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HOW THE MIND WORKS

HOW THE MIND WORKS

by

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PREFACE TO THE SECOND EDITION

THE chapters which make up this volume were originally delivered as a set of broadcast talks upon psychology. To the British Broadcasting Corporation and to the editor of *The Listener* we are indebted for permission to re-publish the material so used. A few of the talks have been re-written or expanded; all of them have been carefully revised by the authors; but no effort has been made to eliminate the conversational note, or to convert a popular discussion into a technical summary or review. Our prime intention has been to show, by simple instances and in plain terms, how the interest in the human mind has grown into a serious scientific study, and how the conclusions reached have a close and practical bearing on the problems of everyday life

Modern civilization is based on science; and it is our belief that, if that civilization is to continue, scientific thinking must be applied to man as well as to inanimate nature. The methods that have revolutionized agriculture, industry, medicine, and war, must be adopted for the study of ourselves—of the individual, the family, the nation, and the race. Already psychology is beginning to affect us at many different points. Its discoveries are being employed by teachers, doctors, and men of business, in their own particular fields. Educational psychology has improved the means by which we train the child

at school; vocational psychology will soon be deciding his future occupation and career; industrial psychology is introducing more efficient methods into factories, workshops, and mines; medical psychology is diagnosing, and finding how to cure, the most terrible afflictions of all—those of the mentally diseased. And the plain man at last has started to inquire, what is this novel, self-styled science of which he is hearing so much? Is it quackery? Is it a fad? Or is it just sheer common sense?

It is sometimes said that 'we are all of us bound to be psychologists.' The proper study—indeed the inevitable study—of mankind is man. Yet for the most part we commonly assume that human nature is a thing about which any reasonable person can safely generalize and reach a satisfactory view. To manufacture or repair a lifeless machine—a motor-car, a microphone, a submarine—expert knowledge is essential. But to follow the workings of the growing mind, to guide its development and correct its faults, for that, we fondly imagine, nothing but common sense is needed. No view could be more mistaken. Common sense alone will no more enable us to fathom the mysteries of the human consciousness than it has helped us to solve the problems of the atom or the star.

During the last fifty years, the study of the mind has undergone a profound revolution. It has changed from a branch of philosophy into a branch of experimental science. The psychologist of today has a

laboratory of his own, with materials and equipment for technical research. From physics and chemistry he has borrowed the most up-to-date apparatus; from medicine and biology the latest hypotheses and views; from mathematics the most rigorous devices for checking the truth of his data. The conclusions, therefore, put forward in these pages, though brief and sometimes dogmatic, nevertheless represent far more than the private opinions of the writers or the results of personal guesswork: they claim to rest on a solid foundation of well-established fact.

Psychology is as old as the Greeks who christened it. It started, as this volume starts, with the study of the adult man. Indeed, the early psychologist began with the examination of but a single mind—his own. "Inquire within upon everything"—that was his simple maxim. But modern psychologist is no longer content to rely solely on self-analysis or on armchair speculation. He goes out into schools and factories, tests the pupils or the employees with exact experimental tests, and analyses the results by a precise statistical procedure. Thus, besides studying his own mind, he also studies the minds of others. And this double line of approach has brought him to recognize, not only the presence of conscious and rational processes, but also the supreme importance of emotional and instinctive factors working below the conscious level.

Accordingly, in re-arranging the following talks

in order, we have begun with the study of the adult, as giving a general systematic picture, and have described in concrete detail both the conscious and the unconscious working of the mind. We have then proceeded to discuss the more recent applications of psychology to familiar practical problems. Here it is the mind of the child that has attracted attention first and foremost. It is during early childhood that the main lines of adult character are first laid down and fixed; it is then that the efforts to strengthen the weak intellect or to correct a vicious temperament are most likely to succeed. Further, with the appointment of psychologists to education authorities, it has become possible to investigate early development on a wider scale, either by carrying out experiments on large numbers at once, or by making more intensive studies of those individual cases that call for special treatment—the dull, the backward, the defective. As a consequence, more is known about the psychology of childhood than about any other branch; and, since most men and women have children of their own, and the future generation lies within their hands, the results are of deep interest and importance.

After discussing the mind of the child, we have turned to the working of the adult mind in society. Here we approach more speculative ground. During recent years, however, and particularly during the present war, the aid of trained psychologists has been increasingly sought to study the human factor alike in industry, in commerce, and in the fighting services. For

the Admiralty, Air Force and War Office the psychologist's chief task has been to devise better methods of personnel selection. Tests of intelligence, special aptitudes, educational knowledge, and trade skill, have systematically been applied to millions of recruits in Great Britain and other countries; and a vast amount of data has now been accumulated revealing the distribution of such characteristics according to nationality, sex, and social class. More and more we have come to recognize the wide range of individual differences in regard to innate abilities, and the varying influence of opportunity, experience, tradition and the like. Politically, we may readily agree, all men are born equal: but it is no longer possible to assume that all are born equal in mental capacity; and the limitations thus imposed give rise to one of the most serious and neglected difficulties of a democratic state

The increase of delinquency, the treatment of evacuated children, the improvement of training methods in the forces, the peculiarities of night vision and the principles of camouflage, the maintenance of morale and the factors influencing rumour, panic, propaganda, and successful leadership, the selection of entrants to the Civil Service by better tests and better methods of observation or interview, the arrangement of shifts in munition factories, rest-pauses, motion-study, the adaptation of the machine to the man as well as the man to the job—these are but a few of the innumerable problems that have been submitted to psychological research. More recently still statistical

psychologists have attempted to find better means for assessing the changing attitudes of the public towards questions of current importance; and their sampling devices have been adopted in the numerous wartime social surveys carried out under the Ministry of Information for various Government departments—surveys which have sought to determine the opinion of various sections of the community on such matters as food-problems, housing problems, problems of educational reform, social reconstruction, and the like. In short, there is hardly a single sphere of human activity which does not possess its psychological aspect or call urgently for scientific study by trained investigators working in the laboratory or in the field.

In this small volume we have confined ourselves mainly to subjects of popular interest on which these newer methods have thrown fresh and suggestive light. The mental differences between nations, social groups, and the two sexes, the broader issues of politics, art, and religion—these are urgent questions on which nearly everyone has a rough but often an erroneous view of his own. Yet, in spite of their extreme complexity, they have already proved fruitful subjects for accurate research. So far as is practicable within the limits set, we have endeavoured to take each of these topics in turn, and briefly describe the most important results, the most recent conclusions, and the directions in which current speculation seems to be tending.

CYRIL BURT

UNIVERSITY COLLEGE, LONDON

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I

HOW THE MIND WORKS
IN THE ADULT

THE CONSCIOUS MIND

By

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The wedding-ring, the nervous smile, the brown cigarette-stain on the finger-nail—nothing escapes you. Next, having set him at his ease and put him off his guard, you try a few plain, penetrating questions; and, as you listen to the replies, you mentally record, not merely the wisdom and the frankness they are meant to demonstrate, but the way they are worded, the accent they betray, and the ingratiating tones in which they are uttered. And from all these revealing details, swiftly summed up and duly compared, you draw your final verdict.

Here, then, are the outward signs on which we generally rely. Physical appearance, facial expression, voice and general demeanour—they fall into three or four main groups. Let us take them all in turn, and consider how far each one can be trusted, and what faith, if any, may be placed in such snapshot judgments.

Let us begin with physical appearance. Can we, with any degree of certainty, deduce a man's character from his physique or bodily build?

