignorance of a community which would not support him in such a way that he could carry on his researches with a minimum of expenditure of time on his routine work.

It may also be urged, with truth, that scientists being the most busily engaged of educated men in absorbing work, have no wish to enter administrative posts. "Let some fool do that who has nothing else to do," is the general retort to invitations to control. He generally does. The disastrous results of this policy on the position of progress and the service of science to the community we have already witnessed in university organisation. With an appropriate increase of the number of men now engaged in scientific work, science can and must be prepared to spare some of its members for a government based on research, biological principles, intelligence, and goodwill.

Government by men trained to the impersonal attitude of science, ingenious, curious and loving truth, would at least succeed in one function for which present governments are impotent: the attainment of stated and agreed goals. For they would not be crassly ignorant of biology, and would use all the possibilities of analysis, prediction and control which developed psychological, economic and social sciences could offer. But such government would do more: it would assist us in fixing the most significant goals for our endeavour. And to show how this would be we must first analyse the weaknesses of democratic representation, for it has recently been much attacked though little analysed.

In a recent broadcast symposium[1] of thought contributed to by

[1] October 1929. Printed in *The Listener* for that month.

Shaw, Wells, Inge, Haldane, and others, the fundamental basis of democratic government was subjected to severe criticism by the very thinkers who are generally supposed to be its supporters. These same essayists have also written more extended criticisms in books well known to the purposefully-reading public. The criticism of the democratic system turns largely on the incompetence of the electorate. But, in presenting opinions on that subject, we must not forget that the party system is a very crude mechanism. Our investigations into the biological needs of society have surely shown that our problems are not to be solved in terms of our present political alternatives. Socialism and Conservatism are mutually complementary aspects of truth in many spheres, in others they are the will to change and the will to be left alone, and yet again they are reflections of the temperamental and dispositional differences of men. Capitalism and Communism are merely personified powers not existing as entities outside the quaint, primitive, melodramatic mind of Karl Marx. We can construct such parties and systems as we can construct cardboard giants to amuse us at a carnival, but they are artificial things bearing little or no relation to the countenances of true biological advance or retreat.

The fallibility of an electorate restricted by no psychological tests of ability or knowledge is, however, the greatest weakness in our present democratic system. It is unnecessary to reiterate shrewd opinion on this matter or review original psychological data. Hollingworth, in drawing practical conclusions from her study of special talents and defects in the population, has rightly asked with respect to the lower intelligence grades: "Is it possible for education to prepare the lower half of the distribution curve for self-government?" Considering recent discoveries as to the mental capacity which characterises the lower half of the population when adults, is it possible that education will ever be able to nullify the charlatan influence of demagogues whose appeal is to prejudice and cupidity? These questions remain unanswered.[1]

In the face of such facts one frequently meets with the rejoinder that the electorate is not the real ruler; that the views of the uneducated do not matter; that, after all, the educated few,

[1] A glance at historical happenings is, however, a rough answer to this query. Dean Inge (*Labels and Libels* in *Assessments and Anticipations*) quotes approvingly Sir Henry Maine's observation that "Universal suffrage would have prohibited the spinning-jenny and the power loom, the threshing machine and the Gregorian calendar; it would have restored the Stuarts. . . ." Inge adds: "Democracies, another critic has said, always die young, and of the same two diseases—the destruction of national credit and prosperity by predatory legislation, and the emergence of militant groups which the State is too weak to control."

by their influence, are the only minds it is necessary to take into consideration. I find this view both cynical and false. The less educated have equally a right to the consideration of their aspirations, and they can in fact offer a resistance to manipulation by educated authority which cannot be overlooked. In any case, the opinions grafted on the passions of these intellectually passive minds are not those of the educated and clear-sighted minority as such, but the views of financially interested groups. Graham Wallas has well said: "The more serious grounds for apprehension come from the newest inventions of wealth and enterprise, the up-to-date newspapers, the power and skill of the men who direct huge aggregations of industrial capital." Already we begin to stagger under the government of such a democracy, and already we have seen all progressive ideas ignored or brought to nought at its hands.

Considering these suggestions in the light of a broader psychological investigation one can perceive some three directions in which democratic government could be immediately improved. Firstly, the electorate might be restricted to about two-thirds of its present extent by the application of mental tests, including intelligence tests, and tests of the knowledge shown on leaving school.[1] Shaw has made such testing an article in his democratic creed, though apparently being unaware of the progress which psychology has made in this direction. He is particularly concerned to extend such a selection of intellects, however, to the people elected—the senators and members of parliament.

"What I should like to see," says Shaw,[2] " is a real test of their capacity . . . we could then have a graded series of panels of capable persons for all employment, public or private, and not allow any person, however popular, to undertake the employment of governing us unless he or she were on the appropriate panel. At the lower end of the scale there would be a panel of persons qualified to take part in a parish meeting; at the higher end, a panel of persons qualified to act as Secretaries of State for Foreign Affairs or Finance Ministers. At present not more than two per thousand of the population would be available for the highest panel." Incidentally, this repeats from the single aspect of government the demand for a universal service of vocational guidance by psychologists, the need for which we have emphasised in earlier chapters. Thereby the individual's right of self-determination would not be assailed, but the influence which a man should wield would be decided by his capacities, not merely by his skill in impressing other people.

[1] *Democracy under Revision.* [2] Preface to *The Apple Cart.*

What have politicians themselves to say to applications of psychology to government? One great politician (in England) at least is alive to the wider possibilities in making a science of government. The Prime Minister, the Right Honourable J. Ramsay MacDonald, speaking at the annual dinner of the National Institute of Industrial Psychology, in November 1929, suggested "a special department should be added to the activities of the Institute to look after what is one of the most important industries—that of public government. I do not venture in a gathering like this to pursue that subject any further; but I feel certain that, whatever your point of view may be, you will all join with me in putting up a prayer that science and art may be applied both to industry and legislation." This is rare vision for one so acutely occupied in the rough and tumble of immediate political necessities.

A second revision of democracy concerns the things for which we vote. At present we vote for one "complex" of causes as against another complex. The items of this complex are supposed to hang together logically, but actually they do so in only the weakest fashion. Even if the movements and reforms supported by each party were uniformly sympathetic to a certain temperament type, there would still be many individuals whose mixed temperaments would urge them to partake of an "illogical" selection. But no such necessary connections can or do exist. I am asked, for example, to vote for nationalisation of industry, decrease of armaments, extension of educational opportunity, increase of the dole, free trade, increase of "working men's" wages, and retraction of economic control in Africa and China. Or I may vote for the party which sponsors the opposite changes. What necessary relation have these changes to one another or to a biological conception of progress? I may find myself in favour of decreasing armaments; increasing education; unable to decide, without expert economic enquiry, on the question of nationalisation and tariff reform; opposed to increase of the dole without eugenic safeguards, and to the cessation of European development of backward areas. This confusion, making voting nonsensical to the intelligent portion of the community, removes from the electorate the small proportion of intelligent direction that made democratic representation anything but a complete farce. In Germany my choice would be rendered still more embarrassing by my being asked to champion or oppose Jews, and by my religious standing—Catholic or Protestant—being dragged into the issue. The fact that I should have eight or nine parties, representing new possibilities of combination of the old items, to choose from, would make a satisfying choice somewhat easier, but government much

more difficult. The dilemma is not to be solved by the purely arithmetical device of increasing the number of party viewpoints. The scientific sociologist would first give attention to developing principles which will show clearly what ideals really converge in each single direction. Having worked out, with the aid of economics and psychology, how various measures truly form complexes of policy heading in definite biological directions, his task is then to change the election to a vote on, at most, half a dozen "complexes" of items instead of two or three candidates. The outcome of an election, too, must not be an "all or none" result, but one graduated quantitatively according to the number of citizens for or against. Our present election procedure savours too much of an ancient decision by combat. We put two or more parties in opposition, and the winner, no matter what the margin of his victory, proceeds to enforce his every wish on the losing minority, with no more accommodation to their views than an obstructive opposition can produce. Imagine such a state of affairs internationally, if there were an international democracy! Although England, for example, counts a little in comparison with Russia, no item of its suggestions would be put into practice, but every item of the Russian programme would pass into force because of the preponderance of votes which Russia's population would constantly have. For our present non-quantitative election solutions, the minority does not exist. A sound psychological weighing of desires would find the optimum requirements for the group as a whole.

An election on such lines would be preceded by a period in which the newspapers could set out clearly the findings of specialist bodies—economists, psychologists, doctors, and sociologists—on the issues involved and the results likely to ensue from each of the alternative courses. The divergencies both in policies and in resultants would frequently be not a matter of this or that movement, but of more or less of some recognised change. All this supposes that sociologists shall have investigated social mechanisms sufficiently to be able to make such predictions of effects from causes. If it is to be possible to put before the average man, as a calculation and in relatively precise technical terms, the issues of various courses of action, then our schools will have to include civics—a broad study of economics, sociology, psychology—in the final school years.

The result of the election being thus expressed in direct quantitative recommendations regarding each of a few coherent lines of policy will be that it will remain for the legislative body, without opposition and without debate, to work like a body of engineers to put these recommendations into effect.

I say without debate, but I do not mean without discussion, for we may hope that a re-orientation of the classico-literary spirit incidental to the education of our rulers towards a more scientific spirit, will have carried still further the change which Dean Inge thinks is already evident when he remarks: "Even in politics and religion, where passion and prejudice are most potent to obscure the intellect and distort the judgment, there is a higher standard of veracity and more respect for evidence. Rhetoric and advocacy are distrusted. The scientific spirit has transformed history, and has imposed rather more conscientiousness. . . ." The discussion of the legislative body will then be of the nature of the calculations of a committee of scientists.

All this brings populace and legislature into a relation parallel to that of patient and physician. The patient may announce his desire to get better or worse, and the physician can tell him the means by which he can attain either of these goals. And is not sociology as complicated as physiology? Or again, this proposed mechanism of government might be still more aptly likened to the desires, the knowledge of how to satisfy them, and the action of satisfying them which goes on in the human organism. The task of the governing scientific brain is firstly to devise a mechanism highly sensitive to the organic needs of the body politic; secondly, to understand what objects will satisfy those needs and how they are to be obtained; and thirdly, to be skilful in directing the adjustments of the social body necessary to attaining those ends. The government of the future will thus split up what is a single and confused process into distinct stages: it will keep more scientifically in touch with the physical and mental condition of its populations; it will assess the desires, needs, and goals on a scientific basis and leave to trained sociologists the calculation of means to those ends; it will be as different from our present system as the mammalian brain is from the crude nervous connections of the jelly fish, and it will be proportionately less time-wasting and ineffective.

If it should ever prove possible to take a vote on fundamental attitudes instead of asking the elector to prescribe for himself, and from a quantitative attitude picture work out the measures best calculated to meet the demands of those attitudes, government would enter a stage approaching perfection in proportion to the perfection of sociological science.

But to return to the more immediately practical consideration of suitably modifying present governmental structure. When the democratic mechanism has been modified, and when the issues of party difference have been drawn up according to a sounder

scientific division, there will still remain the undesirability of present parliamentary methods—the methods of debate and discussion. And there remains, above all, the glaring fallacy of government by unselected and untrained men, ignorant of science in an age when science is shaping civilisation and when government itself increasingly demands the methods of science.

Is it to be wondered at that the scientist, glancing up from work which he believes to be more valuable, begins to lose patience with the futile methods of those who carry on the necessary business of government? He sees endless bickerings, insincere sentimentalities, and dramatic gestures where he rightly suspects that scientific methods are possible. He sees again and again proposals and arguments which would be untenable in science put forward by men ignorant of scientific method and lacking the insight or patience for its application. One wants at least the sober, truth-seeking purposefulness of spirit which brings dignity, even in the absence of success, to scientific work. Wells looks from politics to science and confesses: "In the scientific world I find just that disinterested devotion to great ends that I hope will spread at last through the entire range of human activity." How can such hopes be given practical expression? Are we to demand simply that there shall be an increasing provision of scientists—economists, chemists, biologists, psychologists—acting in an advisory capacity to the legislative body?

The real government of the country is frequently said to be in the hands of advisory bodies. Shaw asserts that "we are now governed by a Civil Service which has such enormous power that its regulations are taking the place of the laws of England." That is not such a bad state of affairs providing that we choose our civil servants well and take steps to see that the service does not suffer from the typical diseases—infallibility and conservatism —of such bodies. But we do not choose our civil servants well. We select men of good ability, but men as ignorant of scientific knowledge and spirit as are our members of parliament.

The only true solution seems to be that of adding to legislative chambers a second house composed of elected scientists.[1] These men, among whom sociologists, economists, psychologists, biologists, medical men, and anthropologists would predominate on account of their conversance with the subject matter, would be

[1] Such a house might be constructed in England from the House of Lords. If rightly composed of a preponderance of biological scientists it would certainly maintain those relatively obscure but profoundly important principles for which the House of Lords, in all ignorance, has stood in the last century, e.g. the restriction of the electorate, and the maintenance of some degree of hereditary differentiation.

elected in the usual way from their special scientific bodies—the learned societies. Their function would be to formulate sociological issues in the most logical and intelligible form; to reduce problems to their fundamental biological terms, and to exercise a stimulating and inhibiting action (perhaps by veto) on the legislating tendencies of the House of Commons.

Of the advantages and disadvantages of bureaucracy something has already been said. J. S. Mill long ago (in *Representative Government*) made an analysis of the pros and cons in this and other questions of government, which has never been bettered. He concluded that a bureaucracy was not sufficiently responsive to the will of the people and that it tended to become too conservative. Government by scientists, however, could never be simply government by a bureaucracy. In the first place, it would definitely recognise the need of a special machinery for estimating the will of the people. Secondly, being composed wholly of men whose activities by temperament and training are inclined to experiment, progress, and adventure, it would be a government peculiarly free from this besetting disease of established officialdom.

But how, it may be asked, is the electorate to be sure that a scientific body not elected directly by itself will carry out its wishes? Notice first of all that under the present system there is no guarantee that M.P.'s will act in this way—at most people can refuse to re-elect those whom they imagine to have defaulted.[1]

The first guarantee will be the selection and education of the scientist. Psychology is giving us a fuller understanding of the real roots of integrity—an understanding which, applied to education, will do away with the need for the cruder checks which it is necessary to maintain to-day in so many occupations. Secondly, scientists must select their members for office according to the agreement of their professed opinions with the programme indicated by the popular vote. We may suppose that a body of research workers at least three times as large as the legislative body will be maintained by the community at the same financial level as those actually engaged in legislation. From among these, the individuals who find themselves particularly in sympathy with the trend of the current democratic wishes will volunteer to change over temporarily to the legislatively active body and will submit themselves for election. The differences in opinion in such a body will in any case be less than those in the population at

[1] "As it is," says Shaw, "the voters have no real choice of candidates. . . . By chance rather than by judgment, they find themselves represented in parliament by a fortunate proportion of reasonably honest and public spirited persons, who happen to be also successful public speakers."

large, just as the differences of opinion among physicists as to the shape of the earth are less than those among people in general.

Thus, suppose that sociologists propound the question, "Is the congregation of population in our towns such that we are suffering unnecessary economic, physical and spiritual loss?" and present data to show the psychological economic and social effects of changing the present population distribution. And suppose the electorate considers those effects and decides for a lesser density in towns, then those scientists who are themselves slightly more inclined to that view than their fellows will take in hand the task of altering various factors to produce the desired results.

Such an organisation precludes any possibility of a scientific body ruling the country according to its own intentions and not according to its own knowledge and the will of the community. Here we have more checks on integrity than we have in the civil service or the House of Lords. And if prejudices still linger, let us ask ourselves what ulterior motives a body of scientists, drawn from the length and breadth of science, could possibly have as a whole?

To suggest the steps which could now be taken to bring about such a saner plan of government is a difficult task. Probably the better organisation of scientists themselves and their representation by a special party in parliament is a necessary initial change. Only education, however, can bring the community to the state of wisdom in which it will perceive the desirability of organising government on the surer basis which has proved so profitable in all its other activities.

X. *Modern Society's Greatest Stupidity: the Impoverishment of the Source of Prosperity—and of Greater Things*

However desirable the prospect of introducing new and scientific methods into government may be, we must face the fact that at present democratic government is being thrust in a very different direction by forces which, though they may be transient in an educated country, are none the less strong.

Principal among these forces, if we are to accept popular belief, are the interests of organised capital. It is unnecessary to recount the multitudinous ways in which democratic legislation may be thwarted by capitalist agencies. Shaw will cheerfully inform us that the whole democratic machinery is at the mercy of large industries—the agencies of "Breakages and Co."—concerned to maintain the profits of particular sets of shareholders at the

cost of the health and integrity of the social body—and succeeding shamelessly in their endeavour. But a non-partisan survey cannot overlook the equally powerful organisation of wage-earners. Here we have a second frustration of parliamentary machinery in the tendency to slide from general representation to mere control by occupational groups—the trade unions. These groups, beginning as protective organisations of the poorly-paid, have spread to all occupations, and the trade unions are now only a particularly obvious example of the general organisation of those who earn salaries and those who earn wages in their various occupational units. This tendency, has gone far in America and led McDougall to assert, "the elaborate organisation of occupational groups that has grown up in modern times, the struggle between such groups for the raising of the standard of life of each group, relatively to and at the cost of all other groups, has become a very sinister feature of democracy."[1] If such a purely disintegrating movement ever threatens normal representation, it cannot but be regarded as undesirable, though as long as it continues as a means of adjusting wages to the ability of those practising each occupation, a function which it would successfully perform by reason of the greater diplomatic success of the occupations with more intelligent members and leaders, it can only be regarded as a necessary mechanism in social life.

The tragedy is that all these movements proceed on the same old all-too-human plan of self-interest and immediate results, as if no new spirit or new possibilities of social organisation had come into human life. They evince no more imagination, no more grasp of the possibilities of applying science to human life, than did the analogous groups in ancient Rome. Yet we glibly speak of social progress, and imagine that the improved state of our lives to-day is due to real advances in social organisation. Our material prosperity, our greater leisure, our incomparably higher level of general education, our increased realisation of social justice—all these things which make life to-day a fuller and saner experience than ever it was before—are falsely ascribed to an acquisition of greater wisdom on our part in cultural matters. Such a belief is implied in every popular discussion, and in every newspaper article, with the result that we come to believe that our social organisation stands at the head of a long era of progress stretching back through the centuries. Then we congratulate ourselves on the progress we are now making and turn with renewed interest to "improving" social organisations on the same lines.

[1] McDougall's *America safe for Democracy?*

In truth the whole of this social improvement is but the reflection of the great advance in physical science and discovery.

In England, for example, our political and social organisation shows no essential difference from, and certainly no demonstrable improvement upon, that of the days of King Alfred. Yet the lives of all are happier, and the possessions and luxuries of the poorer classes are a thousand-fold greater. In spite of a vast increase in population, ninety per cent. of the people take as a matter of course a plentifulness, variety, and cheapness of food unknown in any previous age. The clothing and adornment only possible to a queen in earlier epochs are now the possessions of every working-class woman. Leisure has increased. Life has been rendered fuller and more varied, disease and premature death have become the exception instead of the rule. Through all this change political and social forms have come and gone: the steady tide of progress has clearly been something totally distinct from the waves of political fashion. Even in 1848 Macaulay was moved to write the well known lines: "It can easily be proved that, in our own land, the national wealth has, during at least six centuries, been almost uninterruptedly increasing; that it was greater under the Stuarts than under the Tudors; that, in spite of battles, sieges, and confiscations, it was greater on the day of the Restoration than on the day when the Long Parliament met; that, in spite of mal-administration, of extravagance, of public bankruptcy, of two costly and unsuccessful wars, of the pestilence and the fire, it was greater on the day of the death of Charles II than on the day of his restoration." This progress, having continued during many ages, became at length, about the middle of the eighteenth century, portentously rapid, and proceeded during the nineteenth with accelerated velocity.