There is an ancient answer to this question, long ago discarded, which recent experiments prove after all to have formed a very shrewd guess. Everyone has heard of the quaint theory of 'humours.' Humour originally meant fluid or juice. The fluids of the body were thought to have a double influence: first, they regulated the growth of the body, together with the colour of the skin and hair; secondly, they affected the development of character, by arousing

certain impulses or moods: the humours of the mind were thus supposed to be caused by the humidities of the body. Four temperaments were described. Phlegm produces phlegmatic moods; and the phlegmatic are to be recognized by their short, stout figures, and their thickened, whitish skins. Blood tends to generate both a sanguine disposition and a sanguine appearance: the sanguine fellow is tall and thin, with red hair, a ruddy complexion, and a turn for cheerful optimism. Bile is responsible for a bilious or choleric temper, betrayed by a cadaverous frame and a yellowish, jaundiced face. And finally black bile induces a melancholic mood; and the melancholy man is dark both in his physical appearance and in his general emotional outlook.

That was the theory. But where do the fluids come from? We now know that the fluids of the body are mainly derived from certain specialized organs called glands. Of these a certain number, like the tear-glands and the sweat-glands, pour forth their secretions on the surface of the body; but others send their secretions into the blood-stream itself. An ingenious series of researches has shown that these liquids, and the chemical substances they contain, act almost like drugs or intoxicants, and produce far-reaching effects alike on the emotions and on bodily growth. Thus, to some extent the old-fashioned notion of 'humours' is in principle confirmed.

Let me give a few examples. Everybody knows how

at puberty the ripening of the sex-glands profoundly changes both physical development and the strength of certain instincts and emotions. Early castration will prevent the growth of hair, keep the voice a childish treble, encourage obesity, and generally foster effeminate traits. The most striking instance, however, is the action of the thyroid. When Adam swallowed the apple, the legend relates that it stuck in his throat. Just below the gristly prominence known as 'Adam's apple,' you can feel a soft and fleshy cushion called the thyroid gland. In certain people you may notice this gland visibly swollen or enlarged; they are then said to suffer from goitre. When the gland is over-active—a condition not at all uncommon in healthy girls at adolescence—the individual tends to become emotional and restless. The symptoms can at times be observed in the first casual glance. Not only is there a slight fullness at the base of the neck, but the eyes may seem to be almost bulging with excitement; the girl is quick and jumpy in her movements, cries easily, laughs easily, flushes easily, becomes unusually talkative, and often looks chronically over-anxious as a result of excessive fears.

The opposite condition is found in those whose thyroid gland is undeveloped or inactive. They are short and stunted little people, with babyish figures and protuberant abdomens, hair falling out in unnatural places, dull and unemotional in disposition, and in intelligence well below the average. The

extreme cases are called cretins. It is the only form of mental deficiency in which there may be a reasonable hope of cure. If, during early years, such children are fed on extract taken from the thyroid gland, they may show a remarkable improvement: they grow to normal proportions; their intelligence brightens up; their movements become brisker and their attention more alert. There are several other glands of internal secretion which, like these, appear to affect both the outward bodily appearance and the inward state of mind. And here we therefore find a partial justification for the view that you can sometimes diagnose a man's intelligence or character from his general physique.

This is the natural approach of the doctor. He looks for physical symptoms, not only in the case of physical disorders, but also in the case of mental, though, of course, his examination will cover far more than mere physique. Even among normal men and women many psychologists in the past have thought it possible to infer temperamental peculiarities on much the same principles.

Two types in particular have been described: to avoid pedantic terms, we might call them the lean and the plump respectively. The condition is not a mere result of diet—of insufficient food in the one case or of insufficient exercise in the other, as with Jack Sprat and his wife; it arises, or is supposed to arise, from the constitutional chemistry of the body—the way in which energy is automatically built

up or expended. In appearance, the one is thin and lanky, with bones long rather than thick, and the flesh ill-covered with fat; the head often looks too large for the body, and the forehead too bulky for the jaws. The other is stout, chubby, and thick-set, heavy in build, with a rather portly figure and a broad well-rounded face.

The corresponding temperaments have been variously named: we might call them the reserved and the expansive. Others speak of introvert and extravert, of subjective and objective types, of classical and romantic temperaments, of repressed and unrepressed emotions. The former are shrewd, sensitive; and solitary, inclined to taciturn moods, but full of fancies within, and characterized above all else by a lack of emotional contact with their fellows. The latter are slower in thought and action, but quick to show their feelings and often quick to change them. They are liable to fits of demonstrative exuberance and of unconcealed depression. Often they seem to show two personalities in alternation, like the little man and woman in the weather-box who pop in and out, according as it rains or shines. For the rest, they are affable, amiable, and sociable; good-tempered, good-natured, and good company.

This double contrast—between the lean and reserved and the plump and expansive—is a popular antithesis, recurring all through in literature. Those ‘with the lean and hungry look,’ so Shakespeare¹

¹ *Julius Caesar*, I. ii. 192.

tells us, 'think too much' and are often 'dangerous.' 'Sleek-headed men'—'men that are fat,' tend to 'sleep o' nights,' and are jovial and talkative by day. Can you think of a fat fellow like Falstaff or Henry VIII muttering Hamlet's metaphysical soliloquies, or of a spare figure like the usual stage Hamlet¹ rollicking over ale like Falstaff or marrying six wives like the corpulent king?

Now it seems a well-established fact that many forms of insanity consist in an extreme exaggeration of the patient's normal inborn temperament. Thus, in the asylum we meet once more with two distinguishable types—two common forms of mental disease: the first is usually termed manic-depressive insanity—a condition in which the patient is highly excitable, either violently aggressive or inconsolable with grief, or, it may be, both in regular rotation, turn and turn about; the second is generally termed dementia praecox, and is marked by outward apathy and obstinate indifference, while inwardly the patient is full of strange grievances and delusions. Among children the two types of conduct are often well-marked. Teachers are apt to dub them 'hysterical' and 'nervous' respectively. The one is always trying to get into the limelight, attracting atten-

¹ Queen Gertrude's description of Hamlet—'fat and scant of breath'—may seem to contradict the traditional theories: but Shakespearean critics tell us the line was inserted to fit the physical characteristics of Burbage, who sustained the part.

tion by bad behaviour if he cannot get it by good; the other is always trying to get out of the glare, and remains silent, solitary, shy, shutting up like an oyster at the least approach. Here once again (or so it would appear) are the two contrasted temperaments—the ‘expansive’ and the ‘reserved’—carried to a morbid extreme. But how far is it safe to diagnose each one from outward appearance or from physical signs?

To seek some answer to this question a number of investigators have recently been going into schools and mental hospitals; they have started measuring the length and the thickness of the inmates’ bodies and their limbs, and testing their general mentality, to see whether there is any close correspondence between the physical and the temperamental types. From the results it would appear that some such connexion genuinely exists; but, so far as present researches take us, it is too slight and too precarious to be of much service as a practical guide.

A man’s physique, then, tells us a little, but it does not tell us much. What about his face? Physiognomists set great store by the shape of a man’s features—the ample brow, the Roman nose, the heavy, square-cut chin. How far will the psychologist approve this second line of observation? Probably in practice he is guided by it more than his theories warrant. But he is inclined to draw a distinction. The *shape* of the face he regards rather as part of the man’s general physical make-up. It depends

principally on the natural growth of gristle and bone. That in turn is no doubt determined largely by heredity and race, and modified in minor ways by individual health and the glandular secretions. If, then, as we believe, such conditions influence temperament, then temperament may be more or less related to facial type and feature. But the connexion is indirect, obscure, and in most cases very slight. On the other hand, the *expression* of the face, arising as it does from the play of muscular contraction, is full of possible significance. Our features are relatively fixed; our expression varies from moment to moment according to our state of attention, vigour, and fatigue, and the feelings that affect us at each instant. Above all, it must be remembered, every human emotion has its instinctive expression on the face to which we ourselves almost instinctively respond. Even the tiny baby smiles and frowns. The cinema actress will register the most complicated feelings; and you guess, and guess immediately, what agonies or raptures she is suffering as you watch her facial play upon the screen. Moreover, the emotional mood that predominates in a given person's life tends, by the simple law of habit, to leave its natural expression stamped upon the countenance, contracting almost permanently the underlying muscles, and deepening the furrows and the finer lines upon the skin. Thus, the bad-tempered bully comes regularly to wear a vicious scowl, and the anxious melancholic a worried look upon the brow.

Careful tests, however, show that these symptoms are far less trustworthy in actual life than they are in a well-cast film. Certainly, the expression of the face is a safer guide than the structure of the face or of the body as a whole. Yet there are plenty of people whose countenances tell you nothing. I could introduce you to a young thief whose gaze has the open candour of the most innocent saint; and I could show you a philanthropist, conscientious to the point of nervous breakdown, whose furtive glance makes strangers feel he must have committed every crime in the calendar.

The wireless has brought home to us a third suggestive clue: the difference in voice. The voice is altered by passing emotion quite as much as the face. A speaker may be wholly invisible; yet you can tell whether his tone is expressing anger or alarm, boredom or bewilderment, triumph or despair. And, by dint of repeated influences, a man's habitual accent takes on the impress of his personality and class: we recognize the army voice, the legal voice, the clerical voice, the Eton or the Oxford note; and to distinguish the lazy drawl of the sluggard from the crisp staccato of the sprightly wag needs no professional training. The phonetician can set down in symbols the peculiarities of local dialect; and the psychologist may some day devise a method for recording the rhythm, the intonation, the changes in vocal quality, indicative of character and feeling.

From the broadcasting studio a number of instruc-

tive inquiries were made a few years ago. Persons representative of different trades or professions were asked to read a passage at the microphone; and listeners were invited to say what they could deduce from the voices, and how far the speaker's age, sex, character, and occupation, were revealed by his speech. It was found, for example, that of those who answered the inquiries nearly 60 per cent. guessed the profession of George Grossmith quite accurately: on the other hand, only 2 per cent. guessed that of the army officer. But apart from these and a few similar researches, the psychology of the voice is still almost a virgin field.

We find, then, that psychologists have started to investigate nearly all those cues and criteria on which we are tempted to rely. As a general result of their statistical studies, they are disposed to place far less faith in the methods of the personal interview than the majority of interviewers feel. Business men, committee members, women who pride themselves on their piercing intuition—these often profess a confidence in their power to read the minds of others which very few scientists would share. It is true that interviewing could be made far more efficient than at present if certain psychological principles were followed. But even so it could never be completely trusted.

Our verdict, therefore, is this. Physique, physiognomy, the changes of the voice—nearly all the clues we have described may prove suggestive, but they

can hardly ever be conclusive. The safest way to assess a man's character is to look, not so much to the outward and visible signs, but rather to the inward and invisible mentality. Judge mental characteristics by mental symptoms, not by physical. That is the psychologist's chief motto.

How, then, is this to be done? Here the psychologist makes use of a more modern scientific method. Instead of trusting to observation, he makes an experiment. He conducts a psychological test. If, for example, you called at some laboratory of applied psychology, and asked to be told what kind of job your mind was fitted for—whether you would make a good lawyer or a good musician, or whether you should take up journalism, engineering, or the stage—you would find that the psychologist wasted very little time on inspecting your features or physique; he would begin straight away with a series of tests.

The object of such tests is, not merely to examine, but actually to measure a man's abilities and aptitudes. The best known are tests of intelligence. These are not only the most suggestive for practical purposes: they also happen to be by far the most reliable. By intelligence, the psychologist understands *inborn, all-round, intellectual ability*. It is inherited or at least innate, not due to teaching or training; it is intellectual, not emotional or moral, and remains uninfluenced by industry or zeal; it is general, not specific, that is, it is not limited to any particular kind of work, but enters into all we do or say or

think. Of all our mental qualities it is the most far-reaching; fortunately it can be measured with accuracy and ease.

The general principle is to employ a progressive scale of problems, graded according to the age at which they can be answered. The candidate's intelligence can then be measured in terms of mental years. For example, a child of three can repeat two numbers; a child of four can repeat three numbers; and so on, till you come to repeating six numbers, which is harder than you might expect—it cannot be done until the age of eight or nine; seven numbers cannot be repeated before the age of eleven; and eight numbers will tax the powers of the intelligent adult himself. Another test consists in getting the child to say the numbers backwards—obviously a harder task than the last. Others again turn on the child's quickness in critical thinking. An absurd or illogical statement is recited and he is asked to point out the absurdity: for example, "An old gentleman complained that he was getting so feeble that he could no longer walk all the way round the park: he could only go half way round and back again"; or again: "A man saw a notice outside a shop which said: 'Buy one of our patent stoves and so save half your coal.' He bought two of the stoves in the hope of saving all of it." Such questions as these can be answered by the average child of eleven.

The best tests of all are tests of constructive reasoning. These are not read out to the child; he is given

a card on which a problem is printed, and is allowed to study it for himself. The simplest can be answered by a child of six or seven. "Jim runs faster than John; George runs slower than John. Who runs fastest—Jim, George, or John?" A puzzle of that sort can be solved by the average seven-year-old. "If the train is late, he will miss his appointment. If the train is not late, he will miss the train. We do not know whether the train was late or not. Can you tell whether he kept his appointment?" Most twelve-year-old children, after a few moments' reflection, can reason out that question. Here is a test for what the Americans call a 'superior adult': "Tommy's mother sent him for seven pints of water, and gave him a three-pint jug and a five-pint jug. How is Tommy to measure out exactly seven pints, using nothing but those two jugs?"

You may think that this sounds rather like a school examination. But there is a difference. The psychologist has taken the teacher's rough-and-ready procedure, and has tried to render it more scientific. He has done so in two ways. First, he has standardized the method; and, secondly, he has standardized the results.

The method to be used is always worked out with great care beforehand. Instead of leaving the questions to be jotted down in haste according to the private whim of each examiner, the psychologist begins by collecting a vast number of test-problems. Then, before using them for their final purpose, he

tries them out on a batch of children, in order to reject those that are unsuitable and to improve the substance and the phrasing of the rest. The results of each short test are compared with the estimates of the teachers whose judgment can be trusted and who know each individual thoroughly. Only those tests that agree with these criteria are retained. In this way, the psychologist first tests the tests. Then he takes the tests as selected and improved, and applies them once again on a still larger scale to boys and girls at every year of school life. As a result, he discovers what are the normal performances at each age, what are the limits of 'subnormal' and 'supernormal' performance respectively, and what, if any, are the differences between the sexes.

Similar tests were widely employed in the United States during the last war. As soon as the American Army was mobilized, the War Office desired to pick out as quickly as possible those who were fit to be trained as officers, and, on the other hand, those who were too stupid to be trusted with a rifle. Accordingly, the psychologists were asked to examine each recruit. By the end of the war, over two million men had been tested in this way. In this country, the Civil Service Commission, among other organizations, has often made use of intelligence tests. Every school doctor uses them for detecting the mentally defective; and a good many education authorities have tried them for picking out scholarship winners for secondary schools.

If you look round the psychologist's laboratory, you will discover ingenious apparatus devised for measuring more specialized capacities of the mind—vision, hearing, manual dexterity, attention, memory, imagination, and the like. There are even marvellous tests for measuring emotional changes. Come with me into this darkened room and sit down in that large armchair. Just place your hands on these two moist pads. You are not supposed to know it, but those pads are electrodes connecting you up to a battery and a galvanometer. I'm not going to give you a shock. A mild current will be passed through your body, but you won't feel it. Yet the galvanometer will measure its amount and the way it varies. The spot of light, moving to and fro along that graduated scale, tells us how much current is passing. Now we're ready to begin! There, did you see that? The spot of light rushed right off the scale. It was your own excitement that did it! I said 'We're going to begin'; and that keyed you up to a state of mild but anxious tension. Now you're calming down; and you notice that the spot is coming back.