Let us set beside these words some remarks of Sir Herbert Samuel, comparing conditions of to-day with those of forty years ago[1]: "Much poverty and suffering remains, but far less than prevailed forty years ago. Wages have risen and the cost of living has fallen. The real wages of the skilled workman—his wages in terms of the articles the money will buy—have risen in that period, we are told, by fourteen per cent.; those of the unskilled worker, by twenty-eight per cent. At the same time the weekly hours of labour have been reduced—by about one-seventh. The unskilled labourer to-day will receive for one hour's work half as much again, measured in commodities, as in 1890.

"Forty years ago eighteen people in every thousand died each year; now the figure is twelve, a reduction by a third. Of the

[1] "The Brighter Side of Things," *John o' London's Weekly*, May 16th, 1931.

infants born, one hundred and fifty in every thousand died in their first year; now the figure is sixty, a reduction of much more than a half. Rates are heavy no doubt; but it is better to pay rates and live than to pay none and die.

"Education has made great strides. We are told in the new London Survey that, forty years ago, nearly half the parents of the children who were then at school had themselves received no education at all; now the proportion is less than five per cent. The quality of the education given has markedly improved. The opportunities of proceeding from the elementary schools to secondary and technical schools and to the universities have been greatly enlarged. The committals to prison, for all causes, have fallen by three-fourths in the same period; they were 159,000, they are now 40,000. Nearly half the jails of the country have been closed, and the sites and buildings transferred to other purposes.

"I have added up the figures of the savings of the people—the deposits in savings banks, building societies, and co-operative and providential societies. . . . The corresponding figure for the latest year . . . is no less . . . than seven times as much."

It is unnecessary to go farther. We speak in these days of trade depression. What trifling reductions do such things cause, relative to the advance that has been made. It is an interesting exercise for any educated man to construct for himself a picture of what the world was like, fifty, a hundred, two hundred years ago, and to compare it with to-day. Let him think of domestic comforts, artistic surroundings, ease of transport, security for the aged and the sick, and not only these but the changes in the general atmosphere of life—the decline of viciousness, of repressive intolerance; of superstitious fear, the spread of light, knowledge, and breadth of thought. "Intellectual confusion about many fundamental things—yes," says Sir Herbert Samuel in the above mentioned article, "but on the other hand, what a splendid clarifying of many of the dark places through the amazing advance of science." One wants a vast Wellsian time-machine to transport the unimaginative multitude into the past for them to realise something of the debt they owe—to what?

Not to political progress, not to moral leadership as such, certainly not to any improvement in human nature; but to science, which has given that endowment of energy to society which has enabled it to develop like a watered plant in a desert region, must be given the credit for this progress. Up to a certain stage in history man is so concerned to wring a hard living from nature that he has no superfluous energy in which to build up a

state in which cultural advances can be made. Society cannot afford to set large numbers of its members free to teach moral improvement, to educate all its citizens, to provide the luxuries and material conveniences which mean so much in building up a satisfied, happy, and enterprising community. Science and discovery have brought this access of control over material things and natural energies, which has been the ultimate source of human progress. There are other factors which must not be overlooked, especially the moral and mental soil from which these things develop, but they have existed for at least two thousand years whereas the great bulk of this improvement has appeared in the last four or five hundred years and has been correlated with the steady advance of physical science.

Consequently this improvement cannot be regarded as the rightful and hard-earned inheritance of all types and all people. Rather is it the immortality of a few great minds. As Aldous Huxley has remarked in that fascinating commentary *Jesting Pilate:* "The modern civilisation of the West, which is the creation of perhaps a hundred men of genius, assisted by a few thousand intelligent and industrious disciples, exists for the millions, whose minds are indistinguishable in quality from those of the average humans of the palæolithic ages."

These men, as devoted as the leaders of religious thought but more exacting than the latter in attaining the goals of their emotional satisfaction and more patiently ingenious in their enquiries, willingly turned their lives to arduous labour, resulting in discoveries and inventions, the fruits of which they themselves could never hope to enjoy. To-day a thousand million people take for granted the comforts of electric lighting, transport, and communication because Faraday worked, in obscurity and on a pittance, for the subject that he loved. The ascetic moralist may rejoice at the existence of callings in which the disinterested devotions of an unpaid priesthood may still be exercised, but apart from any considerations as to the spiritual and æsthetic desirability of asceticism, the community that will prevail cannot afford to let its scientific advance be carried forward by men restricted in numbers and hampered by poverty, just for the sake of moral exercise. One result of the present impoverishment of the worker in pure science—in science which is not yet paying its way in commercial applications—is that these intelligent and determined types who wage humanity's war against ignorance and the intractable forces of nature are compelled to choose celibacy and childlessness in order to pursue their work. Their qualities are gradually removed from successive generations. Here is one of the

most extravagantly foolish of all the dysgenic trends now resulting from our ignorance of eugenics and our policy of *laissez-faire*—the elimination of the curious, the intelligent, the altruistically adventurous. But this is but one, and a minor, aspect of the disastrous policy of making science a servant rather than a master of our ignorant and undisciplined society. "Society," says East, "has merely utilised the general spread of education, which has brought about so many accretions to knowledge, as a means of profiteering on natural resources . . . for the time being efficiency rose faster than numbers ; and this situation furnished a delightful opportunity for indulgence in high living, which society seized immediately. But this imprudent extravagance should deceive no one. It does not come as the result of permanent social progress."

There are doubtless scientists, too, who find a profound religious satisfaction in this detachment of their subject from the commercial world and from petty considerations of gain or loss. It is for them an intellectual cloister where men of base minds and all the clamant uproar of the busy world cannot penetrate. They are willing to earn some kind of living as best they can and to devote the rest of their waking hours to developing things which they know to be of permanent value. But there are few of them who would not be prepared to sacrifice that seclusion in favour of a greater development of their sciences. There are few who do not cherish at heart the belief that the rare happiness of their occupation could be made a common experience to almost the whole of society. They seek constantly to convey the illumination of their labour to all and to bring the satisfaction of scientific work to an increasing number of intelligent minds. There is no real opposition among leading scientific men to that community organisation of science of which society stands in such great need.

Dr. Little has recently indulged in the directest of complaints, in which he says : "It is incomparably more profitable to draw the Gumps for a comic supplement than to write the *Origin of Species*. There is more money in chewing-gum than in relativity. Lobsters and limousines are acquired far more rapidly by the skilful thrower of custard pies in a moving-picture studio than by the no less skilful demonstrator of the projection of electrons. The gate receipts of an international prize-fight would support a university faculty for a year." To which J. W. N. Sullivan, whose popular accounts of science are well known, in an article quoting the above, replies : "So far as its practical effects on the world are concerned, the money value of relativity is exactly nothing. If a million people (including men of science) are each willing to pay a

shilling to see Chaplin, it would seem that his performance is worth a million shillings. If Einstein can get a million listeners on the same terms, there is no law to stop him doing so." The first part of this rejoinder is inaccurate, for it takes no account of the future economic value; the second part is false in principle, for it supposes that all people are infinitely wise as to what value they are getting for their money. How many schoolboys would be willing to buy even a day's schooling? The community is wiser than the individual, and sometimes even wise enough to look to its own future. It taxes the individual to pay for the things he would not be far-sighted enough to buy for himself. But the community has not yet awakened to a realisation of the vast benefits that science still has in store. It stints science in all but the most old-established fields. The vast majority of people complacently take the beneficent advance of science for granted. They see the continuous triumphs, and know nothing of the lives given, the struggles, the wounds, and the sacrifices of wealth and leisure. Our insufficient moral alertness allows them to take the gifts of science without any feeling of obligation to enquire into the well-being of science. Daily the commercial man goes his way of business and diversion, fondly imagining that he has earned all he receives and that nothing more is demanded of him. Since the Church has lost its hold on modern life he feels no urge to contribute to that cause, and he has not yet learned to contribute to science. But society is blind to the source of its good fortune and makes no attempt to enquire into the state of its beggared benefactors. Are scientific men perhaps remiss in bringing to the notice of the community those new, unendowed directions of scientific endeavour which are likely to be of great promise? I think not. They spare as much time in popular appeals as busy men well can; they even endeavour to imitate the popular accent.

When I assert thus, that science, the giver of good things, is herself reduced to beggary and defrauded of the right to a fraction of her own products which are scattered for the entertainment of a voracious and ever-increasing herd of submen, I may be regarded with astonishment.

I shall be told that the scientists to-day are housed in spacious laboratories, that they receive reasonably large salaries and widespread social recognition. All this is a popular illusion. Applied science may be rich. Industry pays its scientists well and employs them in large numbers. But to what object? To improve face creams, to produce beer more cheaply, to extract the essential parts from natural foods and sell them again to the public under

fancy names. Applied science is largely sterile; one-tenth of the energy applied to futile and fleeting demands in that field, if applied to pure science would improve the human lot to an incredible degree.

Not only is pure science a relatively poorly-endowed calling restricted to the universities, but the larger part of its meagre endowments are expended in sciences already established—chemistry, physics, medicine, etc. The newer branches of knowledge where concentration is most needed are least supported. In biology, sociology, and particularly anthropology and psychology, the scientist is back in the position of the early workers in physics and chemistry—unrecognised, unendowed, beset with all manner of obstacles.[1]

At the moment our puerile press and short-sighted popular mind are applauding the superficial progress made in the means of moving rapidly from place to place. It sees progress in automobiles, in aerial transport, in radio, when these things have ceased to live scientifically and continue only as simple applications of arduously attained discoveries in pure science. The aeroplane is practically a worked-out idea, incapable of anything but minor improvement emanating from the chemistry of metallurgy, yet our press is never tired of directing attention to the great promise of the aeroplane and encouraging an expenditure of public money in which the annual £50,000 of the Schneider Trophy Race is a mere trifle.

If a fraction of that sum were applied to laboratory work on aeronautics the advance would be greater. If, better still, it were annually applied to the biological and anthropological sciences it would result in such progress in health and the happy development of social affairs as would dwarf all that has yet been possible. Public money, if it goes to science at all, goes to the elaboration of ideas and discoveries that are already worked-out in both senses. Was there public money forthcoming for the steam engine in 1705, or for the aeroplane in 1900, or to give Faraday time to concentrate on his researches or to provide apparatus and materials for Perkin?

The great need of our age is research in the science of living things, and in particular in the science of mind. Science's meagre allowance is being spent in the physical sciences and in undue attempts to apply knowledge before it has been established. A distinguished professor of Harvard University has recently written: "If one hundredth part of the money and energy devoted to re-

[1] In America, where academic and civil conservatism is less entrenched, these newer sciences are being given a much better chance.

search in the physical sciences (in the development of radio, of new explosives, of new aniline dyes, of new ways of moving rapidly from place to place) were devoted to anthropological research we should soon have the knowledge of which we stand in so great a need."[1]

One would think that, apart from any wider considerations, pity and the desire to relieve human suffering would have led to greater concentration on these sciences. Our hospitals are already full with human beings suffering immoderately through no fault of their own. A little extra public money spent on medical research fifty years ago would have borne fruit which would have been available now and made most of this suffering avoidable for the present generation. And the less obvious but even more tragic and abysmal suffering of the insane goes unheeded. Psychological research needs every support that the community can give it, if only to grapple effectively with the as yet untouched problem of insanity. Psychiatry and the psycho-analytic theories, devised in the spare time of men trying to earn a living by "curing" mental diseases, have as yet left the insane without hope. Our asylums to-day, in the decade 1930-1940, are in no sense hospitals in which cures are effected, but merely places of segregation staffed by doctors who know nothing about mental therapy (for there is no science to be known) where patients are gathered for general convenience, to get better or worse according to the natural course of the disease. To hide this from the general public is to prevent the inauguration of a systematic research in psychology which will alone put us in command of the facts we need.[2]

The needs of science, however will never be promptly and adequately met until the organisation of science plays a much greater part in community life. To-day, as Wells has remarked: "Science stands, a too competent servant behind her wrangling underbred masters, holding out resources, devices and remedies they are too stupid to use." Until the organisation of science becomes an integral part of the state business, like education, transport and public health, we shall continue to be victims of its

[1] McDougall, op. cit., p. 161.

[2] In a recent article in *The Week End Review*, 8th Aug., 1931, entitled "Research in Mental Hospitals," the writer points out that the cost of administering treatment in mental hospitals in England and Wales is £10,000,000 per annum, whilst only about £15,000 is spent on research. An expenditure of 4d. per week per patient, he shows, would produce £100,000 per annum for research. At present less than ½d. per week is spent, an amount which the writer properly describes as "scandalously small." In this connection it must be remembered that advance in the understanding of insanity depends upon advance in psychology as a whole, for the abnormal is only to be understood in relation to normal psychological processes.

disjointed, unharmonious development and our national life will remain the poorer for lack of blessings which it can bestow.

XI. The Necessity of Organising Science for Greater Undertakings

The time has come to organise scientific enquiry to play a greater part in national life and to do greater services than any it has yet performed.

So sure and steady has been the progress of science, so hidden from the public eye have been the dramas of its secret struggles, that its onward march has come to be regarded as an assured part of human destiny. But its success, which lies in the virtues of its methods, makes correspondingly great demands on the frailty of human nature. For many reasons science must begin to receive more attention and support from the community, if the community is not to be rudely awakened by a faltering and a sudden breakdown of the steady pulse of progress.

Firstly our minds begin to stumble at the complexity of the relations which we are meeting in modern scientific work. We seek vainly to answer ever more complex riddles of the universe in our own poor makeshift mental terms. The psychologist begins to suspect that many of the solutions and explanations of scientific questions when they are attained will be beyond the scope of understanding of most minds living to-day. Who can doubt, for example, after studying modern physics that the true mechanisms will hardly be expressible in terms of our present ways of thinking? Both our mental habits and our mental grasp are as yet inadequate. It has been said that only half-a-dozen minds in Europe can easily follow Einstein's theories. In psychology, appalling difficulties are met at the outset, and there are mathematical conceptions necessary for the progress of that science which only a handful of scientists can adequately grasp.

Art and philosophy have made no discernible progress through history because they depend largely on the direct intellectual and æsthetic effort of the individual mind, unaided by the work of others; and the innate intellectual powers of mankind have stood still or altered but little in historical times.

In science, on the other hand, each mind builds upon the legacy of others. The artist stands on his own feet; the scientist stands on the backs of his predecessors. Often, too, a considerable array of evidence will lead to a discovery which, with a smaller amount of evidence available, would only have been perceived by a really exceptional mind. We can compensate for our limited intelligences by the thoroughness of our organisation and the

ardour of our attack. Nevertheless, we are approaching a period when, even with the most assiduous observation and collection of evidence, the actual individual mental power of scientists must be augmented if progress is to continue and science is not to repeat the story of the arts.

The augmenting of the intellectual capacity available in science can be achieved in two ways: by eugenic measures in the community as a whole and by the selection of better brains from the community for the purposes of its scientific work. We can ensure better brains at the top by increasing the number of people engaged in science as a whole and by making the rewards in science approximate to those in business. I do not believe that the latter step would be in error. A strong interest in science for its own sake is undoubtedly the primary necessity, but at present we do everything possible to destroy that interest in able candidates for a place in science by offering them every discouragement and showing them an array of greater rewards for less effort and ability in almost every other field. Material as well as spiritual reward ought to be as frequent in the sciences as in other walks of life if the necessary quota of able minds is to be attracted to them. It is a mistake to allow fame alone to measure the success of a scientist. That leads inevitably to shop window-dressing and to an attitude to science which is subtly askew and pernicious.

So much for the necessity of improving the standards of innate capacity in the army of science. After the improvement of the scientist comes the improvement of scientific organisation. Centuries have elapsed since Bacon's complaint "that there hath not been, or very rarely been, any public designation of writers or enquiries, concerning such parts of knowledge as may appear not to have been already sufficiently laboured or undertaken." The organisation of learned societies and the publication of journals and abstracts have done much to alter the casual, ineffective course of learning as Bacon saw it, but still we lack that complete organisation of science which is necessary if science is to play its true part in civilisation.

The day of individualism in science is passing. There was a romantic age in science akin to the age of chivalry in warfare, when individual scientists, like medieval knights, pursued their various goals unbidden and unaided, but we are passing into the larger methods of trained armies. Great individuals are still needed, are needed even more than formerly, but chiefly as responsible organising minds directing their fellows. To arrange such collaboration must be one of the aims of further organisation in science.

In every direction the field of endeavour has enlarged. The biological sciences, anthropology, psychology, and medicine, can no longer be prosecuted by individuals in the seclusion of the laboratory: they demand laborious measurement on great numbers of people. It is becoming evident that these sciences can no longer advance without some state intervention which will put large numbers of people at their disposal. The psychologist, who wishes to discover the relation of intelligence and temperament to occupation; the anthropologist, who is following up racial differences and the influence of environment; the sociologist, enquiring on the relation of economic status to birth-rate; the medical man, investigating the differences of growth and health under various foods and living conditions. All these must work with larger numbers of people than are at present available for research if they are to arrive at reliable results. The abnormal individuals who attend at clinics are of little use for such purposes: the scientist is reduced to bribing and cajoling a few individuals to make up a hard-won but meagre group for his measurements. The machinery for marshalling lay volunteers for such work is a much-needed item of the new organisation of science.

Some sciences, it is true, have hardly yet realised the need for this "control" population. Medicine continues to be based on mere conjectures in quite an astounding number of its diagnoses and treatments, because no one has yet seen the necessity and possibility of applying statistical methods. Dr. Waldo, the London City Coroner, in holding an inquest recently on a case of death under an anæsthetic, deplored the absence of research into the stored records of such cases. He added: "Out of fifteen deaths under anæsthetics I have investigated during the past year, all but three were regarded as accelerated by the administration of ether. A few years ago it used to be chloroform. The facts we gather should be most interesting, but nobody seems to take any interest in them. It seems a pity."[1] In many ways the inadequacy of medical research, particularly in its organisation, is very striking to those approaching the subject after the study of some "pure" science. Sciences with an hypertrophied applied aspect are liable to a stagnatory disorder even when well-endowed.

There are many remediable conditions in the situation which have been well discussed by Sir Walter Fletcher in a letter printed in *Nature*, 23rd November, 1929.

The progress of science is going to depend more and more on large scale work, work demanding the organisation of many scientists and many subject assistants—over a long period of time

[1] *Daily Telegraph*, 23rd May, 1930.

on one topic. And machinery is needed—government support or advertising assistance from the press—which will make that possible.

It is becoming increasingly evident that the organisation of research in pure science through the universities alone cannot meet the present situation. Still less will such a basis suffice for the future scientific needs of the community. Advance in pure science now depends on a handful of professors in universities, distracted by details of student organisation and the necessity of lecturing. Associated with the professor there is occasionally, but by no means invariably, a group of graduates engaged in research. That work is of some fruitfulness if it bears on some central problem on which the department has long concentrated under the professor's guidance, but it is all too frequently valueless when the student follows his own inclinations. Moreover, as soon as these students have gained a little experience and technical skill in research they are forced, even the best of them, to scramble for some teaching or routine post. They are full of eagerness, of youthful freshness and ingenuity, which could be applied to good purpose in science, but just when they are becoming effective, and when even the most contemptible salary would easily retain them for valuable work which they desire to do, they are compelled to take up lucrative occupations in which their research experience is largely wasted. All that the universities can contribute, therefore, towards an organised army of science, is a meagre staff of distracted teachers and a larger but fugitive number of birds of passage. Let us face the first difficulty, that connected with the university teacher himself. Of what good is it to attempt to alter his lot? "The university teacher," remarks Sir Eustace Percy, "at any rate in the newer universities, has too many lectures to deliver and too many students to tutor." Are we then going to make the university teacher a teacher, a person selected and trained for teaching and give research to other institutions, or are we going to maintain the dual function in universities? First let us consider the undoubted probability of truth in the assertion that the qualities which make a good teacher are not those which make a good research worker. Intelligence and ingenuity are needed in both, but there the similarity ends. The dramatic, telling speaker and the scientist are poles asunder in psychological type. In many ways the true scientist is as little fitted to engage in the dialectic discussions and "showman" demonstrations of university teaching as a woman with child is fitted to engage in acrobatics. Research is always in the fullest sense a full-time occupation. The scientist goes about with a thousand clues and hypo-

theses constantly seething in his mind. To ask him to clear his mind of these germinating ideas and expound confidently a simplified system, adapted to the several levels of student development, is to cause an abortion of these precious solutions to which his whole mental energy is continuously bent. When I subscribe to the belief that in universities the teachers, since they are teachers of a set of rational adults, themselves fitted with the critical spirit of enquiry, should be actively researching in the subjects which they teach, I do so with many reservations. They must never be expected to play the part of the eloquent, studied, consciously-entertaining lecturer of the popular platform and the pulpit. Their special and limited audience demands only that they shall be eagerly-enquiring, critical, detached, provocative of subtle thoughts and rare glimpses of truth. Unfortunately when many people speak of a teacher, they mean someone of the former sort.[1] To demand such types for university work is to make the combination of teacher and scientist impossible. Yet in the growth of small regional university colleges, in which the teaching aspect heavily predominates, there is the threat of such a danger. For they come to be staffed by men and women who are essentially teachers maintaining merely a respectable pretence of connection with research. These institutions, in effect continuation schools, provide a far more adequate examinational education than do the universities. They are consequently more attractive to all students except those really interested in their subjects and desirous of continuing with research. The danger exists therefore that by competition they will eventually force the universities to the same intensive teaching of low-grade students, to the same excess of lectures and the same choice of staffing type. The process has gone far in America.