Here, then, is a remarkable discovery. It appears that any wave of feeling allows a little more current to flow: the stronger the feeling, the further the galvanometer moves. As you sit in the chair I may talk to you about various agitating topics, and see how far each one excites you; or, to save time, I might simply call out a number of words—baby, marriage, death, the gold standard, pretty girl, un-

employment, income tax, Emily Jones (or whatever is the name of your fiancée), and so on. Your face may not quiver a muscle; but whenever I touch upon anything that stirs your emotions, the speck of light will move up and down again showing that more electrical current has passed.

The experiment sounds incredible to those who have never witnessed it. But it is quite easy to arrange. Anybody who has a galvanometer can set up the apparatus, and see it working for themselves. A few have even hoped that this might prove a useful means for detecting guilty criminals or unravelling the secret worries of the nervous. At present, however, there is a serious drawback to its practical use: no one has yet discovered for certain what is the immediate cause of the electrical change. Some believe that it is due to an imperceptible sweating of the hands: others have put forward more complicated explanations which still await investigation.

These, then, are the typical methods by which the psychologist seeks to study the minds of other people. He observes them, and—more important still—he tests them by actual experiments. It is the experimental approach which, more than any other, has turned psychology into a reliable branch of science. Twenty years ago the use of psychological tests was confined to a few enthusiastic innovators working in the laboratory. Today they are being employed, on a rapidly increasing scale, by those whose primary interest is in education, medicine,

industrial management, or the various fields of social service. No one claims that such tests are perfect. But every year some new investigator improves our devices and adds to our insight. And where so much still remains uncertain or unknown, the one thing needful is further research.

II

STUDYING ONE'S OWN MIND

HITHERTO we have been studying the mind from the outside—judging men from their physique, watching their faces, trying them with laboratory tests. But how can we discover the inner meaning of all these external symptoms? I cannot creep inside another man's skull, and observe his secret feelings at first hand. There is one person only with whom this mode of approach is possible: and that is myself. 'Psychologist, know thyself': that is the first rule for the beginner. He must start by taking his inner life as a sample and judge other minds by his own.

Here, then, instead of dissecting the characters of others, we are going to vivisection ourselves. This special mode of observation—the observation of one's private consciousness—forms a method peculiar to psychology, and bears a technical name. It is called introspection, that is, 'looking inwards.' It is a method of attack that no other science can employ. When the chemist pours vitriol on zinc filings, and heats the flask over a bunsen burner, he never thinks of asking the acid and the metal how they enjoyed the process, or what it feels like to be turned bubble by bubble into effervescing gas. But consciousness can be examined in no other way. Without

some practice in self-analysis, it is impossible to get any first-hand notion of how the mind goes to work.

Too much self-analysis may no doubt become morbid. You may risk turning sickly with the pale cast of introspective thought. But, as the old Christian writers knew so well, a little candid self-examination is an aid and not a hindrance to the improvement of one's character; and certainly an effort at thrashing out one's private motives and thoughts is indispensable if you wish to appreciate those of other people. The power of exchanging minds in fancy is a knack that every psychologist must acquire; and he must get to know his own first of all.

Why not try it now? Put down this volume for five minutes, and ask yourself what at this very moment your consciousness contains. Let me come with you into the innermost chambers of your brain. After a brief look round, it should not be difficult to catalogue the main furniture and fittings, and sort them under a few simple heads.

1. *Sensations.* Of all the contents of your conscious mind the most conspicuous are probably the colours and the shapes—the dead-white page in your hand, the lines of small black print, the Turkey carpet at your feet, the patterned paper on the walls. These things you are aware of through your eyes. At the same time, your ears are conveying sounds and noises—a crooning melody from your loud speaker or the rattle of the traffic in the street. Your nose and your tongue perhaps yield the flavour

and the scent of your half-finished cigar. And beyond all this, like a background to the scene, there looms a mass of obscurer feelings, flowing up from your skin and inner organs—the warmth of the fire, the pressure of the chair, the sense of fullness from a recent meal. Sights, sounds, smells, tastes, and touches—all these are called sensations; and each sensation can be ticketed and named according to the sense-organ through which it is aroused.

Psychologists have carried out a large number of fascinating experiments upon sensations, and have hit upon some most unexpected discoveries. For example, in addition to the five senses that we popularly enumerate, they find that we all possess a sixth sense of position and movement; tiny sense-organs have actually been detected by the microscope, buried in the muscles and the joints. That is why you know where your legs and arms are when you wake up in the morning. There is a seventh sense-organ embedded in the skull quite close to either ear: this serves the sense of equilibrium and of giddiness. Or, take the sense of vision. Experiments reveal that the human eye can distinguish about thirty-five thousand different tints or hues: yet all these can be made by combining, in appropriate proportions, three primary colours—red, green, and blue. Here lies the secret of colour photography and the art of the tinted film. In some persons, one or more of these primary colours may be missing. John Dalton, the famous chemist who

discovered the atomic law, was one day carrying his scarlet robes over his arm. As he crossed the quadrangle he dropped the gown on the grass. He found to his surprise that he could not see it. It turned out that Dalton was colour-blind, that is to say, quite unable to discriminate such opposite colours as green and red. Psychologists have since ascertained that nearly one man in thirty is partly colour-blind, though a colour-blind woman is exceedingly rare. And, in the laboratory, tests of colour-blindness have been worked out which are now employed by the Board of Trade. Every engine-driver and navigating officer has to pass these tests, because, clearly, it would be fatal if he were unable to distinguish red signals from green.

The ordinary man thinks of his sensations as part of the external object. When he sees a snowball or lifts it in his hand, he thinks that the cold and the weight are inside the lump of snow, and that the whiteness is on its surface. He does not say: 'I see a white sensation,' or 'I feel sensations of cold and of weight.' Of course, when the freezing ice upon his fingers begins to hurt or smart, he is tempted to regard the painful chill as his own particular sensation: he thinks of the ache as existing, not within the snowball, but within himself. And experiments will show that, as a matter of fact, all our other sensations depend (just like pain) far more upon our sense-organs and our brains than upon the objects to which we assign them.

Here are a few simple experiments to illustrate this point—experiments which anyone can make for himself.

(i) Plunge your hand for a moment in very hot water. Which do you feel first—the warmth or the pain? Do you feel that the warmth is in the water or in your hand? And where do you feel the pain?

(ii) Now keep the right hand in moderately hot water and the left hand in cold water. After about a minute or so, put both into a third bowl of lukewarm water at skin temperature. Note that one hand now declares that this water is warm, while the other hand simultaneously insists that the same water is cold! Thus your feelings depend far more upon the state of your sense-organs than upon the things you are actually feeling.

(iii) Close your eyes and crook your second finger over your first. Put the edge of a penny or the point of a pencil in between the two, so that it touches both fingers at once. How many points do you feel?

(iv) Hold up your forefinger in front of your nose and look at the distant door knob. How many fingers do you see, and why?

(v) With your eyes shut, turn round three times on your feet, and then stand still, quickly opening your eyes. Do you find that the world begins to go round? If so, in which direction? Now repeat the experiment, this time with your head bowed well

forward until your chin rests upon your chest. Turn round three times and then stand still, with your head upright and your eyes open. Observe that the room now seems to move round in a different direction—vertically over your head instead of horizontally before your face. Make a third trial, this time with your head bent over at a right-angle till your shoulder touches your skull somewhere behind your ear. You will observe that in each case the whirling sensations which you experience when you stop always depend on the position of your head, that is, on the position of the tiny sense-organs for equilibrium situated within the ear.