Again, the universities spend a considerable amount of their endowment in teaching non-scientific subjects and subjects not susceptible to improvement by research—ancient and modern languages, law, philosophy, theology, etc., so that the fuller endowment of universities is by no means certain to produce any advance in the sciences. From the figures given below it will be evident to what an amazing extent the sciences most necessary to modern cultural advance are neglected by some of the best known universities.

[1] See, e.g., the qualities demanded in the survey of professional opinion carried out by the present writer and printed in an article "The Assessment of Teaching Ability," *Brit. Jour. Educ. Psych.*, Feb. 1931.

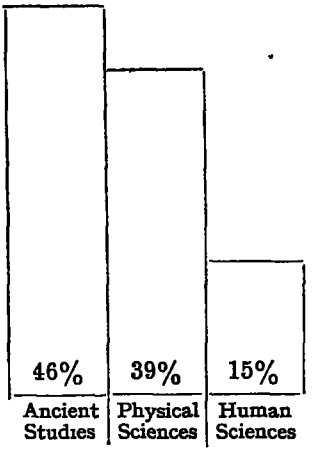
NUMBERS OF PROFESSORS AND LECTURERS IN VARIOUS BRANCHES OF LEARNING IN OLDER AND NEWER UNIVERSITIES.

UNIVERSITY	Non-Scientific Subjects (Ancient Learning)			Older Sciences (Physical Science)		Undeveloped Sciences (Social and Biological Science)	
	Divinity (Theology)	Classics	Philosophy	Physics	Chemistry physical, organic, applied	Psychopathology and Psychology	Anthropology, Eugenics Ethnology Sociology
CAMBRIDGE	20	23	7	13	7	2	2
OXFORD	13	4	14	4	5	1	2
LONDON							
(1) University College	0	5	2	7	21	4	7
(2) London School Econ.	0	0	1	0	0	5	8
(3) King's College ..	12	6	3	7	9	3	3
(4) Imperial College ..	0	0	0	8	23	0	0
LONDON—TOTAL ..	12	11	6	22	53	12	18
TORONTO	9 ethics	24	6	11	17	9	4
TOTAL	149			129		50	

Here for comparison I have chosen two of the older universities and two of the newer ones. In order to keep the numbers for London approximately equal to those of the other universities I have used results from only four colleges—the larger, representative colleges.

To illustrate the present function of universities I have taken three branches of ancient learning, two branches of physical science, and two of sciences which deal with man and society. Although the socio-biological sciences are those most needing promotion at the present day, and the ancient studies have no other than entertainment value and very little of that, the former are practically neglected whilst the latter are maintained at an artificial eminence relative to the cultural interests of the community.

	Ancient Learning		*Physical Sciences*		*Human Sciences*	
		%		%		%
Oxford & Cambridge	(81)	71	(26)	23	(7)	6
London . .	(29)	22	(75)	56	(30)	22
Toronto . . .	(39)	49	(28)	35	(13)	16



The diagram shows percentage of staff (of four typical universities) devoted respectively to repeating ancient viewpoints, furthering old-established sciences and developing the newer sciences which have the greatest bearing on social and cultural welfare. How far can universities be regarded as centres for leading the advance of the community ?

From these considerations and this numerical insufficiency of university scientists, it is evident that the universities alone cannot organise a new and vital scientific movement. The need can only be met by additional institutions devoted entirely to research. "Can civilisation afford to inaugurate and support institutions devoted entirely to furthering science ?" asks the man in the street. "No civilised country can afford to neglect such a step," replies the rarer man of foresight, "and does not science deserve to profit by some fraction of its own fruits ?" Is it not a mistake, from whatever angle one chooses to survey the matter, continually to deprive a productive source of the meagre fraction of its products necessary to its own vigorous growth ?

We need permanent national institutions set to organise and increase each of the great branches of scientific knowledge. The miscellaneous growth of research boards, institutes of applied science, and temporary scientific associations which we now possess, is entirely insufficient to cope with the true organisation of science. We have, for example, the National Physical Laboratory or the National Institute of Industrial Psychology, but they are forced to confine themselves pretty strictly to problems in applied science. There must be a National Institute of Physics, of Anthropology, of Psychology, and of Sociology, provided with suitable laboratories and staffed each with an effective permanent staff of thirty or forty experienced research workers—able to devote their whole thought and attention to the furtherance and organisation of their sciences.

These institutes could maintain close contact with the universities, exchanging staff from time to time and organising the

research work of the universities so that all problems are attacked in co-operation and from the best angles. The present confusion, duplication and neglect of problems in science could thus be eliminated.

We can afford to maintain millions of unemployed, an army of over 500,000 men, a navy of 100,000 able and intelligent minds, and at the same time to pay business men of mediocre ability such salaries that they can support unprecedented expenditure in amusement and luxury—surely we can afford to maintain 300 men for the benefit of the sciences that will show us, among their many services, how to eliminate armaments, unemployment, and popular purposelessness.

At present, and particularly in England and France, the sciences that are going to change the course of history can only truthfully be described as being in abject poverty. At the present moment, in the twenty odd universities and university colleges of England and Wales (exclusive of London), there are precisely seven people specifically employed (and in some cases as part-time workers) to study psychology, in the intervals of teaching what is scarcely known.

The intelligent organisation of our social life, the solution of countless cultural problems, the establishment of new forms of education, the conquest of mental disease, the continuation of eugenic progress: all these depend upon the fundamental study of the human mind. This paltry response represents the extent of the wisdom of those who are supposed to lead cultural advance.

There stands the field of psychological knowledge, a vast realm full of hope for the future of our common human adventure, in which a few men try to cope with tasks too big for their unaided arms. It is like a long battle line, thinly held by a handful of pioneers, reinforced by a few amateur troops who are continually forced to desert from lack of supplies. It is a battle front of unprecedented difficulties, in which many an advance turns out to be but the prelude to a greater retreat. A few salients have been gained and consolidated. Those advances have already brought visible changes in human life. When will educated humanity as a whole realise the astounding gains that would result from regular reinforcements?

XII. The Integration of Progressive Tendencies

From the analysis of social values and forces carried out in the earlier part of this book we have been able in this section to make a series of definite proposals for organising social life more effec-

tively, in the pattern which the nature of things ultimately demands, and which will alone give to mankind that true control of its destiny for which it has so long striven.

These proposals point firstly to the growth of a co-operative world-wide movement to ensure eugenic advance by controlled direction of evolution in competitive groups formed by organising nations into their component racial sub-groups. Secondly, we have shown how an assurance of immense and unwavering progress in social and cultural matters could be gained by extending such controlled experiments to comparisons between independent cultural groups and sub-groups. Such experimental units would be most naturally formed from our present nations or future racial eugenic groups by the self-determination of their constituent parties (and especially minorities) in an agreed scheme of co-operative competition. Thirdly, we have dealt with the mechanism of government which can most safely, effectively, and intelligently control such groups from within in their agreed adventure of evolutionary divergence. That control can only be by a government of scientists who will direct all but the intuitive growing point of culture by sociological research, and control eugenic progress in innate powers by an extensive plan of psychological testing and research. As a necessary condition of such changes it follows that science, which is now an entirely incidental and subsidiary concern of the community, must become a highly organised major function of national and international life.

In what way will these obviously related tendencies be mutually accessory, and how will they develop from present conditions?

Both in the progress of culture and of innate biological type there must ultimately come a point where the guiding hand of science, having pointed the direction of evolution far more wisely and certainly than we can now comprehend it, comes to the end of its power of discernment, falters, and resigns its directorship. That is where the maintenance of the world population in groups biologically and culturally independent comes to the rescue of the purely scientific control.

Psychological and medical science will have narrowed down considerably the possibilities of error in biological evolution just as social science will narrow down the possibilities of error in cultural evolution, but there will always remain a certain unknown deviation error in the scientific compass where the group eugenic programme in the hands of a vital people will step boldly out into the biologically unknown.

Only by subsequent comparison with other groups will the success or failure of the experiment become evident. That is

again a matter for science. Thus one group, aiming physically at greater skeletal development, may find itself becoming slightly more susceptible to tuberculosis, or showing a slightly lower average of energy output than another group. Or aiming psychologically at a lesser instinct of self-assertion and greater gregariousness, may find itself producing fewer men of initiative and originality.

The groups, we can imagine, will naturally maintain the closest and most appreciative observation of each other's experiments in order better to direct their own progress. Indeed, as evolutionary units in a co-operative scheme, they will organise themselves with this scientific object. Many of the divergences will be qualitative differences or at least differences arising out of the original inborn characters of the peoples and so intrinsically satisfying to each and not considered in a relative way as superior or inferior.

But apart from these, in both eugenic and cultural progress there will in time emerge differences which are perceived not to be merely differences but superiorities and inferiorities. All groups concerned will in time recognise the fact.[1]

Now, to what kind of action will this lead ? Will it mean, as at present, that the more advanced group, after contemplating the decay of the other human experiment, will fall upon it violently to exploit its possessions and enslave its people ? It is the greatest mistake of popular thought to imagine that a superior culture can only be spread by conquest. Anthropologists can supply hundreds of examples of cultures borrowed without physical subjugation. The Westernisation of Japan is a modern example on a grand scale. There may be delay, there may be refusal for generations to perceive that the other group is on the right track. There may be panic, as when Poincaré finds a link even with Stresemann[2] in the common desire to avoid the Americanisation

[1] The evidence of scientific anthropology leaves no doubt that, except in rare instances which would right themselves in other ways, there would be no difficulty in deciding which culture group is on the best line of development. Neither would it be necessary in practice to establish any special coercive mechanism to make other groups recognise false steps which they may have taken. Wissler sums up his valuable survey of the psychology of culture borrowing with the remark: "Looking at groups in general, we see that they not only recognise differences between themselves and other groups but are conscious . . . of their relative position whether they admit it or not."

[2] See *Stresemann*, Antonina Vallentin: "We in Germany are to-day more Americanised than any other people in Europe ; at the bottom of our hearts we feel that in the stress of modern life we have lost a fragment of our soul." Alas, these tender souls that in India and now in Germany succumb so easily to the effort of improving material conditions! Einstein, on the other hand, in an extremely incisive and sane article "What the U.S. can Teach Us," writes : "The strongest traits of the American (are that) . . . he is friendly, unselfconscious, optimistic and unenvious. The European, on the other hand,

of their beloved social cultures; only to turn a few years later to that objective, democratic, open-minded culture for assistance. With an effective inter-group organisation of sociological research there will be far less doubt than nowadays as to the relative success of various eugenic and culture changes. There will be far less delay, less reluctant obstinacy, and less hesitation in the way in which each flyer in the homing flock of culture groups adjust its flight to the path of the new leaders who appear from time to time. Far fewer groups than now will go unnecessarily astray and fall out of the evolutionary race. The advanced groups will be less burdened and less tempted by backward peoples.

Yet there are bound to be instances where interference is called for. There are bound to be leading groups and groups falling behind. There are bound to be cases where it is time to call a halt to a certain line of evolution. In uncivilised ages that surgical operation of lopping off the backward branches of the tree of mankind was done violently and without an anæsthetic.[1] The American Indians, the Australian Blacks, the Maoris, the negroes were driven with bloodshed from their lands, as blindly unconscious of the biological rationality of that destiny as were their oppressors.

In such clearly established cases, where it is obvious that the race concerned cannot hope to catch up in innate capacity (and therefore in cultural capacity) to other groups, the leading nations may attempt to reduce the numbers of the backward people by birth-control regulation, segregation, or humane sterilisation. Repeopling, by more intelligent and alert peoples, of parts of the earth possessed by backward people is merely following the highest moral considerations when it is done with humane feeling for the happiness of the generation of backward peoples then existing. Clearly, the reverse process—i.e. the giving up of territory by an advanced people to a people with a lower standard of living and denser population—is highly undesirable.

An insufficient grasp of ethical principles is causing popular

is more critical, more self-conscious, less good-hearted and less ready to render assistance, more isolated, more fastidious in his diversions and in his reading. In comparison with the American, the European is inclined to be pessimistic. The amenities and comforts of life play a large rôle in calmness, light-heartedness, security—these are sacrificed to living. The American lives more for the goal, for the future, than the European. Life is always a Becoming, never a Being. In this regard, he is still more dissimilar from the Russian and the Asiatic than from the European." These observations accord well with the distribution of inborn qualities deduced in Chapter II of the present work.

[1] Our present method is by machine guns and the diseminating of disease and alcohol. I find that Graham Wallas has demanded that we face this problem: "We are nearing the time," he says, "when the extermination of races, if it is to be done at all, must be done deliberately" (p. 288, op. cit.).

thought at the moment to countenance sentimental solutions of present group difficulties for which there is no justification. In an otherwise very sound and scientific treatment of population problems,[1] Warren Thomson has suggested that war may best be avoided by the "correlation of needs with territory," i.e. the ceding of territory by countries with small populations, to those with dense ones. He proceeds to particulars by asking that India should be allowed to send its teeming population to East Africa; that Italy should expand into Syria and Iraq, and that Japan should at least colonise New Guinea. How false such principles are can be appreciated by those who have followed the biological ethics of this work.

In less clear cases, the types of more developed innate powers will increase their numbers relative to the less developed by reason of their greater economic success, and probably by literally "buying up" the areas of the less successful for their own expansion.

Incidentally, there can be little doubt that all wisely directed units will aim at a distinct reduction of the density of their populations, and compensate, from the point of view of economic success and defensive safety, by the greater increase in quality which that state of affairs will permit.[2]

[1] *Danger Spots in World Population*, Knopf, 1930.

[2] Malthus thought in terms of limitation of population by food starvation. We must recognise that there are many other forms of starvation which become evident before actual food starvation begins. There are all the evils of overcrowding, hygienic, economic and moral; there is the lowered standard of living which, as Carr Saunders has pointed out, is an inevitable outcome of increase of numbers under standard conditions. Lastly, there is an acute spiritual starvation which comes to those who are herded in large cities. Our larger cities, as we have seen in Chapter III, have probably outgrown their optimum economic size; they have certainly outgrown the size which would permit normal contact with nature, normal hygienic life, normal exercise and normal thought. They have become such places that it is a crime to rear children in them.

Barker asserts (op. cit., p. 93): "Men will flock together for company and comfort, and have done so through the ages unless they are necessarily scattered in space by the scattering of the substance . . . from which they get their subsistence. It is not so much that great industry created the town; it is rather that it released an old inveterate instinct." In this I think he is right. It is another case of an instinctive reaction to a primitive situation being carried over into civilised life, this time without serving any useful object.

As I have indicated earlier, there is probably a race difference in this matter, the Mediterranean types being relatively fond of crowded city life and the Nordic types preferring the country. In any case, it results in the end in a spiritual starvation of our better types. Both Inge [op. cit.] and Russell [*The Conquest of Happiness*, pp. 66, 70] have rightly stressed our inherited adaptation to country surroundings and the need which we have to satisfy it. The latter remarks: "The organic need is so profound that those in whom

Since the difference between the groups will vary very much in degree, it is obvious that the diplomatic relations between them must all vary in an irregular way. There will, for example, be groups composed of fractions of the same race, diverging only to a slight extent in cultural aims. On the other hand, there will be groups sundered by every difference of race, creed and civilisation.

I have spoken of them as if they were precisely equivalent groups, similar bricks in a larger piece of masonry, but it is evident that as soon as they are given a local habitation and a name, as soon as they are related to existing races and political divisions, these groups will take on very varied colourings. What will be the political and economic relationships of these groups ? Competition we have seen, can take place on an economic and cultural basis. But the present tendency is for economic organisation to become to some extent international. The extent to which that change ought to take place is limited. Some degree of economic individuality is necessary for the effective functioning of group competition, though it may well be combined with as much international economic life as group co-operation requires for the common good.

Clearly the groups must primarily be cultural and genetic units,

it is starved are seldom completely sane." Our city democracies are not noted for their sanity. Present returns show that insanity is, for the same size of population, much commoner in urban than in rural areas. This has not always been the case. It has arisen with the monstrous modern city. The psychological effects of crowded living, of unnecessary noise, and deprivation of nature have not yet been adequately studied, but I think we shall find that city conditions stunt psychical vitality, reduce perseverative thought and destroy originality. As one cause of the psychical disturbance in crowded living, Russell has pointed out: "The natural instinct of man, as of other animals, is to investigate every stranger of his species, with a view to deciding whether to react to him in a friendly or hostile manner." The constant jostling with strange people in train and street abuses that instinct.

Probably we shall find every self-directing group reducing its numbers to the maximum compatible with healthy physico-spiritual life, and the minimum compatible with economic and defensive purposes. Here as elsewhere, quality will offset much quantity in opposing groups. It is a sorry outlook if, as Barker believes: "At the most we can anticipate an increase of open spaces and a proper provision of playing grounds for children, the improvement of facilities for transport into the country." He continues: "It is left for us, therefore, to apply the methods of the mind to modify and if needs be, correct, the effects produced on the mind by (unsuitable) physical environment." It is extremely doubtful if we can do so. Burdens are constantly shifted on to education by those who will not trouble to change the material surroundings which produce the deficiencies. The great need of the times is to take in hand at once the restriction of town growth, the planning of towns in beauty and grace and the rescue from the hands of the "improver" and park gardener of all natural beauty spots.

The "room" given to each individual, the standard of living, space and leisure are at present functions of the efficiency and general level of ability of the citizens of a state. Probably it will always be so. A nation of highly able individuals could live as a nation of aristocrats—without human slaves.

and secondarily economic ones. For purposes of armament and defence they must be prepared, firstly, to sink their differences and unite behind the older national and imperial walls (or better still, into true racial leagues) and secondly into a world wide league of nations—the organ of group co-operation and international peace. They will then ultimately be united into a brotherhood of all mankind. And this unity, a further development of the present League of Nations, must be no mere agreement of convenience taken up in fear as a mechanism to ensure peace and make sudden aggression impossible, but a spiritual unity in the common purpose of ensuring the evolutionary and cultural progress of mankind, through a scheme of agreed experimental divergence.

How similar is this picture of the ideal mechanism of human progress to the conditions that actually prevail during the present century! Yet this conception has been reached in detachment from historical reasoning and in an effort to follow out biological reasoning in radical isolation from any current preconceptions. A few such perceptions of the rationale of world processes might easily carry one to the view that what is, is best. Truly one can say that all processes work for good, but not always by the shortest route. The philosophical issue that opens out here will be followed up to a satisfactory conclusion elsewhere. At the moment we need observe only that there are certain inessential differences between this biologically constructed world and the political world of to-day, but that in the small scale of our own lives these differences are by no means negligible.

The most tragic of these differences lies in our unawareness of the goal behind these processes and in our consequent unwillingness to co-operate in competition. Almost equally deplorable is the absence of a definitely scientific and experimental attitude which would lead to a better planning of comparisons and of a more conscious assessment of sociological resultants. Again, our flimsy international organisation is barely strong enough to ward off the primitive catastrophe of war. How much less is it in a position to eliminate the clumsy irregularity of the present picture —the unpremeditated mixture of races, the lack of eugenic ideas in regulating economic conditions, the confusion of universalistic ethics with ultimate evolutionary ethics, and the lack of comparable conditions in comparing group cultures and types.

At present, too, the groups are too few in number. The number of groups required for the testing out of various eugenic and cultural forms is mathematically dependent upon the number of such models to be tested. Two groups are required to settle one question

of cultural or eugenic difference when all other differences are eliminated. Thus if it is required to discover, for example, whether the inborn nature of white or yellow peoples is best fitted for progress in the scientific understanding of nature, it would be necessary to divide up world resources between Mongolian and European groups only. We should then start with all other conditions (economic and cultural) approximately equal and observe the course of scientific advance in each group. If now one wished to try out as well a cultural difference, say the social effect of following Christianity on the one hand and Buddhism on the other, it would be necessary to have four groups—a white Buddhist group, a white Christian group, a Mongolian Buddhist group and a Mongolian Christian group.

Such mathematical considerations applied to the variety of racial and cultural differences which must necessarily be solved by more than laboratory findings, will quickly show that progress is only properly to be served by developing more independent groups than now exist.

Not only do the numbers of independent culture groups need to be greater than the present roll of nations if we are to avoid thwarting of evolution through the association of too many bad and good practices in any single survival unit, but an increase is desirable also in order to lead to smaller groups. Smaller groups are advantageous in that they give more scope and responsibility to all individuals and that they make rational progress more easily possible. A large group holds back change because of the large number of people to be convinced before any reform is possible and because passive herd opposition, which is one of the great uncritical conservative forces, has more chance to develop. Two factors—war and the economic motive—tend to make groups unduly large. The threat of war, and the need of large numbers which that entails, has in recent historical times reduced the number of integral groups well below the optimum for progressive variation. Only a new form of international organisation can set that right.

One can imagine nature baffled and perplexed by our present organisation; compelled to achieve her ends with tremendous delay and infinite cost. For example, a nation defeated in war may be on the right lines of evolution, relative to its conqueror, in a dozen aspects of innate biological type and social form. At the same time we will suppose it to be astray in an equal number of other matters; one of which happens to be relatively important and, in fact, responsible for its defeat. Here group selection is baffled. The defeated nation, in attempting to reform its ideals,

is just as liable to drop all its good points as its bad ones, whilst the victorious nation is confirmed even in the most stupid of its traditions. Evolution under such conditions is reduced not to decisive movements but to a series of backward and forward fluctuations requiring an extremely large number of paired decisions in order to produce definite progress. Fewer groups mean disproportionately slower progress. New and valuable cultures are produced only to be wiped out again and re-instituted after countless ages. Sound directions of human evolution are held up, deflected, annihilated, rediscovered, redestroyed, and so on, endlessly as far as human hopes are concerned.

We are at the mercy of the environment we have created. Unhealthy ways of living, which need be only temporary phases in civilised progress, are allowed to work selectively upon our biological endowment until we are adapted to such ways and incapable of demanding any change. The germ plasm learns only to unlearn again or it is trapped in an evolutionary cul-de-sac where further learning is impossible. We do not adapt environment to our desires, we allow environment to adapt our desires to its chance patterns.

In this chapter has been outlined the scheme of social organisation which appears to be the inevitable and desirable one if mankind is to pass to an era of conscious control of progress. Eugenic and cultural progress are to be engineered in the first place by the application of biology, psychology, and sociology to social problems. Such a condition can only be adequately attained if present systems of government by orators are replaced by scientists who will devise more accurate means of measuring the nation's desires and ideals and more efficient means of realising them, in complete detachment from party strife.

Each community by reason of its scientific insight, or, failing that, by the pressure of competition of other groups, will come to regulate the birth-rate of all its citizens according to individual medical and psychological tests, and will deliberately experiment with itself to attain better cultural habits for this better biological population. An assurance of external checks and safeguards in eugenic and cultural experimental change is provided by dividing the people of the world into eugenic evolutionary groups, according to racial type, which will co-operate in a competitive scheme, ruling out warfare and continuing in economic and cultural emulation. These groups could develop and are developing naturally out of present political groups. They will need a strong growth of inter-group organisation to assure peace, by force if necessary. They will need a central laboratory to collate the

biological and sociological comparisons of diverging groups for directive purposes, and to clear away the debris of group experiments that have definitely failed. All this is possible only if science, which now sees its gifts of prosperity and opportunity bestowed everywhere but on itself, becomes definitely organised as a leading function of national and international life.

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CHAPTER NINE

THE CONQUEST OF OBSTRUCTION: EDUCATION

". . . The life, the fortune and the happiness of every one of us, depend upon our knowing something of the rules of a game infinitely more difficult and complicated than chess. The chessboard is the world, the pieces are the phenomena of the universe, the rules of the game are what we call the laws of Nature. The player on the other side is hidden from us. We know that his play is always fair, just and patient. But we also know, to our cost, that he never overlooks a mistake, or makes the smallest allowance for ignorance. To the man who plays well, the highest stakes are paid, with that sort of overflowing generosity with which the strong shows delight in strength. And one who plays ill is check-mated—without haste, but without remorse. . . . What I mean by education is learning the rules of this mighty game."

THOMAS HUXLEY.

I. Education and Society

So excessive is the conservatism of the adult human organism for the tasks it is called upon to perform, so rapid is the decline of intelligence after middle life, that the chances of getting even the most obvious reforms carried out by the elderly people in control at any given time are negligible. It is no idle epigram on the part of Tawney[1] when he remarks that "one of the main truths of all education whatsoever—(is)—that, if the young are not always right, the old are nearly always wrong." The hope of those who are shepherding in new customs and laws turns always to the spirit of youth.

In education lies the hope of translating the discoveries of life's truths into the universal practice of living. In it there lies even the power of sublimating man's conservative obsessions into useful channels.

Consider the thousand spheres of human life in which armed force, economic manipulation, and even organised religion have failed, and yet the slow process of education has succeeded! Consider the solutions to a thousand problems which converge on the single need, "more and better education," and you will perceive the overwhelming importance of that social duty which the unimaginative man accepts only as a dull and subordinate social task containing nothing more than he experienced in his own dismal school days.

[1] *The Acquisitive Society.*

Consider alone the mental processes involved in appreciating the principles educed in this essay. These principles and their consequences are written large on the face of the biological sciences for every man of average intelligence to perceive. Yet both the man in the street and the "educated" man of the last generation will almost certainly regard them as strange, immoral, or lacking in normal feeling values. They are labelled unconventional, at worst subversive, but generally they are met by a dull silence not of disapproval but of non-comprehension. What is wrong with an education system which permits this estrangement of man from nature and from a rational approach to all his problems ?

There lies the main question for us to investigate. The general principles of education in any age and place have already been very adequately discussed in recent years by such educators as Nunn, Dewey, Campagnac, Raymont, Adams, and others (especially the first named). However clearly these are understood there remains the problem of getting education adjusted to the cultural progress of the community, and keeping it adjusted. The former problem, the philosophical treatment of the aims and principles of education, is too vast to be assailed in one small chapter. Moreover, although the aims of education are one of the prime interests for educational theorists, they have never yet been reduced to any simple formula of demonstrable validity.

II. The Debris of an Old Educational System

Education, one might imagine, would be founded on a study of the child mind and directed to those subjects which would give a useful and liberal education. The systems of education which most countries have inherited from medieval times do neither of these things. Ignoring the child, they set out to impose an education which will make him a "gentleman of leisure" unfitted for the enterprises of a progressive society, or an expert in the dead languages, or an efficient clerk without any cultural interests, or any one of a number of equally monstrous products. New attitudes exist, and a finely shaping growth of true education, founded on psychological research and directed to an understanding of life and efficient service to the community, is springing up in every country, but it stands completely outside older school and Church institutions and, at least in the old world, sees the main stream of the nation's youth, and the greater part of endowments long ago set aside for the nation's education, going to maintain the vitality of a grossly false *weltanschauung*.

Let us examine this obstructive debris more closely.

Barker, as principal of one of our largest university colleges, quotes Arnold: "I repeat now: what we must look for here is, first religion and moral principle; secondly, gentlemanly conduct! thirdly, intellectual ability"; and adds himself: "The order in which Arnold places these three things may seem curious; but it is characteristic, not only of Arnold, but also of England."[1] The English public-school tradition, so dominant even in modern education, owes much to Arnold. One wonders if Christ would have passed the above criteria in the eyes of the authorities of his time. This standpoint assumes that every child left to himself would be a vicious criminal, a wild beast, a violently anti-social being in whom any natural desire to serve and to absorb oneself in the community would be monstrously incredible. By implying this nature, the public schools have tended to produce it, and indeed the boys whom Arnold taught, who broke into revolution and required a company of the guards to quell them, were forced to possess such an outlook.

It seems inconceivable to people adopting such educational aims that a child, given self-respect, will develop his own character without all this external meddling. Shaw has said that "the vilest abortionist is he who seeks to mould a child's character," and I think that psychological research will prove that our present attempts to enforce the traditional character-moulds have been immensely destructive of natural altruistic urges and original worth.[2]

But the older public-school traditions have already received illuminating criticism elsewhere,[3] particularly for their desire for uniformity, their fear of "morbid introspection" in the pupils, their over-emphasis on sport,[4] their neglect of modern studies, and their determination to mould all types into an extravert, unanalytical, conservative model of self-confidence and self-satisfaction.

This is not merely a criticism of the public schools as they exist to-day. I wish to remind the reader that established institutions

[1] *National Character*, Barker, p. 263.

[2] By "moulding character" I mean the continuous imposition by the prestige suggestion of adults, of character forms, the value of which are in any case highly debatable. There can be no objection to leading the child to reason for himself and develop his own character under favourable conditions.

[3] See, e.g., Adamson, *A Short History of Education*, also Alec Waugh, *The Loom of Youth*, which is an insightful commentary on this system. It is no unusual thing even to-day for the products of public schools to look upon the scientist merely as a harmless fudger or crank, and to see nothing of the immense purposeful drive which science has introduced into human life.

[4] Sir Charles Trevelyan, Minister for Education, recently remarked: "At Harrow, the evil of the school was the football and cricket captains, and no one else. The boys did not believe in brains, they only believed in brawn."

which fall into the hands of a class and cannot be moulded by the state for its changing needs, are more dangerous and harmful in education than in almost any field. Moreover, any such institutions, bound by the necessity of keeping to ancient traditions in order to distinguish themselves, must always be impossible components of a progressive changing civilisation. They perpetuate false views on human psychology and provide no mechanism for the constant revision of educational practice in conformity with the advance of psychological and sociological science. Among the false views that have been perpetuated one might mention (1) the belief in formal training—the view that by filling a boy's time with Greek and Latin which he will never use, one is training him to think better in other fields of reasoning[1]; (2) the view that character training consists merely in the formation of habits and can be carried out by group pressure; and (3) (here we meet one of the larger issues) the standpoint expressed above in the words of Arnold, that religion, gentlemanly conduct, and intellectual activity are three distinct things to be separately catered for and arranged in that order of importance.

As yet we do not know much about the psychology of character, and when we do, that psychology may be too complicated a body of knowledge to permit of complete popular exposition. Freud has argued, with good reason, that the essentials of character are formed before seven years of age. Certainly the main shaping of a youth's character in its social attitudes is almost over before the age when the public school would set out on its programme of educating his character (to the neglect of his spiritual and intellectual development). Moreover, an immense amount of character education—education of and the formation of the self-regarding sentiment—arises neither through external religious principles nor through the formation of habits in accordance with what "is done" in a group, but through the individual's own creative moulding of himself on admired characters.[2] And, at least among

[1] A good summary of psychology's findings in regard to transference of training will be found in Sandiford *Educational Psychology*, p. 275-300.

[2] The insistence on religious salvation and struggles in character formation is almost certainly misguided. When we have discovered by research how a healthy character ought to be allowed to grow, all this interference may be avoided. Was it a lucky happening of Dr. Hale's parents upon a suitable early upbringing, which gave him such a nature that he was able to reply to Starbuck's questionnaire on religious difficulties: "The half-philosophical novels of the time had a great deal to say about the young men and maidens, who were facing the 'problem of life.' I had no idea what the problem of life was. To live with all my might seemed to me easy; to learn where there was so much to learn seemed pleasant and almost a matter of course; to lend a hand if one had a chance, natural; and if one did this, why, he enjoyed life because he could not help it" (quoted by William James, *Varieties of Religious Experience*).

the more intelligent youths, these characters are not those placed around the boy or girl by thoughtful school authorities (the class teacher is almost as frequently an object of criticism and contempt as of admiration and imitation), but the characters found in literature and history. The character-building effect of these sources has been in the past, and will be still more in the future, a thing dwarfing the effects of direct suggestion in preaching or of school "tone" as it is at present understood. Barker drops an observation which could be developed further. "It has often been remarked that when Mr. Pickwick kept Christmas, he set a fashion. M. Finot has said that the Parisian woman models herself on the pictures of Parisian women which she finds in French literature. . . . Mr. Kipling's pictures of the men who have made the British Empire have helped to make the men who have made the Empire." This is but one aspect of character development relatively neglected by our traditional school systems in favour of less desirable methods. How many other neglected possibilities exist, psychological research can alone show.

It would, however, be an ungracious attitude to direct one's shafts at the English public school (or the German gymnasium) *per se*. The public school tradition, which at the moment seeks to impose itself on our newer secondary schools, is likely to crop up again and again, wherever education is regarded exclusively as an art and not as a science. An example of this educational maladjustment is the separation of intellectual and moral development inherited from medieval dogmatic philosophy, an error which results in the destruction of much intellectual eagerness and the production of astoundingly empty and obstructive public-school types, too well known to need description. Considering that the best individuals in inborn ability tend to go to our public schools and that they have immensely greater financial and social opportunities than others in later life, it is amazing to see how little they have contributed to modern thought. In a recent speech Sir Charles Trevelyan, Minister of Education, remarked: "At Harrow, in the day when I was being educated, the conception of education was not very wide . . . it was a rather dreary and silly attempt to make me write Greek verse before I could write good English, . . . I do not believe in trying to make all boys do the same thing, and I think it is a very mistaken idea to make boys very wise by classical education." Sir Charles Trevelyan sent his own son to the local village school in Northumberland.

Practically all the criticisms which apply to the public schools apply equally well to the older universities. Alongside the state-

ment of Trevelyan one might range that of Gibbon who, in his autobiography, was forced to confess that the years spent at Oxford "proved to be the most idle and unprofitable in my whole life." If historians are forced to such comments, how much greater must be the disgust of antevert, scientifically-inclined minds ? Quite a disproportionately great number of scientists and university professors come from the secondary schools. A recent speaker broadcasting from the B.B.C. announced his astonishment at the remarkably small part that public school men had played in the history of the British Association for the Advancement of Science. The majority of its presidents have been men from the most ordinary of modern schools. The movements of our age have been deprived by fatuous systems of education of the best innate material, the types whose vigour should have been bearing the brunt of social pioneering.

Our literary men of genius, Wells, Shaw, D. H. Lawrence, George Moore, and many others who stand out by the freshness and originality of their thought, have appeared from "nowhere" as far as the public schools and older universities are concerned, and this, despite the excessively classical and literary preoccupation of the public schools tradition of education. Even in the field of politics, which has long been one of the special objectives of public school education, the most outstanding figures—MacDonald, Lloyd George, Arthur Henderson, Philip Snowden, to name a few—informing politics with a new spirit, have been educated in state schools remote from the public school outlook. The same public school tradition was maintained more than one hundred years ago, for we find Sydney Smith pointing out in 1810 (*English Review*): "It is very remarkable that the most eminent men in every art and science have not been educated in public schools.

"Spenser, Pope, Shakespeare, Butler, Goldsmith, Samuel Johnson, Beaumont and Fletcher, Ben Jonson, Sir Philip Sidney, Savage, Arbuthnot and Burns, among the poets, were not educated in the system of English public schools.

"Sir Isaac Newton, Maclaurin, Wallis, Hamstead, Saunderson, Simpson and Napier, among men of science, were not educated in public schools.

"The three best historians that the English language has produced—Clarendon, Hume and Robertson—were not educated at public schools.

"Public schools have done little in England for the fine arts—as in the examples of Inigo Jones, Vanbrugh, Reynolds, Gainsborough, Garrick, etc.

"The great medical writers and discoverers in Great Britain—

Harvey, Cheselden, Hunter, Jenner, Meade, Brown and Cullen. —were not educated at public schools.

"The greatest discoverers in chemistry have not been brought up at public schools: we mean Dr. Priestley, Dr. Black and Mr. Davy."

Doubtless, then as now, many eminent men of public school origin could also be named, but they will be found to be men of great natural aptitude carrying on traditional occupations in a traditional way, having lost their natural originality, freshness and openness of mind. No one could fairly contend that the public schools fail to turn out many fine types. But it is obvious to sociologist and psychologist alike that the policy of giving all reverence to tradition; of governing the schools by people who constantly select colleagues from their own narrow set; of keeping this government, by endowments, secluded from State reform; and of allowing the school tone to be set by young and privileged barbarians, is bound to end in a frustration of the most vital developments in education. The reaction of intuitive minds to this situation is no less definite than that of the scientist. In a public address at Plymouth, Bernard Shaw has recently tendered the uncompromising advice: "Let no citizen of Plymouth or anywhere else be persuaded to send his son to Oxford or Cambridge. The thing to do with these two unvenerable institutions is, in spite of the beauty of many of the buildings, to raze them to the ground and sow the foundations with salt. There are several public schools which it will be invidious to mention, which are generally regarded as mere nurseries of Oxford and Cambridge and they may share the same fate." There is going on, unrecognised by the busy man of affairs and abetted by educational pundits, a disgusting sterilisation of our best minds by the social force of snobbery which condemns our brightest youth to be pressed in an ancient and useless mould by an educational system founded on dogma instead of on science.[1]

One reason for this is the low esteem in which individuality and intellectual interests are held in the older schools.[2] Another is the

[1] It is instructive to consider the table on page 355 of the last chapter from the point of view of comparing the distribution of endowments in older and newer universities.

[2] The Bishop of Gloucester has recently been moved to remark: "An education which is purely intellectual appears to have a disintegrating and destructive, rather than a constructive tendency." This is typical of the reaction against true education. One wants to ask for the experimental evidence for such an oft repeated assertion. One wants to ask: "How much intellectualism and of what kind?" And one wonders if the disintegrating and destructive tendencies are not merely confined to belief in the tenets which the Bishop himself holds.

practice which, not only in the school curriculum but in the conception of intellectuality which it creates and the atmosphere in which it wraps education, fills the youthful minds with the lumber of ancient disciplines instead of responding to the natural interest of the child in life and nature.

It is false psychology to draw any sharp distinction between character training and the acquisition of knowledge. Habits of behaviour such as honesty, fair play, tidiness, etc., have been produced under experimental conditions, and it has been found that they only maintain themselves in the field in which they were taught. This means that a boy who has learnt fair play and honesty on the playing fields of Eton may yet show no signs of them on the Stock Exchange.

The only guarantee of true social conduct is a sound disposition resulting from early upbringing on which is built an extensive intellectual interest in, and understanding of, the universe, especially of life and humanity, culminating in a religion which grows naturally out of the scientific understanding of life.

Our present method of teaching religion as a dogma, emanating from separate institutions, would be wrong even if Christianity were right. And every schoolboy who has not, like his elders, acquired the convenient habit of keeping his mind in water-tight compartments, realises intuitively that Christianity is not a universal principle, but a partial principle conflicting with much that is done, e.g. warfare and individualism in economic competition. Moreover, when it is thrust upon him by muddle-headed elders as true ethics, strangely dragging behind it the appendages of the old testament and pre-Christian Church ritual, his suspicion and confusion solve themselves, if they solve themselves at all, in the defence of a superficial conformity and an underlying rejection, a lack of interest, and a mild ridicule.

Certainly he never dreams of connecting this religion with the ideals of kindness, fair play, and group loyalty which grow up independently from a still more ancient and vague English traditional belief in what Sir John Collier has called true religion, "the natural good-fellowship and decency of mankind."