(vi) Get a friend to sit with his eyes closed while you click two pennies round his head. Ask him to indicate with his finger the exact point at which the penny was clicked. You will find that, when the noise is well to one side of the head or the other, his sense of hearing is able to locate the direction with a fair degree of accuracy; but whenever the noise is in the middle line, particularly when it is under the chin, or at the back of the skull near the nape of the neck, his sense of direction goes wildly astray. Clearly our hearing judges direction mainly according to the relative loudness of the sounds as they reach the two ears.

2. *Images.* When we start dissecting our own consciousness then, we find it consists, or seems to consist, first and foremost of a patchwork of sensations. Is there anything else? Presently you will

go to bed; and the outer stimulations that kept your various senses wide awake will be almost completely cut off. You turn down the light; you shut out the noise; you rest on a soft and comfortable bed: no sights, no sounds, no smells, no tastes, and hardly any touches. Practically all your sensations are thus damped down. Does your mind thereupon fade out to a senseless blank? Not at all, for if you preserved no consciousness whatever you would already have dropped into a trance or a doze. Yet during the next half-hour, as you lie 'twixt sleeping and awake,' the comedy within your brain may go forward as actively as ever. Your bodily eyes may be shut, but you will catch yourself, like Hamlet, seeing apparitions with the mind's eye. A knock on the door downstairs may make you picture the postman; the letter you have just been reading may recall your friend's voice; and, as you try to grope your way across the unlit room, you will get a dim mental photograph of the solid obstacles—the dressing-table here, the scuttle there, the matchbox lying on the mantelpiece. Indeed, with some small effort you may find that you can summon back to remembrance a faint and faded copy of almost any sensation you please.

These inner pictures, these mental echoes, are not unlike sensations, and yet they are far dimmer, more unreal. They are curiously private, and less full-blooded or substantial than the original sensations themselves. They are flickering phantoms

rather than actual things that seem to pass before your mental gaze. These resurrected ghosts of past sensations are known as mental images. They are excited from within the brain, while genuine sensations are excited from without. We may have images corresponding to every one of our sense-organs—mental pictures, mental sounds, fancies and memories of touch and taste and smell. Thus, even in the absence of external objects, our thoughts may be clothed in concrete, sensory form.

What kind of costume do your own thoughts wear? Let us try a fresh experiment, in order to find out. Summon up before your mind some imaginary or past event—the battle on the Somme, shall we say? Do you catch the whole scene as a moving panorama, a succession of dissolving views? Can you hear in your mind's ear the gun-fire and the shouts? Do you feel an illusory bullet piercing your flesh, and then the warm trickle of the blood? Or do you simply go over the story to yourself in words? And, if so, are the words heard mentally, or muttered mutely to yourself, or possibly glimpsed in black and white like printed headlines?

Inquiries of this sort have revealed to the psychologist a most unexpected fact. People differ enormously in the ease with which they can call up these various kinds of images. Tests have even been invented for measuring these special tendencies; and at one time it was suggested that individuals

could be classified into a number of separate types. They have been grouped as follows :

I.. Thing thinkers (concrete type) :

(A) Visualizers, (B) audiles, (C) motiles.

II. Word thinkers (verbal type) :

(A) Visualizers, (B) audiles, (C) motiles :

(i) articulatory, (ii) graphic.

As a matter of fact, most people are concrete thinkers : to imagine is easier than to put things into words. And among them, four out of five turn out to be eye-minded, 'visualizers,' as they are called. Children and most uneducated persons think predominantly in realistic terms. Their thoughts are imaginary pictures. Their recollections, their fancies, and their future plans, all come to them in visible shape. Others are ear-minded : 'audiles' is the technical term. In recalling a musical comedy, they hear the tunes echoing through their minds, but see nothing of the scene. *Your* mind may be like a silent cinema ; *mine* is more like a broadcast debate, with the voices of conscience, my friends, and myself, all arguing together in the twilight. Others again neither see nor hear these imaginary sensations, yet they are quick to feel imaginary touches on their skins : these are the 'tactiles' ; start talking about fleas or spiders, and your victim will soon begin scratching his neck : while others—the 'motiles'—think mainly in terms of strains and movements ;

they can hardly look over a canal bridge without feeling their bodies hurtling through space and their fingers clutching the air.

But many are almost devoid of concrete imagery, whether of sight or sound or movement. They are word thinkers rather than thing thinkers. When they want to recall a past event or arrange their programme for the day, they go over the items verbally in a kind of inner speech. Their reflections take the form of a silent soliloquy; and begin, like the Lord Chancellor in *Iolanthe*, 'Says I to myself, says I.' Those whose lives have been spent among books—teachers, philosophers, inveterate readers of every kind—generally belong to this type: from sheer disuse, they have lost all power of conjuring things up in vivid, sensory detail; they can think of them only by means of their names, and their inner life is a running commentary with no life-like portraits to relieve it. This group, like the former, can again be subdivided into visualizers, audiles, or motiles—according as they see the words, hear the words, or feel them gurgling in their throats.

Try to discover to which particular group you yourself belong. The mental pictures are quite easy to detect. Inner speech is almost as obvious. But it is a little harder to decide whether your speech takes the form of words that you utter mentally, or of words that you hear in your mental ear, or finally, perhaps, of words that you see written or printed.

Once more let us make an actual test. Think of such words as 'bubble,' 'toddle,' 'putty.' Now open your mouth and think of them again. With the lips apart, a good many people fail to catch the consonants. They find themselves saying: 'u'le,' 'o'le,' 'u'y.' They are probably motiles. Others are not in the least put out by displacing their movable organs of speech: they still hear the words, as distinctly as before, echoing in their mind's ear. I myself, for example, am undoubtedly a verbal audile: I can enjoy a mental concert at my fireside by simply opening an orchestral score; if I pick up a book by my former tutor, who had an impediment in his speech, it takes me ten minutes to read each page, because I hear his voice stuttering at every p and t. A few people, instead of saying the words with their lips, feel themselves scribbling them with a pen on paper or writing them with chalk on a black-board. They are said to belong rather to the graphic than to the articulatory type. And quite a number tend to see the words rather than to hear or say them. A professor whom I know jots down the notes for his lectures on the back of a long envelope, and usually loses the slip; but he has only to look up at the ceiling, and he sees all his headings arranged in order on the whitewash, like the message on the wall at Belshazzar's feast.

Often you can guess from a man's language to which special group he belongs. Have you noticed how some speakers talk entirely in the abstract,

while others use metaphors and similes, and paint a vivid scene, with every phrase they utter? Here is a sentence from a student's essay: "The germ of a new literature had dawned in this strange vein of poetry." Try to picture a microbe dawning like the daylight in a blood-vessel, and you will realize at once that such a writer could never have visualized the meaning of the words that his ear thus carelessly had strung together.

Occasionally our mental images play singular tricks. Generally they help our thinking; sometimes they lead it astray. One remarkable peculiarity is the way in which certain people see colours in things that most of us never connect with colour at all, for example, the sounds of different instruments, the letters of the alphabet, the days of the week, or the months of the year. In response to inquiries made at the microphone, I found that about one person in fifteen has some tendency of this sort. It is commoner in women than in men. The replies show several unexpected resemblances. Nearly one half describe the letter A as a red letter, and the letter O as white. Thursday and Friday are usually said to be brown days, while Sunday is nearly always white, silver, or gold. One listener tells me that her boy speaks about the noises made by animals as though they were evidently coloured. "That dog," he says, "has a yellow bark; our dog has a grey bark, hasn't it?"