Much of the character formation which was put in charge of religious bodies and thought to be produced by them, is now, and will be still more so in the future, undertaken in the normal course of school education. The development of social feeling, of idealistic sentiments, and of a life philosophy, as well as the eradication of evil habits and sentiments, are becoming increasingly matters for the school and the psychological clinic. Even before the advent of psychological science the school was almost certainly more

effective than the Church. The growth of good feeling, of self-control and humanity throughout the nation was most striking throughout the nineteenth century, which saw universal secular education come into being: the preceding centuries of Church rule had failed to produce such an effect. To religious bodies in some instances (e.g. in England) must be given the credit of leading social thought to the will for education, of starting that education, and of revealing the possibility of educating character in ways more pervasive and effective than those of purely religious suggestion. Whilst being grateful for this early influence, we are yet bound to realise to-day that the character education of the young must be one with their intellectual education.

Just as our older educational leaders falsely split up the personality into unreal divisions, so our educational system is struggling in the grip of an old division of intellectual education in the schools and moral education in the churches, with additional uncontrolled and ignored possibilities of education in the home and in the world of reading.

All these need to be integrated into a single organism of education centring in the schools and led by an active institute of educational research which will elucidate the growth of character and knowledge and arrange for the spread of such knowledge through the schools and the teaching training centres of which I shall shortly speak.

Particularly do we need to organise that education of child and adult which comes through reading. The teacher, particularly the older teacher, has refused to popularise his knowledge; any attempt to put into practice the psychological suggestion that education should grow out of one's natural interests was opposed, especially in higher education, on the grounds that it decreased the academic rigour of the study. Those who have advanced the sciences, the study of language and history, have generally shown a complete lack of this academic attitude, and in literature only the middlemen—the professors of literature and pundits of the art of writing—not the creators, have shown interest in such forms of discipline.

Consequently, outsiders have had to do for adult education what academic minds would and could not do. Sympathetic and skilful teachers have arisen who, through the medium of books, have interested more students than the dry-as-dust academicians with their essentially unpsychological methods had ever succeeded in attracting. It is a pity that circumstances prevent them from doing the same for children. Minds like those of Wells in England, or Van Loon in America, have done more for general education than

a whole university, and even university students owe them a good share of their interest in and understanding of their subjects.[1]

We need a revision of university curricula and methods in the light of psychological studies if the universities are to continue to dictate the curricula and methods of the schools without perpetual risk of the present abuses and the continued presence of century-old obstructionism.

Our whole educational system, in its older roots, has got into a conservative rut. It needs to be replanted in a form in which it can go on growing indefinitely. The encouragement of new ideas and sciences has never been a function of these older roots of learning in this country or in France or Germany. Yet it is the very nature of true culture to live with new ideas and to shape them. There is a strangle-hold on education by narrow minds set up in ancient mutual admiration societies and still dominated by clerical influence. These forces, endowed from centuries back, still exert a considerable back-stairs control on education. Recently the National Union of Teachers, supported by the vote of an overwhelming majority of its members, was forced to insist upon a conscience clause in a religious instruction bill brought before parliament and to make the following demands:

"Grants in aid of non-provided schools to be accompanied by a large extension of public control over such schools, including the appointment and dismissal of teachers by the local education authority.

"No right of entry, or any arrangement involving the giving, in provided schools, of denominational religious instruction to any section of the pupils during school hours."

There is evidently a vast body of progressive opinion among teachers in state schools which is being entangled and held up by the ruins of older systems. Let us turn from these dismal, narrow, medieval ruins standing in the path and survey the progress of the new building.

III. New Prospects in Education

Less than a century ago it was the rule in the most advanced countries of the world for children to have an average school life of about three years. To-day it is about four times as long.

Increased appreciation of the necessity of educating all to a minimum level of proficiency in civilised occupations and manners

[1] I have realised this again and again in tutorials with students, but especially on seeing a university hall crowded beyond previous records to hear such a writer lecture on an academic subject.

has accounted for much, but not all, of that change. With the extension of the boundaries of human knowledge and the increased complexity of life, it has become necessary actually to know more and to be more highly trained. This complexity will cease to increase with such rapidity now that the inventive and organising minds of the leaders of thought begin to reach the boundaries of their own intellectual grasp. Centuries ago the minds of men were of greater complexity than most of their environment demanded. Religious changes, permitting civilised life, have enabled men to bring their mental energies to bear to produce an environment as complex as their minds can grasp at the present stage of evolution of intelligence.

Nevertheless, some increase of the demands on intelligence made by everyday life will always go on, and in any case the period of youth devoted to education will continue to extend because of the increased demands on knowledge. Of course, for the wise and happy man education continues all through life, but I am speaking now of the minimum education necessary to fit one tolerably for civilised life. There comes a certain limit when any further additions to the period of education, with the resultant curtailment of the period of active living, becomes uneconomic, if not anti-cultural, with our present span of life. I do not think we are yet anywhere near that limit. Naturally, with an increase in the effective life-span the age limit for education could be considerably raised. An increase of ten years in the average life would be an immense gain for a species such as man in which the educational period is bound to become longer if the maximum adult effectiveness is to be maintained.

Too great an increase of life span, however, might prove undesirable, for even now human beings, like automobiles, tend to grow out of date before they wear out. That, however, is a matter to be corrected by adult education towards greater self-analysis and adjustment and by the introduction of social arrangements which put comfort but not control into the hands of the aged.

It is my present thesis that everything possible should be done to render shorter the time taken to bestow the amount of education now given. We must first have more knowledge of the process of learning. A very small expenditure—about ten times the present amount—on well controlled research in educational psychology would provide us with the surest means of organising education in this and all other ways. At present in England, educational research is practically unorganised and is left to the charitable efforts of the few. Professors of Education, for the most part, prefer to dwell on the history of education, and seem to recognise

no obligation to undertake research work; whilst directors of education are mostly appointed from the office staffs or from assistants of education departments who, like their professors, have been content to lecture indefinitely without any effort to ascertain the truth of the theories they repeatedly propound to young teachers in training.

This is a root criticism which applies to many countries other than England, though scarcely to Germany and America, where educational advance, educational experiment and enquiry show a vitality unknown in this country.

Not those engaged professionally in education, but men like H. G. Wells, Huxley, Shaw, and Baden-Powell have forced upon an indifferent populace necessary changes and opened up the lines of development so urgently needed. I know of no better examination of the curriculum than that of Wells in *Mankind in the Making*; no better treatises on discipline and character formation than those of Russell and Shaw; no finer understanding of youthful development in all its aspects than that of Baden-Powell.

The writings of these enquirers are old relative to the last cart-load of writings by professional educators, but they still have more to teach than any of the latter. Admittedly the outsider frequently blunders terribly in his incursions into education. Anyone steeped in its problems must restrain his smiles at the extraordinary solecisms made by business men when they are invited to make suggestions in education. On the other hand, the professional educator is so perplexed into a state of impotence by his excessive sensitiveness to all arguments that he cannot see the wood for the trees; and in any case he is continually looking at education from his own purely academic angle. I should say the outsider has a more balanced view of the aims of education and the courage to make major adjustments, whilst the professional educator, having the advantage of historical perspective and close study, if not of psychological direction, is much better able to shape methods and perceive how certain results can be attained.

The historical standpoint, however, has the disadvantage of binding the thoughts of its possessor to the past, opposing him to everything that has no precedent, and making him genuinely afraid ever to make a clean break in his thinking.

I may illustrate the unfortunate effect of this predominantly historical training of educators by considering the present state of two of the largest practical educational problems—the curricula and the organisation of schools.

A man starting without preconceived schemes, and unhampered by tradition, might reasonably suppose that children should be

taught firstly, such knowledge as will be useful to them occupationally in later life; secondly, such subjects as will enable the individual to appreciate life more richly, to perceive his relation to the universe and form a stable philosophy of life; and thirdly, such education as will train the capacities of the mind. He might expect art,[1] history, geography, mathematics, physical training, such modern languages as the individual can hope to perfect, literature, training in effective use of the mother tongue, physical science (including astronomy, physics, chemistry, geology), and biological science (including hygiene and sociology). As the child approaches the school-leaving age and the last opportunity formally to educate him for citizenship arrives, the former divisions of school subjects would need modification in accordance with (1) his growing knowledge and ability, (2) the vocational bent of his aptitudes, and (3) the necessity of making him a liberal-minded citizen. We should expect mathematics to turn to economic and social problems for its material and to exercise itself as a tool on real social problems.[2] We should expect biological science to develop into hygiene and medicine on the one hand and psychology on the other. No youth ought to-day to leave school without knowing all that can be conveniently summarised about the possibilities and limitations of his own mind and the behaviour of the group mind. Here again we have to turn to outsiders for the initial step. Graham Wallas has rightly led the way with his demand: "I myself believe that a very simple course on the well ascertained facts of psychology would, if patiently taught, be quite intelligible to any children of thirteen or fourteen who had received some small preliminary training in scientific method."[3] Whatever is done in the school itself, social studies must be regarded as the main food of later adolescent and adult education when the interests and experiences necessary to full understanding of such questions have developed.

In biology too we need a complete sex education, given in its essentials before the emotional period of adolescence and before the pruriency of the herded young has had time to besmirch youthful minds.

At this period we shall expect art to deal with architecture, the history of art, and the appreciation of music. Here there is a great

[1] I use the adult terms and divisions of subjects, but, of course, such watertight compartments would not exist in the school where the subject matter would be joined in a few broad divisions.

[2] Sir Percy Nunn's new teaching on mathematical education takes this line, but great as his influence has been, it is scarcely sufficient to reform traditional practice, especially among the older schools in educational backwaters.

[3] *Human Nature in Politics*, p. 189.

field for research regarding the normal æsthetic and emotional development of children, of which to-day we have no true standards.

Geography will join with economics on the one hand and biology on the other to lead to anthropology and the study of racial differences, human variability and its results. History, becoming the history of science and of thought, will join with these sociological studies to become a new subject which will aim at giving a rational basis for moral and religious life. Previous to that period of insightful understanding, moral education will have been arranged to occur in every subject and in general group life by the methods which psychological enquiry shall have shown to be best.

All the classical divisions of the curriculum handed down from the past and imposed by higher specialist spheres (the universities) have no right to exist in the school. Until recently we have failed to realise this. The well-known "project method" breaks down those barriers altogether, but even lesser departures from classroom teaching must forget them and make broader studies which follow threads of interest rather than those superficial patterns of the logical division of subjects such as necessarily exist at the university level.

Our whole education, as regards its spirit and subject matter (and these cannot be separated except in text-books of educational theory), needs to be re-orientated to the spirit of our age. That spirit penetrates with difficulty our educational traditions, especially those which direct the education of most of the upper class. Education needs to be humanised by being made spiritually scientific. Professor Robinson in his fine work *The Humanising of Knowledge* insists: "We are forced to ask whether it is safe, since our life has come to be so profoundly affected and dependent on scientific knowledge, to permit the great mass of mankind and their leaders and teachers to continue to operate on the basis of presuppositions and prejudices which owe their respectability and currency to their great age and uncritical character, and which fail to correspond with real things and actual operations as they are coming to be understood." He continues later: "We need, therefore, a new class of writers and teachers, of which there are already some examples . . . who see that the dissipation of knowledge should be offset by an integration, novel and ingenious, and necessarily tentative and provisional. They should undertake the conscious adventure of humanising knowledge . . . be brought together in an effective if informal conspiracy to promote the diffusion of the best knowledge we have of man and his world. . . .

At present there is a woeful ignorance even among persons who pass for intelligent, earnest and well read, in regard to highly important matters that are perfectly susceptible of clear general statement."[1]

IV. The Undue Resistance of Established Systems to Newer Educational Methods

I suggest that an intelligent approach to education, unhampered by preconceived prejudices and imposed traditions, would lead one to such an organisation of education as that just depicted. In actual fact, the picture of present-day education is very different. For example, although the introduction of biological science into secondary education has been ably sponsored during at least the last thirty years, those who control the schools have only very grudgingly made way for it. Even among the modern secondary schools, unhampered by anything more substantial than the desire to ape the older schools, one could point, for every school which has adopted a better balanced curriculum with biological science, to two or three that have introduced Latin and Greek, subjects in which no pupil reaches the stage of easy, pleasurable reading, and which have been shown to have no training value for mental capacities.[2] I mention this lest I should be thought to be tilting at the coffins of old foes.

In the classics and modern languages there soon operates a law of diminishing returns. Contact with Roman and Greek culture is obtained much more effectively by reading the history and thought of these periods in our own language. For that matter, the wealth of thought of classical nations has already been amply exploited, and the best features incorporated in the framework of modern ideas which are directly available to pupils. Moreover, if these cultures eventually led to the disappearance of the people who bore them, are we justified in trying to produce a widespread and wholesale adoption of their spirit in our own time? There are features of the classical spirit—the irresponsibility, the exaggerated individualism, the apotheosis of warlike virtues, the absence of a progressive religious outlook and sense of community adventure in a world of science—which indeed we must en-

[1] Quoted by Barnes, *Psychology and History*, p. 143.

[2] Sir Eustace Percy in his recent book, is repeating the conservative tradition and the old useless *a priori* reasoning when he says: "It is probable that language will always be the best medium of education, because language is man's distinguishing gift and touches the human brain at its most sensitive nerve." For such people, Huxley, Ruskin, Armstrong and modern psychological research have existed in vain.

deavour strongly to eradicate if any progress to better, more spacious times is to proceed without unnecessary obstruction. The new feature of our civilisation is a commonsense scientific attitude. We should bend all our forces to developing it, for it may save us where the classical culture led its bearers to destruction.

Surely such subjects as Arabic, archæology, Chinese, Greek, highly specialised science or mathematics, horticulture, Latin, law, military studies, shorthand, Swahili, and theology, which are useful in later life as a means of livelihood or community service to extremely few or which can provide no cultural value save for the 0.1 per cent. of pupils who are able to carry them to advanced stages and to research work, should have no place in our overburdened school curricula, and should be relegated to specialist studies in the universities or to technical schools. Only an unbalanced philosophy of life or an unpruned growth of tradition can regard them as part of a general liberal and vocational education.

The ancient debate of liberal versus vocational education, discussed *ad nauseam* in educational circles, has been rendered devoid of purpose by being couched in the conceptions of the obsolete sociology of those educated in institutions isolated from the progressive forces, and immune to the critical control of the nation. The modern world presents entirely new situations which have not been taken into account. Firstly, so complex are most of the occupations of civilised life that it is possible so to arrange a vocational education that it ensures at the same time a liberal education.

Vocational and liberal education are no longer separable in the way possible when the liberally educated spent their time hunting and the vocationally educated pursued simple routine occupations. All matters involved in a successful performance of any civilised occupation are now so interrelated with the other activities of the community that the safest way to a vocational education is through a liberal one. Secondly, leisure is becoming the right of the many, not of the few, and a liberal education must be one suited to the expressions of all. It is no longer the education of a special social class to its own traditional mode of idling, but a true education of all to an appreciation of the universe, to an intelligent understanding of the drama of human progress, and to the acquisition of means of recreational and artistic self-expression.

If we are to make any distinction in the varieties of education—and as we shall see, some education must primarily be purely technical in aim—it would seem best to design pre-adolescent

education as entirely cultural and to turn at adolescence to vocational subjects developed liberally, continuing adult education largely as an enlightenment and development of the whole personality and intellect.

A division in adult life between technical occupational activity and general cultural development there must certainly be. For a large but diminishing number of people the hope of making work play, of making it the absorbing work of the artist—is chimerical. All attempts, in the William Morris spirit, to put the clock back in industry and to conjure back a very problematical constructive joy in work which the original hand-worker is supposed to have possessed, are radically false, and hinder us from rapidly discovering the real way out of the industrial workers' misery. We must aim, through still more technical and specialised industry and still greater mastery of machinery, at reducing banausic labour to a negligible minimum. Those with little creative ability will then spend but a short portion of their day in machine-tending and have a large margin of leisure for recreations suited to their psychological make-up, whilst those with any degree of artistic and scientific ability will have the fullest scope for reproducing their artistic and technical inventions on a large scale for the benefit of all mankind. The consumer will have, for example, instead of furniture laboriously made by mediocre artists at a high price, furniture machine-made to the design of the best living artists and produced at half the cost.

The worker will find his creative satisfaction in the recreational activities possible in the greatly increased leisure of his day: the person with greater artistic and technical skill will have been able to put those powers more fully at the disposal of a greater community. And the proportion of the second type of worker relative to the first will have increased as a result of invoking machines for the work hitherto done by slave labour.

As Professor Huxley says: "Some form of the 'dual day,' to use a current phrase, or at least of the 'dual life,' is the method which seems to be in accord with the enduring principles of biology." To that equilibrium of activity in adult life must we shape the present school education. Confused by regressive theories of social and psychological happiness we are at present tending to neglect the growing leisure possibilities of workers in civilised lands because we are still persisting in older conceptions of technical and liberal education for life. As Principal Barker has reminded us: "We have to learn in a word, not only to organise work, but also to cultivate leisure. It is a matter of education and of schools; but it is also a matter of public policy and public institutions."

We are confused by the persistence of old educational labels and libels and by the appearance in our midst unnoticed of new mechanisms of vocational and liberal education and self-expression. An example of this confusion of ideas is seen in the fact that although educationalists purport to deplore specific vocational education before adolescence, purely on the grounds that a child cannot choose its vocation at a tender age, the child actually has the general nature of his vocation fixed for him at eleven years of age by being drafted to elementary, central, or secondary school. In this there is nothing intrinsically amiss, indeed scientific vocational guidance may be able to predict at the earliest ages what particular occupations are best suited to each individual: the undesirability lies in its not being openly recognised. Again, the universities continue to be regarded as the homes of liberal education, and make some show of standing aloof from the technical schools, whereas for the majority of their students they are technical colleges leading to the professions of medicine, engineering and, especially, teaching. More students attend workers' educational classes for liberal education than attend the universities for that purpose, and universities in consequence are in danger of neglecting those subjects—sociology, anthropology, psychology—which do not lead to a definite fee-earning profession.

Wherever we find an intelligent outsider, working on commonsense scientific principles, attempting constructive work in education, we always find him arriving at a viewpoint radically different from that which tradition has imposed upon us. And invariably he is quickly opposed by an immense passive resistance from the old entanglements.

Because it is a relatively new growth, organised under clearly set out principles and accessible to general criticism, there is great hope in the state system of education which is now completing itself. Yet this valuable, responsive and responsible organism lies in a thousand ways at the mercy of older institutions and the abetting ignorance and apathy of the public. A ludicrous example occurs to my mind at the moment of a very efficient secondary school guided by enlightened methods, which, in order to meet a snobbish and misguided parental demand, has had to bring Greek into the curriculum and alter its name to Grammar School.

In all this vital growing point of the national life we are in the grip of a vicious circle of incredible tenacity. The older upper classes developed their schools—good schools for the ideals and social situations of the time. These in turn shaped the atmosphere of a pair of universities which were the only ones then existing. The newer universities, shaped to some extent despite themselves

on the older models, continuously impose those traditions on the new state schools (and such private schools as have no new ideals or cannot afford them). By demanding certain subjects and certain attitudes in their entrance examinations the universities can dictate the curricula and educational spirit of the schools. I have known even a provincial university college forcibly to push Latin and Greek into the curriculum of the only secondary school of a small town, simply by imposing a university scholarship on the town which could be attained only in those subjects. That is one half of the circle.

Now from the universities the graduates pass out to become teachers in schools, teaching as a matter of course the particular academic subjects in the particular academic divisions with which they themselves have been crammed. Then the evil circle is complete and offers no point at which reform can force an entrance.

Stagnation is aided by two other mechanisms. Firstly, there is a general tendency for the administrative educational officials to be recruited from the Arts graduates. College and university principals are almost invariably classical or literary specialists, mainly because science graduates are too engrossed in their own vital work to want to take up administrative duties, even though these positions bring greater remuneration. Secondly, the slowness with which the public acquaints itself with educational matters causes it always to extend its loyalties and admirations to the models of yesterday and to a bygone distribution of cultural values. Again the social mechanism which causes the views of the upper class to spread, at least superficially, to the lower, results in the schools and universities which have at one time been regarded as best by the upper classes, being regarded as such by the whole nation a few generations later.

Especially do we find this unintelligent imitation taking place in the middle classes, which are in all countries the most snobbish. For this reason those who would teach in girls' schools (in which social shibboleths are still valued by parents more than they value education) had much better obtain an inferior degree from a fashionable provincial university attended by the rich than a hard won degree from a more thorough and progressive British, American, or German university.

V. Scientific Investigation Wanted in Aims, Methods and Organisation

So far I have been concerned mainly to combat that viewpoint —or rather lack of viewpoint—which permits education to pursue

a desultory course from one ancient tradition to another, which acquiesces in its being shaped by historical accidents and makes no attempt to make a clean start from the ground of common sense, clearly discussed aims and the findings of empirical mental and social science.

Education can be permanently set on a progressive footing only by instituting at its head an active body of research workers, unhampered by ancient endowments and prejudices in their task of putting every well-proven advance at once at the disposal of the community.

Progress is needed firstly with regard to clarification of aims (the decision of aims should, like the decision on political aims, be a matter for the whole community expressing itself in terms of enlightened alternatives), but especially is it necessary in methods and in all that is affected by psychological knowledge.

Direct progress by the application of psychological knowledge and common sense must replace the sheer traditionalism, the sheer sentimentalism and the sequence of ill-founded educational "fashions" which now divide our educational system between them.

Consider, for example, the guidance which the psychological study of intelligence should be giving to our educational system. It is now well known that intelligence is pretty symmetrically distributed in the population. About half the population falls between the limits of Intelligence Quotient 85 and 115. A quarter falls below the lower of these limits, and another quarter above the upper one. The indications of these facts for school organisation are pretty clear. We should need a set of normal schools to take the middle section, a set of special schools for the backward, and a set of "secondary" schools for the advanced quarter. Actually, until quite recently, about seven-eighths of the population—containing all levels of intelligence—were in the public elementary schools and the remaining eighth in "secondary" (grammar, public, preparatory, private and secondary) schools. With the increase of secondary school accommodation, favoured by government action and the increase of free scholarship places, our education system momentarily shaped itself as if to absorb the more intelligent half of the school population into the secondary schools and the lower half into the elementary schools—a division quite out of accord with the most convenient and natural points of cleavage in the normal curve of distribution of ability. Conditions soon began to show that something was amiss in such an ideal, and the pressure of facts eventually forced upon educational opinion the necessity of starting a type of school midway between

these two. These new schools, the central schools, came into being, and have continued to grow, with the rapidity of an institution which satisfies a real need.

Now the arrangement of school opportunity must be determined by two sets of conditions: (1) the facts regarding the range and distribution of educable capacity in the raw material, and (2) the kinds of finished product desired; i.e. the community's proportional needs with regard to various kinds of occupational service.[1]

As we have realised in Chapter II, the social profile, i.e. the distribution of vocational opportunities, does not seem to fit very well the distribution of natural ability. The distribution of capacity, we have said, is that of the normal curve (p. 55), but the distribution of occupations at present demands a relatively great number of unskilled and semi-skilled workers, fewer highly trained clerks and mechanicians, and an extremely small minority of managers and professional workers.

From the distribution of occupational opportunities one might argue to (1) a large elementary school section; (2) a relatively small central school section, catering for the highly skilled mechanical and clerical occupations; and (3) a still smaller secondary school provision concerned with those likely to enter professional life and higher business posts. This is the direction in which school organisation is now tending, though we have been late in inventing the central schools. But it is for many reasons unwise to allow school divisions to be dictated purely by the social and occupational profile without regard to the distribution of ability. During the period of predominantly "liberal" education, before the necessity of shaping-up to adult occupational needs becomes insistent, a psychological division of the school population on the basis of ability would lead to much more effective instruction, devoid of wasteful maladjustment, than comes of educating in one type of school children covering an ill-defined range of natural capacity. A clear realisation of the two sets of circumstances determining the provision of schools and some well-thought-out compromise would be a great step forward from our present confusion. But this would be only the beginning of the improvement which could be brought about, through deliberate planning, by the application of psychological discoveries to scholarship selection, school promotion, methods of instruction and character education.

[1] For example, if there were an unduly large number of dull children, we should need an especially large provision of schools for defectives; if the conditions of adult life demanded a great number of skilled technicians, we should need an especially large provision of schools with a "secondary" type of education, and so on.

VI. Unappreciated Factors in the Selection of Teachers

Since in education lies the hope of all other progress, it is probably more important for teachers than for any other body of men serving the community to be of high quality. And by a fortunate concurrence of circumstances this seems to be the case.

Firstly, owing to the mechanism whose bad results we see elsewhere—the hormic tendency for all types, but especially teachers, to mould others into their own type—our secondary schools have largely been centres for educating the young to be teachers. That is, unless some special interest pulled the pupils in a particular direction, the most able boys in the school were being shaped all the time to the ideal of a teacher—by curriculum and by the teachers' attitude to the subjects in the curriculum.

Secondly, since there is a tendency to send more pupils into university work than can be accommodated in positions demanding university training—through the ambition of both the individual and the school—a considerable number of the able individuals (relative to their school fellows) have found themselves taking up teaching as a necessity when the other and better paid professions demanding capital become overcrowded.

Thirdly, by an ingenious but morally reprehensible practice, the government subsidises through a university education those who, at the early age of seventeen or eighteen, are willing to sign a document pledging themselves to teach. This bait raises artificially the competition for teaching posts, and so enables the government to keep salaries at a lower figure than would, under normal conditions of supply and demand, be possible.[1]

Fourthly, even if none of these factors were operative, teaching, like preaching, would still draw more persons of fine character and ability than the salary would normally attract, for there are many filled with a noble ideal of service who rightly see in teaching a maximum opportunity to help world progress.

Fifthly, the continual selection by examination and intelligence tests of those who would be teachers results finally in teachers being a relatively highly selected group both in this respect and in regard to perseverance (though not necessarily in regard to other qualities, e.g. initiative and open-mindedness). This selection may account for the virtues and failings of the teaching profession:

[1] Of the £650,000 now spent in University scholarships 45 per cent. goes by non-scholarship (non-selective) endowment to intending teachers, whereas it might be used for selecting more able pupils for unfettered university education.

it produces a type able by its intelligence[1] to defend itself against criticism and to establish prestige, but lacking the open-mindedness and the initiative to venture on new paths.

Nevertheless, the final result is that we find ourselves with a much better type of teacher than we deserve to attract by the salary and conditions of life proffered. When psychological science has more fully investigated the nervous fatigue occasioned in various occupations I think we shall find that good teaching very nearly heads the list in its demands on nervous energy. We shall not always be so sure of attaining our present supply of teachers by the conditions which we now offer. Incidentally, teachers as a type are far from maintaining their numbers (by reason of a very low birth-rate). Indeed it is one of the crying dysgenic evils of our time that teachers and doctors, classes attracting those with the finest innate qualities, are practically the least fertile of all classes in civilised societies. How far is this due to the too heavy demands which society makes upon them?

Inspectors of teaching, again, comprise one of the most intelligent and progressive bodies of men in the country, a body to whom much of the sanity, the enterprise, and the efficiency of state education is due. The concentration of desirable qualities in such a group results from its members being selected from an already selected body of teachers.

Now this phenomenon of professional selection with its obviously far-reaching social and economic effects, is one likely to have important social developments in the future. There is a continuous social and economic competition between the various occupational groups. On the lower plane this takes the form of financial emulation between trade unions, professional associations, etc. But there is a vaguer and greater competition for social prestige and intellectual influence in social affairs. The outcome of such a competition must eventually depend upon the inborn and acquired intellectual and moral power of those drafted into the various groups. The financial attractiveness of an occupation, by increasing competition for its ranks, will raise the standard of entry, but it cannot be too often stressed that we are not entirely financially determined individuals—both higher and lower motives come more or less strongly into play. And moreover, some occupations have methods of selection which are more psychologically apt than those of others.

Being more closely in touch with psychological research than

[1] In a recent survey of Occupational Norms of Intelligence by the present writer, Secondary School Teachers were found by tests to have a higher intelligence average than Medical Doctors, Civil Engineers, and Business Managers.

any other profession, teaching is likely first to avail itself of psychological methods of selection. Already, in some parts of this country and America, intelligence tests are being employed for this purpose.

With the assistance of the National Institute of Industrial Psychology, various industries are beginning to select their employees according to psychological methods—accepting the best and rejecting the less able. What is going to be the result of this?

Obviously the occupations which do not avail themselves of such methods are going to become increasingly the dumping grounds for those rejected by other occupations. I am sure that one of the causes of the present lack of intelligence and enterprise in English commerce is the effectiveness with which the schools draft all the most able pupils into callings entered through academic examinations, i.e. the professions, especially teaching. In Germany the universities give up again their capture to industry. The university doctor passes out easily enough into industry, but here it is not so. This scramble between the vocations for the supply of talent ought to be wisely regulated for the good of the community: at present the community is well served by the lucky accident which provides society with a better selection of teachers than it sees fit to provide for itself.

On the other hand teaching considered simply as an occupation lacks the incentives which make the fullest use of human motivation in business. Professional occupations in general distinguish themselves from business occupations by having no close connection between the efficiency of the service given and the material rewards returned to the individual. The professional man, and from this aspect the teacher is the purest example of professionalism, is supposed to carry out his tasks satisfactorily, to be enterprising and inventive, all from a sense of duty and a desire for reputation, whereas the business man, for his part, throws in his fullest energies in response to opportunities of material gain. It is this contrast between the motivation by conscience and by egoism which really forms the central issue of Tawney's work *The Acquisitive Society*, but Tawney is able to see only the virtues of a system which is motivated by duties and none of the advantages of a society which emphasises opportunities.

The issue is so vital that it is well to discuss it here. It is one of the first truths in the psychology of learning that the organism continues to progress in acquiring skill only so long as its tentative actions continue to be met by punishment and reward (in the broadest sense) according as they are wrong or right. Now in most professions (*a*) it is very difficult for the individual to appre-

ciate the effects of a change of method (as a teacher he cannot perceive the differences in children resulting from slight differences of method, and as a doctor he cannot assess the effects of small differences of treatment); (*b*) even if he can perceive his relative success or failure, no reward or punishment accrues to him. No one else, as a rule, notices the change he has produced, and his total reward is the approval or disapproval of his own conscience—a slender force in most individuals compared with the forces of self-assertion, acquisition and rivalry which are brought to bear on the business man.

Moreover the teacher, like all professional men in a large organisation, has insufficient motivation, compared wth the business man, to be enterprising and progressive and to use up all his energies in his work. Apart from making a good exhibition in a very occasional inspection (and even this does not yet apply to the medical man and other professionals) he has nothing to gain and everything to lose by stepping out of the rut and making himself a nuisance to his colleagues by advocating or adopting new methods and aims.

On the whole it would look as if Tawney's ideal of socialising the economic system, so that the "professional duty motivation" may extend to business and supplant the economic motivation, is a very bad one. Psychological considerations seem to suggest that it would be better to find some way of extending business motivation to the professions in order that they may become more efficient and progressive.

An unbiassed study of these facts, however, will show that what is really wanted is not the introduction of economic motive, for (1) self-assertion can satisfy itself without a merely material reward, and (2) independent economic arguments may in the end justify a socialised society. Psychological considerations indicate rather the introduction into professional life of means whereby the relative success of the practitioner can be made known to himself and to the general public. Conscience, the duty motivation, will then not be supplanted but merely assisted by the more robust drives which spring more directly from the instincts.

Thus in teaching it must be one of the next tasks of the appropriate science—psychology—to devise means of estimating with some accuracy the educational progress—not merely the examinational progress—of classes of children (relative to their native ability) so that the work of the teacher guided by this accurate perception of the changes being wrought, may become still more interesting and at the same time susceptible to comparison, and so

that it may draw more fully upon the psychological energy of the whole personality through both conscience and emulation.

To pretend that the soldier, the scientist, and many who have performed the noblest deeds, have not been motivated by the desire for distinction as well as by conscience is utterly false, and to hope that the competitive spirit will be eliminated is not only to hope for a relatively ineffective society of psychologically lamed individuals but also to manifest a most perverse asceticism out of keeping with the main trends of nature. We tread closely here upon very great issues, the general solutions to which are, however, clearly indicated by the principles discovered in the earlier part of this work. Human nature is innately competitive, for definite evolutionary reasons, and any system which represses or neglects to use this incentive will fail in comparison with one which does, because it makes only partial use of human energy. Competitive societies, on the other hand, are more difficult to organise successfully and are more prone to disastrous diseases. For this reason it is possible and indeed probable that we are entering on an era in which a type of individual will be evolved whose innate energies will express themselves in more altruistic and less competitive channels. But that process cannot safely be carried very far, and sociology will therefore devote itself not to inventing societies which suppress the competitive drive but to discovering the best ways in which it may be utilised without evil economic and psychological consequences. Psychologically we wish to avoid the inferiority complex and its resultant spiteful or neurotic characters; we wish to avoid the person who never co-operates and has not learnt to satisfy his self-assertion through excelling in community service; we wish to avoid the deterioration of character which goes with excessive rewards for success and the desperate insecurity which goes with failure. These can be avoided by right education, by a much more kindly attitude on the part of society towards failures, by greater moderation in "rewards" and "punishments," and by arranging social life in such a way that the fullest self-expression is to be found only in serving society.

Every student of education to-day knows that one laughs at the old practice of "payment by results," but he would be astonished at the notion that the practice is right in principle, only the method of assessment and the method of reward being at fault.

If we could truly assess educational progress, and if the reward of the teacher were only the greater satisfaction he obtained from demonstrating the success of his methods to an appreciative community, we should raise no objection to payment by results.

Individual differentiation in reward with respect both to inborn

qualities and to those qualities which can be acquired by training will probably continue to be a sound principle in progressive communities. The amount of variation of reward will almost certainly be restricted, and the reward may cease to be crudely material, but it will be maintained. When eugenic selection schemes reach a high degree of perfection we may practically cease to reward inborn excellencies since these will then be fostered by other means.

Our present inability to assess obscure and intangible services like teaching and healing is no refutation of the essential soundness of rewarding the teacher and the doctor according to their success.

VII. Centralisation and the most Enlightened Control of Educational Policy

With all this efficiency in the selection of teachers—a relatively lucky result of unplanned influences—there goes a profound stupidity in the broader aspects of education. This concerns mainly the mechanism of control of education by the state. The educational system is like an artistically-wrought window badly set in an unsuitable building. With some aspects of this unsuitability—notably the control of separate aspects of education by school, by Church, and by writers—I have already dealt. Another aspect of this mismanagement is the control of education by local bodies which need know nothing about education. It may be true that these committees know something about the needs of their own areas, but do they know enough about education in general? We entrust the building of a bridge only to a man skilled in engineering, and not to those who merely know the local topography, but when the growing minds of children are concerned we lose all sense of proportion and entrust the task to those who are only familiar with the less important of the two things to be adjusted. Those who support this decentralisation are wont to talk much of the "local spirit" and the "special needs of the area." Behind this mixture of humbug and local knowledge (which is nothing but a knowledge of the local purse, the numbers of children and their distribution) lies an ignorance of the larger modern trends of education, a desire to resist the reforming functions of a central authority, and a puerile pride in local accidental peculiarities.

These butchers, bakers, and candlestick makers are often very earnest men seeking to do their best, but how can they in their busy lives hope to keep up with the progress of educa-

tional science? Education needs to be directed by the finest brains in the land who have examined and thought upon all educational innovations. At present we are asking the blind to lead the blind. According to M. Siegfried in his much-discussed book on England's crisis and the English character, one of the most unenviable elements of the British traditional thought is the determination to disregard facts. Some clever essayists may construe our muddle-headedness into a virtue, but Time is continually writing it as a debt to our national account. In law and in education this determination to muddle, to patch and compromise instead of making a clean, deliberate, rational adaptation to meet new circumstances and conceptions, has reached its highest expression and resulted in two fields of appalling chaos where every action demands double the time and expenditure of human energy that should properly be necessary.

A typical example of the unenlightened attitude of the local authority in education is the determination of these bodies to reject married women teachers when the most enlightened thought of the nation would undoubtedly welcome them. How many of the parochial busybodies on the average small education committee have had time to acquaint themselves with the pros and cons which sociologists and psychologists have weighed in discussing such a problem? Apparently the usual superficial argument is that a married woman is already being supported by the earnings of her husband, and that she is keeping an unsupported woman out of a post. This is but one example of the perverse "humanitarian" thought against which Armstrong[1] has so ably written. We must learn to pay people not according to their needs but according to their value and service to the community. If in any instance a married woman is more capable and better qualified than an unmarried woman, she should receive the post without any further ado. Similarly, a man should be employed on his merits, not on any considerations of his private life. Business employers recognise this in regard to both men and women, because they are compelled to look at things from the point of view of the success of their business. They are concerned with increasing the national wealth via themselves, not with subsidising the less able.

Moreover, the preferential treatment of unmarried women in business or professions works out in the end as highly dysgenic for the community. Our women teachers represent our most able and physically fit womanhood (and probably to a greater extent than male teachers represent our ablest manhood). Any

[1] *The Survival of the Unfittest.*

discouragement of these women from marriage is a crime which no nation can commit with impunity. Yet surely to ask a trained woman to turn from teaching to housework and to live on the portion which her husband allows her out of a salary no bigger than that which she alone was earning, is a discouragement sufficient to keep nine out of ten women from approaching matrimony. Moreover, the best women, like the best men, become so interested in their professional work that to ask them to throw it all aside is to demand a big sacrifice or readjustment of life interests. Any system which involves the giving up of a life profession as the price of marriage is thoroughly disastrous, for it will tend to remove from the next generation just those types of womanhood showing the greatest devotion to tasks and the finest organising ability.[1]

A married woman teacher in order to perform her duties well may need to delegate the managing of her home and the detailed care of her children to another less able woman, but surely that is better than that she should have no home or children. Her good qualities, too, are made available to a much larger family—the school.

These arguments merely apply to the case when the married woman happens to be more able than the unmarried, without any contention that she generally is so. But it is indeed possible to maintain that the married woman is generally more desirable. In the first place, men tend to select women whose good looks reflect an attractive disposition. And surely the balanced qualities of character which make a woman a good life partner also make her the best-fitted person to manage children or to carry on business. Many single women, as we have already pointed out, acquire psychological characteristics as a result of unconscious mechanisms, which really render them dangerous, neurotic and hysterical influences on the young. Professor Haldane, speaking from the biological standpoint, remarks: "To-day much too big a part in public life is played by the celibate woman, and too little by mothers. I find few ideas more genuinely disgusting than that held by many education authorities that a woman ceases to be suitable as a teacher when she becomes a mother." He expresses there the opinion of every psychologist and sociologist, but not the attitude of the bodies which we see fit to put in control of education.[2] What we find here is only what we can expect to find

[1] In the most progressive American universities the retention of married women on the staff is encouraged and they are allowed leave of absence with full salary when bearing children.

[2] The Royal Commission on the Civil Service is apparently not much wiser in biological and psychological matters than our small education committees.

on all questions requiring special enlightenment and knowledge—and what problems in education do not? But in our determination to decentralise education we have put everything in the hands of those who know local geography, and have provided no mechanism for placing the control of finer issues with the best specialist wisdom that the nation can produce. So our education and the fine instrument of the teaching profession remain at the mercy of those who do not read and who have not been trained to think.

VIII. Is the State System of Education to become full grown?

Every civilised state is now aware that even its industries cannot be allowed to depend entirely upon individual competition for their progress and efficiency. Yet these units tend to reap directly as individual organisms the results of favourable advances in methods and general efficiency and are forced to progress by external pressure. How much less can educational institutions, the financial success of which cannot be made to depend upon the success of their pupils, be allowed to function as private concerns?