The explanations offered are sometimes quite

suggestive. Monday, for example, is a drab or black day, because, as one writer puts it, "the return to the week's work rather darkens the outlook"; another says it is blue "because washing day gives me the blue and the blues." Friday is green "because Friday is an unlucky day and green is an unlucky colour." To another, Saturday is "literally a red-letter day because I was born and married on a Saturday."

Many picture the days of the week, or the numbers from 0 to 1,000, arranged in an imaginary scheme. In their mind's eye they see the weekdays set out as strips of black and white like the notes of a piano. Or they visualize the numbers in a circle, a zigzag, or a long unending spiral. A few even declare that such mental diagrams help them in their arithmetical calculations or aid them to date historical events.

But let us return to the task of docketing the contents of your mind. As you keep watching its movement, a singular fact is bound to strike you. Amid all this welter of sensations and images, only one, or one small group, can stand at the centre; the others lie in the background, obscure and unnoticed. Your consciousness is like a burglar's torch playing hither and thither about a darkened bedroom, focussing one object after another—the pillow, the door-knob, the keyhole, then the box of trinkets by the mirror. A single shifting spot shines out; the rest is barely distinguishable in the gloom.

The mind in fact can attend to one thing only at a time. Hence our thoughts and mental images are forced to follow one another as a series, item by item, in single file. Our ideas thus come to us in continuous sequences or chains.

As a rule, each series starts with some actual sensation, and, after an interval filled with recollected images passing by in procession, tends ultimately to issue in some definite movement. The rat-tat at the door, for example, suggests a postman, and you see him mentally in blue uniform and cap; postman suggests bill; bill suggests the debt you owe to Smith, but have constantly forgotten to pay; your unpaid debt suggests Brixton gaol; and already you feel the policeman's hand upon your shoulder, and see, in quick and galloping defile, the dock, the judge, the convict's cell, the gallows, and hangman's rope. The result of it all is that you snatch up a pen and post a cheque to Smith.

We are not, however, interested in the final action; we are concerned with the steps that lead up to it. Watch the process, and you will see how each thought keeps jerking the next thought forward like railway trucks on a single line. This suggests two problems. First, what is the force that drags the thoughts along? And, secondly, what couples them together in series or trains?

3. *Associations and Relations.* Let us take the second question first. The links that connect our thoughts are commonly called associations. This is a term

invented by a Greek philosopher who first set people talking about the 'association of ideas.' But the phrase by itself tells us nothing. It would be truer to regard them, not as links between trucks, but as railway lines that guide the course of consciousness—as well-worn grooves in the brain along which our thinking glides, much as an express is steered through station after station, missing some and pulling up at others.

Brain-paths or 'associations,' of much the same kind, control our practised movements. These may at times be as swift and mechanical as an inherited reflex, as winking, shall we say. For example, now that you are grown up, you can dress and undress without giving a thought to the process; in fact, I would willingly challenge you to tell me straight away which sock you put on first or which hand you use to unbutton your waistcoat. Observe that these associations between movements are not only unconscious in themselves, but may lead to quite complicated chains of action of which we are quite oblivious. You remember the absent-minded poet who went to his bedroom to change for dinner, and was surprised a few minutes later to find himself between the sheets, one movement having prompted another, according to an automatic routine. We say that he acted by force of habit. Habits, in fact, are nothing but associated movements, just as memories are associated thoughts.

Even in deliberate reflection the associations are

mainly unconscious. The nerve-current flows blindly along the nerve-filaments, and only flings out a conscious spark as it leaps from one fibre to the next. But, at times, in the brains of the more intelligent, the associations themselves may become explicit. Such a man will not only observe the things associated; he sees *how* they are associated. No animal does that. Your dog learns to connect pain with the stick, but he could not explain why stick and pain tend to go together: you and I perceive (or think we perceive) a causal connexion. We note that the thunder comes *after* the lightning; that King George's portrait is *like* the original; that black is the *opposite* of white. These specialized links in our thinking—links that we denote by such abstract words as 'after,' 'likeness,' 'contrast,' and the rest—are generally termed 'relations.' A relation may thus be defined as a conscious association.

A simple experiment will bring out the difference. Suppose I say, "Here is a word—'black'; what does 'black' make you think of?" You may answer with one of half a dozen associated words—'ink', 'ebony,' 'negro,' 'blackboard,' 'black magic,' or 'Black Sea.' That is called '*free* association,' and the association is quite mechanical and blind. But suppose I say, 'Give me the opposite of black': you at once reply 'white.' You have used not free but specific association: you have employed a relation, and you were conscious of its nature. One of the best tests of intelligence is working 'rule of three' in words.

'*High* is to *Low* as *Good* is to . . . ?' A child of ten can supply the answer: 'Bad.' To do this he must first fix his mind on the relation between 'High' and 'Low'; and discover what it is—contrast, of course, for the words are obvious opposites: this relation he then applies to 'Good,' whereupon his mind at once produces for him the corresponding opposite needed to complete the verbal pattern. Nearly all constructive thinking—the thinking of the artist and the thinking of the philosopher—follows this general plan.

Of all the different kinds of relation, space relations are the easiest to perceive: 'the cat is *on* the mat'; 'Henry is *by the side of* Willie'; a child of four can see that. But logical relations—relations that we express by words like 'since' and 'hence'—are the most important for clear thinking. They are essential to all valid argument and proof. Unfortunately, they are much more elusive.

You can see how far different people are successful in grasping relations by comparing, first a letter written by a child, and then an argumentative chapter written by a clear-headed grown-up. Note how frequently each one uses those quiet little parts of speech expressive of logical connexion—prepositions, conjunctions, and the like. The child will tack on sentence after sentence with reiterated 'ands,' like the older writers in the Bible: the scientist builds up his inference with 'ifs' and 'thoughts' and 'thens,' with 'buts,' 'because,' and 'therefores.'

You now realize why animals cannot reason, and only man can argue and deduce. Reasoning is simply a consequence of this peculiarly human power to perceive and isolate relations. It is not an occult gift of genius, found chiefly among private detectives and a few white-bearded metaphysicians. Nearly all of us have it; hardly any of us uses it. Dr. Watson sees each scattered clue: it is left to Sherlock Holmes to pounce on the eloquent link that connects one little point with another—the uneven footprints on the gravel with the murderer's left-legged limp. "Dr. Brown," said a lady at a tea-party one day: "You have not forgotten me? I was your very first patient." Dr. Brown had just been relating, before the lady entered the room, how his first patient had been a confirmed drug-maniac. Now, of all the persons present who presumably heard both remarks, only two drew the obvious inference. All doubtless grasped the two connexions expressly put into words—(i) between the doctor's first patient and the drug-taker and (ii) between the lady and the doctor's first patient: but hardly any put two and two together and saw that they made one. Thus reasoning depends essentially upon relating relations.

4. *Feelings and Emotions.* There seem to be other contents of consciousness, yet more subtle, and harder still to tabulate. Of these the most important are what we popularly call our feelings. Every sensation or idea is attended by pleasure or pain.

Pain in the-strict sense of the word—the pain that you feel when your skin is scratched with a needle or your tooth tugged out by the dentist—is itself an actual sensation: there are definite nerves which subserve it. But the painfulness of a glaring light or of a harsh and grating discord is not really pain of this sort: so the psychologist calls it 'unpleasure.' Pleasure and unpleasure, then, are not sensations. They have no definite sense-organs, like hearing or sight: they suffuse our whole mental life. Accordingly they are classed as feelings. And the part they seem to play is unique. If we can trust the results of careful experiments, their essential functions are these: it is the effect of unpleasure to stamp out, and of pleasure to hammer in and fix, any activity which they accompany.

We have now nearly finished our inventory of the various contents of the mind as they appear to crude introspection. As a step towards a science of psychology such an analysis is the first prerequisite. It supplies a terminology. Without it we should have no technical names and labels to help us to describe and classify the obvious items in our conscious life. But it is time to correct the picture. Hitherto we have spoken of consciousness as though it contained, or was made up of, a number of bits and pieces, just as a house is put together out of bricks and stones, cemented together by mortar. The account is much too simple, and may even mislead.

To begin with, our sensations never come to us in absolute isolation; they are fused into certain patterns or shapes. That cricket ball lying on the table is something more than a blot of red sensations perceived by your eye. It possesses not only a certain form, but also a certain solidity. It exists out there in space; and, as your attention fixes on it, the thing seems to start out in bright relief as though you had caught it with the spotlight of some concentrated beam. Nor can you describe what you see in visual terms alone. Before ever your hand has felt it, the ball seems to look heavy and smooth. But how can you *see* its leathery smoothness? How can you *see* its weight? You may explain, with the older psychologists, that, years ago as a baby in your cradle, you worked with eye and hand together: whatever you saw you grabbed; and thus you learnt to associate indissolubly those particular sensations of colour with certain memories of heaviness and texture—the images of the touch-sensations that you got when you first picked up your ball. The explanation is far from convincing, and quite out of keeping with the baby's actual behaviour. From the start the baby sees and feels, not single or detached sensations, but concrete objects or things. He does not see certain flat sensations of red that he afterwards links on to other sensations of movement, touch, or weight. With the very first glance (unless I am widely mistaken) he perceives a complete, well-rounded, solid-looking ball, standing out from its background.

In short, sensations are abstract items that we learn to discriminate at a late sophisticated stage; they are things that we can distinguish, not things that we can separate; least of all can we suppose that we start with pure sensations, and then add them together in some complicated way to make a concrete object.

It is, then, simply for ease of description that we depict the contents of our mind as so many stationary blocks tucked together in a tray, or as a series of successive beads strung together in a chain. Consciousness is neither a chain nor a mosaic. It is a living, ever-changing current. There are no joints between our sensations or ideas; one mental state flows into another without any cracks or jerks. Our conscious life is like a stream that glides and sparkles: to count the tiny waves, to name the points of light, means freezing the stream into dead particles of ice, or taking a still photograph and missing out the motion. In short, by treating the mind as made up of conscious elements or atoms, we have overlooked its most characteristic feature, namely, that the mind is continuously active.

This becomes plain when we turn to another set of so-called contents which are sometimes added to the list, namely, our emotions. Joy and sorrow, anger, fear and affection—how are they to be catalogued? Are they to be placed in a separate pigeon-hole of their own, or do they fall under the same general heading as pleasure and pain?

When next you lose your temper or fall violently in love, scrutinize your feelings. You will quickly discover that no emotion is ever a simple, clearly classifiable state. It includes, amongst other things, a number of confused sensations coming up from the viscera within. Part of what you feel (though, unless you are a poet, you do not note it at the time) consists of a widespread bodily disturbance—a hot, flushed feeling on your face, a knocking on your ribs, a laboured breathing in your throat, a twitching or a tingling all over your organs and your limbs. This involuntary commotion is part of the instinctive response that accompanies or underlies every deep emotional excitement. Indeed, more psychologists than one have wholly denied the existence of an emotion as a separate mental content: they maintain that it is a sheer inversion to say your pulse quickens and your mouth goes dry *because* you feel afraid: the truth is that you feel afraid because your heart has started thumping and your tongue is cleaving to the roof of your mouth. The feeling of these sensations is the feeling of the emotion. Take a deep breath, square up your shoulders, smile, smile, smile; and your fears will instantly vanish because you have stopped those sinking feelings of which your fears consist.

Most of us, however, believe that we can detect, beneath this welter of obscure sensations, a purer feeling that is quite unique. During the course of any strong emotion, we are aware of some inner

tendency or purpose; we have a sense, however vague, of striving, struggling, willing: and this, too, is sometimes considered a definite ingredient in consciousness. We seem to experience at first hand a mental force which is urging us this way or that. It is tempting to conclude that these mental forces play the part of a powerful engine, and drive our thoughts along until they issue in action.

This, however, brings us to a cardinal point upon which recent psychology has been laying so much stress. Older psychologists thought our mental life was completely described when we had dissected consciousness into a patchwork of sensations and ideas. Modern psychology goes deeper. It claims that below this quivering surface there is a surging eddy of forces. Thus, if you are to understand a man's character and conduct, it is not sufficient to squeeze inside his skull and watch the play of coloured light and shadow that makes up his conscious life. You will have to pry behind the painted scenery, and peep at the pulleys and wires; and then crawl beneath the stage and examine the switchboard and the dynamos.

So we find that the old-fashioned method of introspection—mere observation of the conscious self—has serious limitations. It helps us to discover the conscious contents of the mind, and to classify and name them. About the powers that produce and guide these shifting contents it merely leaves us guessing. There is, therefore, a second broad

field for the psychologist to explore—the unconscious as well as the conscious region of the mind. But how can we bring to light what by its very nature is unconscious? What lamp can we use to search out the dark places of the heart? These are the baffling questions to which we must now turn.

THE UNCONSCIOUS MIND

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III

WHAT IS PSYCHO-ANALYSIS?

PROFESSOR BURT has told you many interesting things about the workings of the conscious mind, and he has also here and there dropped hints which were intended to pave the way for what I have to say about the deeper, buried layers of the mind. This study is associated with the word 'psycho-analysis.' It is probable that to secure control of the deeper motives in the human mind, the motives that really drive us, would signify a momentous change in man's history. And heaven knows we would seem to need some fundamental change if we are to straighten out the muddle to which we have reduced our world. If that view is right then the present moment may be invested with a certain historical significance. For it is the first time that the B.B.C. has decided to place the subject of Psycho-analysis on its programme. I can imagine there must be no little trepidation in some quarters at the idea of a real live psycho-analyst, so often pictured as an evil ogre, being allowed to address the public mind. That I am sure is based on a misjudgement both of the public and of psycho-analysts, of one as much as the other. There are difficulties in the world around us. If there are also difficulties inside ourselves, in the

workings of our own minds, then an ostrich policy of pretending that they do not exist will not help us in the one case any more than in the other. Difficulties exist to be overcome, not to be ignored.

When you ask 'What is Psycho-analysis?' I will beg you to forget most of what you have heard about it from the popular press and elsewhere. A statement in the *Radio Times* furnishes a good example of the sort of thing I mean. In announcing the present talk it says very truly: "Psycho-analysis is a term often misunderstood and loosely used." But in the same sentence it defines it as "the science associated with the names of Freud, Jung, and Adler." This ought to run "*wrongly* associated in popular journalism with the names, etc." Actually psycho-analysis is associated only with the name of Freud and those who use his methods, which neither of the other gentlemen named do.

There are a great many things that psycho-analysis is not, and they are the things you chiefly read about. For instance, many people believe the main teaching of psycho-analysis to be the advocating of self-expression regardless of any restraint. Actually the effect of psycho-analysis is inevitably to heighten self-control.