It is true that all the great states have long accepted the principle of state-aided and state-regulated education. Yet the perfection of the system, in England at least, is obstructed by the persistence of an immense number of private schools outside organised education. We have seen that the distribution of ability in the population justifies about five school divisions: a large central school section—the averagely gifted—, passing on the lower side to a lesser elementary school section, and a still smaller, indeed an extremely small, provision of schools for the feeble-minded. On the upper side of the central school we need secondary schools, balancing the elementary school section, and a still further provision of a small section for the very highly gifted, balancing the mentally deficient at the other end of the scale. From the standpoint both of national success and of human justice, the drafting of children to schools should be based

It has just reported (July 1931) in favour of the retention of the ban on employment of married women "except where the efficiency of the service is at stake." It is heartening to notice, however, that "a minority of the Commission feel strongly that the arguments against the retention of the ban, outweigh those in its favour and would desire to see it removed in conformity with the general principle of a fair field and no favour. . . . Regarding it as a sex differentiation, objectionable in itself and militating against efficiency since it prevents many women looking to the service as a life career, they would have preferred to make retirement on marriage a voluntary matter" (*Daily Herald*, 21st July, 1931).

entirely on psychological and medical evidence as to fitness.[1] Our scholarship system needs universalising. It needs to be reformed as a psychological enquiry and it needs to come into effective action at an earlier stage in the child's career than is now the case, being repeatedly applied at intervals on two or three occasions in the school life of each individual.

Our present private schools, of which the public[2] schools are the most important, are the greatest barriers in the way of such a system. They contain a good proportion of the pupils who, under a state system of selection, would be drafted into special schools for the most highly capable; and the absence of these pupils in the first place from the state kindergarten schools removes the full urge to create such special centres of high-grade education.

I anticipate the reply that reform in this matter amounts to nothing more than marching the children out of these high-grade private schools only to march them back into the same schools now labelled state schools and requiring no direct fees. And since in nine cases out of ten the parents of such highly intelligent children are fairly well-off in virtue of their own superior ability and able in any case to pay the fees, no alteration, other than in name, has really been brought about.

This argument cannot stand because it assumes at several points that approximate statements are absolute accuracies. In the first place, owing to variation in heredity and also to people of high ability occasionally following very non-lucrative employments, many very able children will be found whose parents cannot afford for them the intensive education which they require. Secondly, owing to the obverse aspects of the same factors, the small percentage of exceptionally well-appointed schools to which we refer are prevented from catering entirely for the brilliant child because they are diluted by many very dull children sent by paying parents. In a recent survey of intelligence in various types of schools[3] I found a disproportionate number of really brilliant

[1] How retrograde, therefore, is the recent step of the Board of Education in England when, instead of extending scholarships without regard to wealth of parents, so that school pupils might be increasingly sorted according to ability only, it refuses to give scholarships if there is the slightest chance of the parents being able to pay. If society is to progress healthily both in this generation and the next, the clever child must be made cheaper to rear (to the parent) than the dull and difficult child. But the strange and irrational horror of direct taxation, which many civilised people still have, causes them to resort to any means, however silly, destructive and wasteful, to avoid it. It is the State's duty to take the State's money from the parents and to educate each child in accordance with its true needs and capacities.

[2] The confusion of English education is reflected even in our terminology.

[3] "Intelligence Levels in Schools of the South-West." *The Forum of Education*, November 1930.

children in private schools, mixed at the same time with so many dull children that the average inborn intelligence for private school pupils was brought down below the secondary school average, even below the central school average, and stood but a little above that for elementary schools. Private schools, then, clearly can claim to perform no function of segregating the nation's most promising ten per cent. of children for special intensive education. Thirdly, because many of these schools are run on business lines, or are so endowed that they are immune from criticism and inspection, the staffing, teaching, even the buildings are grossly inefficient, old-fashioned and misdirected when compared with the state schools. The parents who send their children to these gentlemanly schools veritably pay a greater price than they know for their snobbery. Or, to be exact, the children pay the price. H. G. Wells has painted with rare skill, humour, and not a little bitterness, the horrifying miseducation behind the sham façades of these schools. It is possible that the crudest examples of these "academies" have now disappeared, but the relative backwardness of petty educational businesses, cut off from the main stream of educational effort, from sources of criticism, inspiration, and technical innovation, remains the same. One is speaking, of course, not of the private schools experimenting with definite aims and methods not to be found in state schools, but of those numerous private schools whose only claim is that they are not (common) state schools, not staffed by trained teachers, and not inspected.

Yet in the county of Surrey, for example, there are to-day some 246 private schools[1] against twenty-six state secondary schools, whilst in Sussex one finds an even greater disparity—with 348 such schools against some sixteen organised secondary schools. What similar enquiries would reveal elsewhere I do not know, but I feel sure they would be equally demonstrative of the state neglect of the more able portion of the nation's children. Without the constant influence of the state school system, these private schools would be infinitely worse. The reforms with which the public have improved their own schools and universities have necessarily pulled up the level of all associated educational institutions. Sir Eustace Percy points out (*Education at the Cross Roads*, p. 8): "Twenty years ago public school boys passed at a fairly leisurely pace through a course of general education until, at about the age of eighteen, they passed the entrance examination of one of the universities"; and reminds us

[1] Neglecting minor nameless private schools and including public schools, endowed schools and private preparatory schools.

(p. 17) that: "The process of selection for the university at the secondary school is infinitely more stringent than it was at the old public school: it is more stringent at the public school than it used to be." There is cause and effect here. With these practical examples before us, the argument for a complete state system, liberal in outlook but efficient in method, and subject to direction and inspection by a variety of educationists, needs no elaboration.

Since, however, the general tendency of all civil services to become unduly stereotyped has not yet been met with an adequate corrective device, our actual state educational system cannot be regarded as allowing an optimum divergence of educational ideals and practices. Until it does so there will be need for a certain number of private schools experimenting on new lines.

Most certainly we need state equivalents[1] of the handful of progressive private schools which to-day are pioneering in educational methods and ideals, advancing educational research and providing educational service for those parents who really want something different from the methods and ideals which the general public favours in its schools. I refer here mainly to the New Era Schools such as Dartington Hall, Frensham Heights, Neill's School, Beacon Hill, Bedales. But these are not one per cent. of the existing private schools, most of which flourish for other reasons. And these experimental schools are all too frequently not in any true sense experimental, for they lack scientific control and comparison of their methods and objectives one with another and with the state system. Severed by mutual contempt from the leading educators of the state system and misled by the emotionally determined theories of cranks, they succeed merely in fostering the errors opposite to those which cripple the public schools. Their enthusiasm for progress and readiness for adventure would result in great things if they could but be rescued from their barren insularity, given a part to play in a largely-organised scheme of experimental variation and brought into closer contact with genuine psychological, educational and sociological research.

Even with our Board of Education catering for experiments in education there will still remain a need for a few private schools, founded by special groups of individuals for educating their children along relatively eccentric lines to which the community, with all broad-mindedness, cannot see its way to contribute. These will be very advanced or very backward cults on the worth of which time alone will decide.

[1] That a State system can be run with a sufficiently liberal direction to permit of the widest experimental variations is evidenced in America (see Dewey's *Schools of To-morrow*).

To solve present difficulties in education, especially in the education of the brighter half of our child population, we need firstly, special schools for the very bright as we now have them for the very dull. These schools, since they will take only about five per cent. of the school population selected from a great many schools, will need to be boarding schools (except in large cities). Secondly, we need schools (in the state system) catering for divergencies of educational aim, and these too, since they will draw thinly from a relatively large area, will need to be boarding schools. If these divergences of aim arise from the regional cultural divisions already discussed, the problem of organisation will be simplified. Then our present regional schools and university colleges will not be mere futile growths of local patriotism attempting to offer a second-rate provincial education in place of what could be much more effectively given at the fountain-head of a national centre. (For "provincial patriotism" is a purely psychological echo, sociologically valueless, of national patriotism, which alone has a true place under our present group organisation.) If new local culture groups, as discussed in the last chapter, were evolved, these institutions would exist to express an ideal or practice of education differing in some way from the other national universities and schools and differing in a way determined by the conscious decision of the cultural area concerned.

By such an organisation of controlled experiment in education, by catering for diversity of aim and, above all, by inaugurating a "scholarship" system to give the fullest opportunity to all grades of ability, can our state system be perfected.

IX. The Education and Happiness of the Citizen

When educational progress has struggled through the obstacles which confront it in organising adequately the education of the child it will be able to turn to the great advance contemplated to-day—the arrangement of continuous and vital education for the adult so that he may express himself fully as an individual and become a happy, effective citizen in a progressive state.

Adult education to-day is little more than an attempt to help those who have missed adequate childhood education. Even when it has become something more it will still need to attend to this aspect of its work, for the changing face of civilisation must continually put gaps between the citizen's school education and the needs of the adult world.

The provision of education, in the best sense, for adults is a matter for the most ingenious minds, since the formal "classroom"

education is even less wanted in adult education than it is in the school.

Independent writers have done much. They must still do more and on an organised plan. Most of adult education will come through intelligently organised libraries, some through lectures and discussion circles, and some through radio. The tone set by the British Broadcasting Company and its organ *The Listener* is indicative of splendid possibilities which may result from forming an organised body of specialists for adult education work and correlating their lecturing and writing and broadcasting activities with university extension movements.

The "popularisation" of knowledge is both more difficult and more important than many professional educationalists would care to admit. The imaginative labours of the most able writers who have undertaken this valuable task may not have born obvious fruit in increasing popular erudition, but they have done much in increasing popular wisdom and so orientating the face of society to the true values of our times.[1]

Especially at the moment do we need an education of parents on the education of children. Much of the teacher's best work is rendered valueless by home influences. Moreover, the teacher is all too frequently faced by problems, especially character problems, created in the school by parental ignorance and mismanagement. At best the teacher's work is unappreciated through the parents showing no understanding of the real values in education. In the work of child guidance clinics the difficulty of getting intelligent co-operation of parents in the psychological treatment of nervous and difficult children is even more striking.

Consider, for example, the question of giving children a truthful picture of the world. Bertrand Russell has started with two very sound axioms when he tells us only to teach children what they can understand and always to tell them the truth. How many parents and school managers are enlightened enough to support such a system? I remember a young teacher being severely reprimanded by a headmistress because she had dared to give the class a truthful account of the life of a poet with whose poetry she was dealing at the time. In our sentimentality we put all heroes in a shining light and paint all villains doubly black, and thereby set in motion a false view of life, the evil consequences of which are boundless. (How many adults feel their world of values falling about them when they discover that Nelson was an adulterer,

[1] For instance Dean Inge asserts: "The popular opinion is that when a scientist says anything it is so, but when a philosopher or a theologian says anything it probably isn't." This is a very definite advance in popular thought.

that Goethe ran away from his post of duty, that great men are sometimes afflicted by petty jealousies, and that some of the finest virtues have flourished in traitors and villains.)[1] An interesting but minor social resultant of this false attitude is shown in the ferocious sentences given for blackmail (a mean crime but one which should not be socially damaging). If people were intellectually appreciative of reality they would realise that every life has many features which are objectionable and, realising this, would cease to censure a normally erring life-history. The blackmailer would then be left with nothing to work upon. His threat to expose the adultery of his victim, or some amoral but ridiculous deed in his past, would leave the latter unmoved, since society would have admitted to itself that, as statistics would show, some minor peccadillo is incidental at some time or other to the lives of even the best citizens. It is an evil state of affairs in which truth cannot be told and it is a condition which necessarily attracts carrion as putrid flesh attracts flies. When we have learnt to be truthful in education and to appreciate the dignity and beauty of truth everywhere, a host of vague and undiagnosed malaises in social life, particularly in religious life and in the growth of ideals, will automatically vanish. The selfish ostrich attitude to life, the sheltered attitude, in which foolish parents were particularly inclined to bring up their daughters, must go.

Again, consider the educational maxim that children should only be taught such precepts as are comprehensible to their intelligence and experience. How much character training is sheerly abortive because of this neglect to observe the truth! "If moral teaching is to be effective," says Russell, "it must not outrun experience, but must be content to point the moral of actual occurrences at moments when the children or young people are in a receptive mood! Many men of strong convictions fail to observe this precept, with the result that their children react against their teaching. Tolstoy's son joined the Black Hundreds, and clergymen's sons are not invariably models of piety."

One very widespread error is to make a moral issue out of every unsuitable action even of quite young children. Philosophically (or rather one should say "sociologically") there is no true distinction between what is inconvenient to others and what is immoral,

[1] A reviewer has recently deplored the realism of a biography of three lives (Lawrence, Wilson and Kitchener), saying that it has destroyed irrevocably the chance of these men ever being regarded as the great characters which they would otherwise be considered to be. He should rather have deplored the sentimental astigmatism of his own mind which prevented him from appreciating greatness as it is, in its true human setting.

as we have seen in Chapter IV. But there is no reason to adopt that realistic adult attitude with the young child if the psychology of the child should suggest a different course. In morals, as in every other subject of education, we are waiting for psychology as a science to point out the intermediate resting-places at which the child mind must pause if it is to attain the most vigorous and realistic adult attitude. Nowhere is this need greater than in religion. If the religious solution which has been arrived at in Chapter V is the true one, i.e., if we are to perceive God and the assurance of immortality in the tangible group mind of mankind, which is the highest expression of life that we know of in the universe, are we to approach this in education only when the child's mind is able to grasp the ideas involved or are we to substitute simpler symbolic representations in earlier years? Probably, when dealing with mentally healthy and unrepressed children, the psychologist will suggest only that the child be *socialised* in the years before adolescence and that the religious interpretation begin when emotional and intellectual development starts on its adolescent growth. For the religious attitude is only necessary when individualistic divergence becomes insistent in an altruistic mind.

The average parent will take a long time to grasp the idea of permitting stages of development in the child which, as finished states of development, would be intolerable. He is not sufficiently psychologically educated to see that, for the ultimate health of the individual, widely different modes of behaviour and opinions from those considered creditable in an adult must be permitted in the young. How stupidly and repressively some parents react to these valuable chrysalid phases! Our educational authorities have not yet faced the fact that further advance in education will only be possible when means have been found of enlightening parents. And our educational system is not yet a sufficiently integrated organism to grapple effectively with that problem.

In America, Dr. W. H. Todd conducted an enquiry by questionnaire among 7,000 parents to discover what parents really know about the schooling of their children. The results, which are of first rate interest, he sums up by saying "on the whole citizens know just about fifty per cent. of what is most desirable, even necessary for them to know about their schools to enable them to give reasonably intelligent consideration to public school affairs." He found that various occupational groups were conversant with school trends in the following descending order: professional, clerical, skilled labour, semi-skilled, business men, unskilled labour.

In a useful popular article,[1] Calvin T. Ryan brings these results to the notice of business men, and adds: "I suspect the general ignorance of the public concerning its schools is explainable largely on the ground that the schools and educational science have progressed more rapidly than the public's ability and facilities for keeping up with them. . . . We have gone about as far as we should in educational theory and educational science until the laymen catch up with us." Yet we find Sir Eustace Percy, one time President of the Board of Education, asserting that educational reformers have too often contented themselves in the past with what is really a servile view of education: making our schools the slaves of existing social standards instead of the creators of new ones.[2]

In this respect we find educationists at all levels of enterprise—those who would keep well behind society, those who would let the schools represent the average opinion and those who would let the schools be led directly by the most advanced opinion. But whatever the educator's view may be he finds his practice strongly constrained by parental influence to the average outlook of the present generation. Great as are the objections to removing children from home, there can be no doubt that enormous social advances would be possible if each generation could make a clean start away from the uneducated last generation's suggestion of "old, unhappy, far-off things" entangled in the parental view-point.

Although it is desirable if progress is to be natural and little obstructed that the schools should be a little ahead of the general (electorate) opinion of society, they clearly cannot be ahead of the best thought in society, for to be "ahead" of the views which the wisest are prepared to sanction is perhaps to be very much behind, and though society must arrange for its schools to be ahead of the opinions of the numerical average it cannot allow them to step into unproven things beyond the boundaries of its own ever-active social research.

. . . . . .

It has been the thesis of this chapter that the most important goals of progress are to be realised not by economic, legislative, or military action, but by education, which acts upon minds not yet crippled by conservatism, and finds thereby the shortest route to new attitudes. Unfortunately, education is suffering an undue resistance and obstruction from the persistence of traditional educational complexes sustained by financial and prestige endowments and by a vicious circle of pupil and pupil teacher.

[1] "The Business Man and the School," *The Rotarian*, Oct., 1929.
[2] *Education at the Cross Roads*, p. 61.

Such obstruction is bound to occur with any system whatsoever until one is evolved which has at its head a research body empowered to redirect education continually in accordance with common sense and newly discovered psychological facts. The older system is obstructive particularly in regarding intellectual and character development as distinct, and also in maintaining artificial academic subjects, from the Middle Ages, in the curriculum, instead of making education a study of the universe as it is and fostering the natural interests of the child. It also fails because of the naive assumption that child psychology is best served by adapting itself to adult psychology, to the teacher's love of domination, to the parent's convenience, and to the last generation's attitude to the universe.

In putting education in the hands of leading intellects some centralisation will be necessary, but it can be centralisation about a number of localised experimental culture communities as discussed in the last chapter. At present the lack of completeness of the state system (and its insufficient regard for psychological evidence as to the distribution of ability, etc.) permits the existence of a vast residue of private schools of no particular merit, prevents a deliberate and scientific planning of experimental divergence in the state schools, and upsets an adequate control of the drafting of children to suitable schools.

Adult education, necessary for a variety of urgent reasons, awaits cultivation as the next field of educational endeavour, but it must be put in the hands of those who, by means of books, radio, and discussion, are able to interest the layman.

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CHAPTER TEN

A TENTATIVE PLAN FOR CONSTRUCTIVE RACIAL CONTROL

"And thus the native hue of resolution
Is sicklied o'er with the pale cast of thought,
And enterprises of great pith and moment
With this regard their currents turn awry
And lose the name of action."

SHAKESPEARE.

I. The Speciousness of Social Progress now even Popularly Realised

WITH the rise of biological science, a new light is dawning on human affairs. But in the brief inspection of the view which we have made here—so inadequate as to facts, so lenient as to method, so much a patchwork of ill-fitting researches of varying value—we cannot hope to see all features with sufficient definiteness to justify immediate action. Many of the gaps in this picture of reality I have had to fill with intuitive material, but material frankly avowed as such and pressed with sincere thought from the pulp of general facts and principles familiar to those concerned with the biological sciences. It suffices if this picture has shown that lines of order and the possibilities of scientific control run through the multitudinous confused appearances of social life. Every topic considered runs at its edges into a tangle of surmise. The bibliographies appended to each chapter will enable the keen reader to enquire more fully into these fascinating uncertainties where he wishes, and will suggest lines of urgently needed research to the skilled and enterprising.

Of the various improvements discussed many will be found which are well within the realm of practical politics. Overshadowing all the rest in its cardinal importance for human happiness and progress is the problem of checking the down-hill course of human evolution into which civilisation has blindly fallen and of replacing it by a definite constructive eugenic programme of the kind outlined in the previous chapter.

It is perhaps too much to expect that the popular mind will pay much heed to even the simplest mathematical arguments revealing the inner dysgenic trend of society, but there comes a

time when the crude results break out on the surface and force themselves brutally upon the dull perceptions of those who took no trouble to anticipate them.

Side by side with the pomp of outward and visible progress in human conditions which has gone on during the last five centuries, there has proceeded, with especial rapidity in recent years, an invisible decay of the average inborn vigour and capacity. There is going on now a close race between an almost galloping decline and the efforts of a few scientifically-educated people to institute constructive eugenic measures.

Not all the self-advertising clamour of outward cultural improvement, nor all the popular conspiracy of rejection with respect to any frank recognition of eugenic ideas, can long hide the crumbling human foundation of our civilisation—the cancerous growth of the physically and mentally subnormal and unfit, the excessive proportions of low-grade population, and the growing sterility in cultural and technical advance which begins to manifest itself in spite of increased education and leisure. There have always been Jeremiahs in our midst, but the complaints now arising of the incompetence of those leaving school—leaving good schools—point to a real falling off of ability and vitality in the general population.

Considering the economic advance alone, Carr Saunders was able to conclude several years ago from his statistical studies that "The steady rise of wages visible since 1880 received a check in the opening years of the present century." The slow but steady improvement in the position of the working classes in this country was no longer taking place in the decade before the war. Mr. Keynes has suggested that over-population was at least in part the cause. Not simple over-population, but over-population by types of insufficient intelligence and initiative to make adequate use of natural resources and opportunities is responsible for their decline in average real wealth.[1]

Again, educational activity may be taken as a good index of true progress. We may say that we spend more on education to-day than in any previous era. But do we spend more relative to other interests? Do we spend more relative to expenditure on amusements, housing, food, comforts, and luxuries? There can be little doubt that the Greeks, for example, gave much more of their life energy to things of the mind than we do. And as Leonard Darwin reminds us: "We may rejoice at the spread of education to

[1] Is it any indication of this change that the greater part of the income tax of this country is now paid by only one-twelfth of the population, and that the rate paying minority is practically identical with the tax paying backbone of the nation?

all classes; but as a fact we now succeed in turning out a smaller proportion of persons of eminence than did the ancient Greeks."[1] The finest education must work in vain on innately poorer material.

At present all one can say with certainty is, with McDougall, that "under modern conditions the race is not to the strong and the ambitious, but rather to those who are poor in spirit but obstinately fertile." There is much in that "poorness of spirit" that represents a desirable evolution of selfless temperament. Nevertheless the evidence is clear, that apart from certain minor forward trends, the true requirements of human evolution and progress are being fundamentally frustrated by a decline in all-round ability and the production of an excessive density of low-grade population.

Since we have prodigally used up the fruits of our great conquests—the opportunities of immensely raising the standard of living by means of the resources gained by the conquests of science —we stand on the threshold of an era in which the harsh pressure of environment will again be felt. If the general notion to the effect that more rigorous conditions necessarily produce saner habits and progress were true, this would be no matter for lament. Merely to be hounded by environment is, however, not necessarily to progress in the best way towards nobler human types.

Not the frozen sub-arctic lands, but the temperate zones produced the greatest human evolution in things specifically human. The intense pressure of population caused the Chinese to enter a path of evolution in which a premium was placed on ability to live by a modicum of food, to endure prolonged banausic labour, and to exist under inaesthetic and unhygienic conditions.

The whole civilised world now stands with the alternative of being forced blindly along trivial paths of improvement or of boldly setting out to control conditions and to engineer to some extent its own progress and evolution. East concludes: "The facts of population increase and the facts of agricultural economics point severally to the definite conclusion that the world confronts the fulfilment of the Malthusian prediction here and now. Man stands to-day at the parting of the ways, with the choice of controlling his own destiny or of being tossed about until the end of time by the blind forces of the environment in which he finds himself."

[1] The same may be said to apply to physique. The continual improvement of athletic records in all branches, the increasing frequency with which sustained feats of endurance, such as channel swimming, are accomplished, is not to be uncritically accepted as evidence of improved physique; it is a function of the increased number of people which increased wealth, leisure and total population bring to bear on these activities.

The spirit of science, which is nothing if not the courage of calm enquiry and the determination to undertake deliberate creative planning, stands prepared and eager for the task. But will it be given the opportunity? Will it succeed in gaining control of the reins now held by politicians, by old religious organisations and a stagnant public opinion? Can it hope to inform the whole social body with its own broad progressive spirit? The fate of humanity hangs on a successful transformation of ancient social attitudes. Faint, all-too-inadequate beginnings of the new spirit are visible.

Barker, a close observer of the political organism, tells us: "From the stage of the making of national character by race and environment, by population and occupation; through the stage in which nations made themselves what they were by the reaction upon them of the institutions, political and ecclesiastical, and of the literature which they had made for themselves—they may now have moved to a stage at which they make themselves freshly by their own free choice of their ideals (ideals consciously framed and consciously pursued) in the fields both of social organisation and of national education. If it be so, it is a great and solemn thing."[1] Later he concludes: "In the last century and a half the sphere of deliberate creation has grown and grown; it has prevailed in France; it has made codes and institutions in Germany; it has created unions and commonwealths in Canada, Australia, and South Africa."[2]

Unfortunately eugenic racial control is far from being, as yet, one of the deliberate creations within range of the political mind. Wider issues of human adventure never will be in the scope of the political mind as it is now trained, selected, and made to work. Progress must wait till politicians are firstly scientists. And unfortunately for ephemeral schemes and superficial solutions, eugenic control must be the beginning of any true control of human happiness and progress.

Inge is more positive as to the willingness of our present organised religion to join and sustain the new movement. "Eugenics," he tells us, "is religion, and its name is Christianity." Alas, the remaining hundred thousand authorities in control of the business of the Christian churches seem as yet to interpret Christianity very differently!

With the systematic impossibility of gathering sustained leadership from these and allied institutions I have already dealt. What has been the effect of specific efforts by scientists and others to awaken society to the need of eugenic measures?

[1] *National Character* 1927, p. 6. [2] *Ibid.*, p. 143.

Nothing is more astounding than the way in which even those who have at last realised the underlying sickness of our civilisation have failed, despite devoted and intelligent labour, to impress any effective action on society. Indeed there are many who, having fought for a time with the popular indifference, not only lose interest but begin also to belittle the importance of the danger. That, of course, is a very natural reaction of the mind to an atmosphere of continued social coldness, but it is one which the strongest minds have succeeded in overcoming. And persistent men like Darwin, Inge, Havelock Ellis, and others have continued faithfully to investigate the further ravages of the dysgenic process and to demonstrate its workings to the public without any abatement of purpose, and without any reaction of cynical bitterness or despair at the general stupidity. There is not the slightest reason to believe that the downhill career of racial endowment has in any way slackened in recent years as a result of its being perceived. The situation remains more threatening and gloomy than any other with which the human scientist is concerned.

We have constantly before us the sad examples of earlier civilisations that have reached the position of stability we now enjoy and have yet foundered for ever.

The time for enquiry and thought is concluded ; it is time for the thinkers themselves to act.

II. An Appeal for a Constructive Eugenics Party

In this final section, wishing to deal entirely with a practical issue, I shall confine myself to particulars and formulate the general proposals of the last chapter. Utopias have been planned often before, and how narrow, partial, and misdirected they have appeared to later ages ! But these schemes have always been intuitive efforts of mind, not organic scientific proposals.

The country which first adopts eugenic measures of a strongly positive kind will be the first to pull itself out of the universal decline and, if it can devise methods to protect itself from destruction in the crash of neighbouring states, it has every prospect of inheriting the earth.

Where are the countries fitted to take such a step ? A longer study than we can now make would alone answer that, but the Scandinavian countries first and foremost, America and England next, and then perhaps Germany and France, are best fitted by cultural background, scientific and economic status and political bent, to undertake such work. This order, too, represents roughly the order in which these states are practising eugenic policies.

Russia, in spite of the poorness of much of its human material, enjoys in the communist party a mechanism so well designed for the intelligent control of the state organism that it might more readily than any other nation put a eugenic scheme into operation.

Nevertheless in none of them is there any prospect in political life of an immediate adoption of constructive eugenics.

Since an immediate assault on this dysgenic decline is the most vital need of our time, the situation calls for independent action. It may even be necessary for those who see the danger and can get no control of the ship to put off in their own small boat before it is too late.

We need a voluntary eugenic organisation, if necessary a distinct eugenic colony which, by the clear success and manifest advantages of its way of life, will convert the unimaginative remainder of the nation to active steps, or failing that, will maintain its independent progress in the face of national collapse.

The scheme described in the last chapter gives a sound framework on which such constructive eugenic efforts can confidently develop. One eugenic party will beget another, and these units will co-operate in developing each its type ideal. At the same time these small communities will experiment with those improvements in the science of government and community organisation which must be co-ordinated changes in the progress of society to new planes of collective endeavour.

What we need to-day above all else is definite action, however small, on a clear practical plan for constructive eugenic measures.

The movement might begin as a voluntary society starting with very modest aims and numbers but so designed as to permit of effective expansion. We have sufficient knowledge to start on sound lines here and now whilst granted a generation of adequate attention to and research in the biological sciences, we should be in possession of facts and principles which would enable the first tentative scheme to achieve vigorous and effective service to the community in the next generation.

The detailed scheme which I am proposing is as follows:

(1) The formation of a society of citizens voluntarily pledging themselves to accept the individual eugenic valuations worked out by their own elected medical and psychological representatives.

(2) The recommendation as to the number of children would at the present stage of our knowledge not be too precisely formulated, and would be based only on two kinds of assessment: (*a*) general physical and physiological fitness estimated by medical examination and family histories; (*b*) general mental ability estimated by psychological tests of intelligence and of the special aptitudes.

From this assessment such desirable factors as inherited temperamental stability, physical beauty, emotional adaptation to civilised life, etc., are omitted. The existing real life tests constituted by sexual selection, married life, and social happiness can safely be left for the present to deal with such qualities as these. Beauty will be favoured by sexual selection; the necessity of being able to get on with at least one other person if one is to rear a family will eliminate undesirable temperaments, and so on. The psychologist has every reason to believe that these qualities are not in any way related systematically to the qualities which it is already proposed to select (physical fitness and mental ability). Therefore by selecting for these latter and leaving the other qualities for the time being to natural selection, we shall set up progress in fitness and ability unattended by any falling off in other qualities; for the dysgenic trend to-day is mainly in regard to physique and mental ability whilst, at least among the intelligent classes, a slow evolution of desirable inherited temperament and character qualities is probably going on.

(3) Such a society will tend naturally to attract all the more intelligent and sensibly-educated portions of the nation—the portion which at present has too small a birth-rate in relation to the rest of the community. Consequently the individual recommendations within the group must be adjusted to give the group as a whole a survival-rate appreciably greater than that of the uninterested section of the nation. (In proportion to the extent to which the average for the group is higher than the average for the nation.) At the same time every effort must be made to attract all ranks to the party and to bring about changes in the rest of the nation—notably by establishing birth-control clinics in poor areas—which will assist in adjusting the birth-rates of the whole nation to those which sociological considerations (e.g. as to food supply) have led the constructive eugenics party to adopt. There can be no doubt whatever that the large family of the poor man is quite undesired by him and still less by his wife. The recommendations to small families—to have one or two children —would almost certainly be gladly accepted by most of the people concerned. I agree with East, however, that a "love of children" and an excessive interest of a father in having a large family is frequently connected with his lack of success in adult life. His emotional interest in his standing with his children is due to his inability to achieve emotional satisfaction in the real world of adult activities. For that reason a wide dissemination of the means of controlling family size will never in itself lead to survival of the most able; the deliberately instituted mechanism of selec-

tion here discussed is in any case a necessity. Nevertheless there can be no doubt that the simple procedure of making birth-control methods available and understandable to all would at one stroke arrest the greater part of the dysgenic decline.

(4) The Constructive Eugenics Party should be linked with other progressive movements (e.g. towards scientific government and economic organisation) having genuine affinities with its aims. At the same time very definite advantages should be available to members of the society by reason of the scientific knowledge and capacity concerned in its organisation. These advantages should include examination and advice in medical and psychological matters during the years of growth and education. They should include access to schools constantly kept ahead of all others by reason of timely application of the results of psychological research in education. At the time of leaving school there would be the best vocational guidance for finding careers most happily suited to the particular bent of each individual. Finally there would be the spiritual advantages accruing from being closely organised with similarly thinking people, the social advantages from favourable contacts, and the financial advantages of the special insurance (and education) rates which medically well-organised upbringing would allow.

(5) Such a movement would necessarily have to organise itself around a research institute in the social sciences which would direct for the greater good of its members the policy and internal organisation of the society in accordance with the advance of scientific knowledge. It might begin by publishing a journal designed to co-ordinate the activities of the society, to express the bearing of biological and psychological discoveries on current social events, to popularise a scientific attitude to life, and make available to general discussion the principles of sociological science. Its function would also be to keep all members actively interested in the progress of the society by promoting discussion and keeping them in touch with its policy.

(6) Careful attention would have to be given to the relation of the society to the state; for although most of the regulations of the society would work within state laws, there would almost certainly arise minor differences between the regulation of the society, reflecting its progressive spirit, and the laws of society reflecting older forms and obstructive traditions (i.e. in regard to income tax and children, scholarships in education, state employment of married women). Moreover, since the ultimate aim of the society would only be the frankly avowed object of converting the whole of the nation to eugenic and scientific re-organisation—

its initial detachment being only for greater effectiveness, certainty, and safety—it would undoubtedly aim at political organisation and influence.

In a number of important recent contributions to social thought the definite proposal has been made of forming a separate eugenic colony. (See McDougall, Armstrong, and Darwin, op. cit.) Such a plan has clear advantages: (1) The group would be able to modify the existing laws to its liking by making by-laws and to conduct much of its own organisation by constituting its own local council. (2) As a working model demonstrating in a tangible form the cumulative advantages of its principles, the eugenic colony would be one of the most effective arguments towards convincing the reactionary part of the general population of principles which, expounded as sociological science, would never be grasped or accepted by the popular mind. (3) It would at once give solidarity and a sense of spiritual unity to that small minority of the population now enlightened enough to see the serious need for unpostponed action. It would also give them an opportunity to improve by experiment the organisation of, and regulations necessary to, a eugenic colony.

Against these advantages one must range the purely circumstantial objection that few people would be prepared in middle life to uproot themselves from among their neighbours and move to a new locality—quite apart from the fact that occupations identical with those they had left might not be found for them. Secondly, this geographical segregation might cause the movement to be less effective in gaining the sympathy and co-operation of the rest of the community in a programme of national regeneration.

In the scheme which I am suggesting here the membership would be scattered throughout every locality and social class in the country. These citizens, members of a constructive eugenics party, would be bound together (1) by an agreement to regulate their birth-rates in accordance with recommendations founded on biological examination; (2) by a scientific attitude to life's problems which would be stimulated by their social intercourse, by the published organ of the society, and its centre of social research; and (3) by belonging to certain schools open only to children of members of the society.

A combination of resident localised colony with nation-wide membership seems the ideal plan. Whether the region chosen for a colony be agricultural or industrial in character is a matter of indifference, the pros and cons for each appear well balanced. But it should have some natural geographical unity and be not un-

attractive in scenery and climate. (The Isle of Wight or parts of the south-western peninsula would seem well suited.)

A colony of three or four thousand members would easily suffice to set such a movement vigorously afoot. (How small were the most famous of Greek cities!) Later comers could gradually buy out those residents in the district who showed no sympathy with or understanding of the fundamental principles of the movement.

I am not suggesting that the localised colony should be the essential part of the constructive eugenics scheme—that savours too much of seceding from national life—but it would be a valuable appendage and experimental arm to the registration scheme which I have proposed as running through the whole national life.

Moreover, it would remain as a life-boat against the foundering of the larger vessel. I have yet to have research results placed before me which will demonstrate that drastic steps against dysgenic collapse are not urgently necessary here and now. There may well come a time when the wisest man, and those most devoted to human welfare, will see that the only hope lies in a determined secession from an erring civilisation. Taking their intellectual and spiritual dissent with earnestness, like the Pilgrim Fathers long ago, and lifting their courage to the pitch of action, they will set out from those countries of Europe and America now overloaded with ineptitude and stupid, blind discordance, to inaugurate a colony on a rigorously positive eugenic and scientific basis.

Another generation of neglect of these reforms by politicians, press, and church—reforms involving the dissolution of these institutions and their remodelling—will bring about a dire state of stagnation and collapse in which nothing will be left for those with a sense of the purpose of life but to uproot their sympathies from existing institutions and start entirely afresh a new and deliberate human experiment.

The experiment of Russia is looming boldly on our horizon to-day, and its social purposefulness is bound to meet with the success which all thinking men have always anticipated from such measures. That experiment, however, as long as it neglects the social implications of the biological inequality of men and fails to inaugurate a constructive eugenic system cannot hope to forge continuously ahead of its unreformed European and American rival groups. Indeed, the latter, providing they adopt such biological eugenic measures and the slight readjustments of democratic rule which are implied by psychological science, may

hope easily to surpass countries better organised industrially but composed of poorer innate material not eugenically organised.

Let us hope that there are sufficient able and soundly educated people in this country to-day, willing to co-operate in a constructive eugenic movement; willing to face the misrepresentations of their aims which will undoubtedly arise, and sufficiently vital to be uninhibited by the academic cynicism and captious criticisms of "brittle intellectuals." For positive eugenics is an inevitable development of progressive societies, and if it is bound to come everywhere, surely it is best that it come first to the Anglo-Saxon countries that have given the world leadership in so many developments and which would further increase that leadership by being first in the field with positive eugenic measures.

At worst it can be an instructive experiment; at best the salvation of civilised progress. Experiment in social life, carefully and deliberately pursued, is the need of our time and is the mark of a society sufficiently vital to pass on to a new era. Has enterprise and initiative yet been so far bred out and drained away from England that the nation has fallen below the level necessary to the successful adoption of such a scheme? Stupid apathy is undoubtedly spreading with the decline of inborn powers. How miserably small has been the response to eugenic proposals! How slow has this nation been in resorting even to sterilisation of the hopelessly mentally defective! It has had to wait for America to take the lead and plan experiments, whilst our plans remain at the level of unintelligently debated legislation.[1]

The time has come to sound opinion in this country as to the possibilities of forming at once a nucleus which can develop constructive racial control. The majority of adherents will not be supporters enthused over-night by the direct influence of suggestion and inspiration—eugenics is too complex a proposition to rally any but thoughtful, scientifically-thinking men. Consequently the successful launching of a positive eugenics plan must be preceded by a thorough testing of the support it can now depend upon. The present writer will be glad to hear from all those interested in positive developments.

Essentially the aim of this movement must be to convert the less vital residue of the nation by the force of a clear concrete example; and to store in that model the best innate stock of the nation, as an assurance of civilised survival in the face of civilised

[1] Leonard Darwin remarks: "Sterilisation has only recently come to be regarded as a possible way of damming various streams of harmful hereditary tendencies at their sources; the change in public opinion on this subject having been largely due to the experiences gained in America."

decline. The experiment of a positive eugenic system will call for greater self-regulation and self-discipline of the individual at the bidding of society, but only as the price of greater freedom and happiness. In this it is but repeating the demands of all earlier steps in human progress. Here is an experiment which should appeal to all those in the nation who see the greater possibilities of the future in applying human science to human life. It presents the first opportunity for the new mentality to demonstrate the effectiveness of its beliefs.

Summary of Essential Aim in a Society for Constructive Racial Control

1. *Within the Society.*

(1) Recommendation given to each individual as to approximate reproduction rates on basis of scientifically approved psychological and medical tests of capacity (and, with later knowledge, of inborn features of character).

(2) The formation of a research institute to establish principles and make advances in social and individual psychology, and of a journal to educate society to an intelligent appreciation of the working of psychological and economic factors. Within the experimental community it would guide new developments whilst keeping clear the scientific-moral-religious aims of the society.

(3) Special educational and social advantages to be built up for those belonging to the society and responding to its recommendations, but no financial interference to be considered other than an extensive provision of scholarships.[1]

2. *Throughout the nation.*

(1) A thoroughly effective provision of birth-control clinics in all poor areas throughout the country.

(2) Sterilisation of the hopelessly defective, and segregation of all those producing larger families than they can support without excessive state aid.

[1] With the proposals to subsidise the well-off, I have already dealt. They can be subsidised only as soon as the subnormals who now receive constant state aid, have been reduced in number sufficiently to release wealth for constructive purposes. It is almost certainly true, as Darwin says, that "Any reform, in so far as it tended to increase the numbers in the well paid ranks of society, might produce the beneficial economic effects likely to result from an increase in capital," but that change can best be achieved by deflecting the first available wealth to the working classes as I have indicated above.

(3) A good living wage for all those carrying on occupations essential to community welfare, so that having a standard of living worth maintaining, the poorer classes will have sufficient self-respect to decline to lose that standard by producing unduly large families.

(4) The discouragement of snobbery and false ideas of value in the upper classes which cause them to restrict their families unless they are assured of luxuries for themselves and their children which more often than not are individually pernicious and socially unfair and obstructive.[1]

[1] Hard conditions up to a point are generally conducive to sane habits, and most of the upper middle class, for whom Darwin is so concerned, could easily reproduce adequately under healthy environmental and sound educational opportunities if they sought possibilities of dropping luxuries, utilising leisure, and examining more closely true values in education.