Whatever psycho-analysis is, therefore, there must be something very odd about it. Other new ideas may be easy to understand or they may be extremely difficult, like Einstein's relativity, for example, but they do not often get misunderstood so grotesquely,

or even changed into their very opposite. There must be a reason for all this, and you will see in a moment what it is. Now let us start with a correct definition of the term psycho-analysis. The original sense was simply a special method devised by Professor Freud of Vienna for the treatment of a certain class of nervous troubles, but the term is often very properly used to refer to the knowledge that has been gained through employing that method. If this were all, you might well ask what all the fuss is about, since it is a matter that concerns only a few medical specialists and their patients suffering in this particular way. There is much more in it than that, however. I will only say here that the nervous troubles in question are concerned with the whole problem of human unhappiness, and it so happened that an attempt to alleviate these by searching out the causes of them brought with it an investigation of layers of the mind that had never previously been studied, and also a special method for doing so. This method has naturally been greatly improved, both by Freud himself and other workers since it was first devised some forty years ago, and I may add that although he is now in his seventy-seventh year Professor Freud is still engaged in endeavouring to perfect it.

It was soon found in testing these various modifications and improvements on the original technique the attempts defeated their own purpose and led away from the goal as soon as one departed from

certain necessary conditions of working. It became possible to say just what were these necessary conditions or principles in the technique, and it followed that those attempts, however well meant, which did not take them into account were abandoning the very essence of psycho-analysis itself. The value of these latter attempts, such as those made by Adler, Jung, Rank, Stekel, and others, is very much in dispute, and I do not wish to discuss them here; but to confound them with psycho-analysis itself is not merely inconvenient—it leads to helpless confusion. These other methods all tend to deteriorate into the use of suggestion, which is the only real alternative to psycho-analysis.

You will now want to know something about the method itself. I shall try to give you some food for interest about it, but I fear I shall disappoint those of you who may be expecting to be told just how to use it yourselves. It is much harder to carry out a surgical operation on the mind, i.e. to carry out a psycho-analysis, than it is on the human brain; though of course it is easy enough to manhandle either. There are not fifty people in England who would feel very happy operating on a living brain, and there are still fewer who can carry out a corresponding operation on the mind; yet thousands of people are willing to make the attempt in blissful ignorance of the difficulties.

Nevertheless I propose to tell you something about the method and I will begin with a paradox. Analysts

commonly teach, and Freud himself would say so, that the basis of psycho-analysis is what is generally called the free association method. Yet it would be more accurate to say that the basis of psycho-analysis was Freud's discovery—perhaps his greatest—that there is no such thing as a free association of ideas. This is a simple notion, which you all know something about. Everyone has at times let his thoughts run away with him, as the saying is, and then been surprised at where they get to. One does it in every day-dream or reverie. Children often make a game of it, purposely letting their thoughts run on just to see where they get to. The point is that one suspends some control evidently present in ordinary thinking or conversation and lets the mind think for one instead of thinking for oneself. Do I make this clear? Let me do it in front of you. I start with anything that catches my attention, say that bunch of artificial magnolias with which the B.B.C. authorities have chosen to enliven this studio. I see they are made really of seagull feathers, and off I go. Seagulls. They remind me of studying the different species of seagulls when in the Scilly Isles. Scilly—what a queer name for a place! I think of Silly Suffolk, which I am told properly means Holy Suffolk, silly originally meaning innocent or blessed as does still the corresponding German word *selig*. Off I go into personal thoughts about learning German and it is time for me to stop, already miles away from artificial magnolias or

seagulls. That is what is meant by free association. It is often amusing to try to retrace one's steps and to wonder how one got from one to the next. Usually one can see some reason, some connexion in either the sound or the meaning of the words next to each other, but even then one wonders just why the one word gave rise to what it actually did when there were so many other obvious alternatives. Why did I go on just now from the Scilly Isles to Suffolk rather than to some other isles, of which many interest me? Why did the word Scilly grip my wandering attention rather than Isles? Can it be that without my realizing it the word was already at the back of my mind from the moment when I first glanced at the artificial magnolias? Horrid thought! Was I being disrespectful to the B.B.C. canons of decoration? Let me quickly put such a sacrilegious possibility out of my mind.

This little example, which I may assure you is a quite spontaneous one, will illustrate several points. The essence of Freud's discovery was that when one idea follows another there is bound to be some connexion between them, whether the connexion is apparent or not. This runs counter to the general belief that the mind has the power, by 'free will,' to think of an idea which need not be related to whatever was last in the mind; that the mind can, for instance, change the subject whenever it likes and without any reference to its own immediate past. Sometimes one has a strong motive for changing the

subject for social reasons, and if you observe what happens on such occasions you will find that it is more easily said than done and that the effort often results in falling out of the frying-pan into the fire. I will tell you of a recent personal experience of the kind of thing I mean. It was at a small dinner party where the host and hostess were evidently on strained terms with each other. At one moment, when the husband replied acrimoniously to some tart remarks of his wife's there ensued a painful pause. A fellow guest coughed and gallantly tried to steer the conversation into more peaceful channels. This is how he did it. He began by describing a tour he had recently made in Ireland and passed on to a discussion of the Irish character. Warming up he expressed the opinion that Irish people were impossible to deal with politically and said, "They will go on bickering until they get a complete separation." That brought the table back with a start to the original embarrassment and we had to struggle on again in the effort to reach a safer topic.

So you see it is not so easy to drop a topic completely and embark on an entirely disconnected one. The experience I have just quoted also shows that the difficulty of starting afresh without being influenced by the previous train of thought is much greater if this had been accompanied by any emotion or personal feeling. And that is always the situation in psycho-analysis, since no one engaged on self-investigation can go very far without coming on to

some topic that concerns his personal feelings. When someone is occupied with a deliberate or conscious train of thought, such as in ordinary conversation or discussion, the connexion between the following ideas is mostly evident. With scatter-brained people, it is true, who jump all over the place this is not always so. When, on the other hand, the person relaxes his mind, renounces the usual control and directing of his thoughts, and thus allows his mind to think for itself and let thoughts come as spontaneously as possible, the observer will soon find it difficult to follow the flow. He wonders why this idea should have come after the preceding one and fails to see any connexion between them. To do so it is necessary to go back over the chain, to focus one's attention on them, and to get further *explanations about the intermediate connecting links* which often have not been expressed. The subject of the investigation can generally by reflecting throw light on these links. In some instances, however, he is unable to do so, and then one might well suppose this is because there actually is no connexion. According to Freud, however, the reason is quite different. He maintains that in these cases there always is an underlying connecting link, but that the person is for certain reasons not aware of it. The connecting link, which is still a mental process, belongs to a region of the mind of which the subject is not aware, is not conscious, to which, therefore, the name of 'unconscious' has been given.

And Freud has provided a technique for ascertaining the nature of the underlying or unconscious connexion, the study of which is psycho-analysis.

We have here reached another point. If Freud's assumption just mentioned is true then we have to do with a world with which mankind is by definition unfamiliar. If we arrive at the conclusion that man has an unconscious mind it may prove to be momentous. Quite unimaginable vistas begin to open before us. I do not say unguessed at, for many philosophers and all the great poets have surmised that there is more in man than he knows; that he is only partly aware of what goes on in his mind and perhaps influences his conduct; indeed, that there are deep and obscure sources within him from which he draws his most profound convictions, his strongest emotions and his most intense aspirations.

But to get back to the drier question of the method itself. When what we called the underlying motives linking the consecutive ideas are brought to the surface it is found that they all have one common characteristic. This is the second of the three main discoveries made by Freud which make up the theory of psycho-analysis. The first was the existence of the unconscious and the pathway to it. The second was the reason why we are not aware of the unconscious, and that I am now going to tell you. The underlying links which open the way to the unconscious are all unwelcome to the conscious personality, to the idea the man has of himself, to

what he calls his real self. There are many ways in which these ideas may be unwelcome, and some are much more unwelcome than others. The idea may offend one's pride, one's private picture of oneself; it may be repugnant to one's moral or aesthetic sense; it may be terrifying from its betraying an impulse we may fear to be unable to control, and so on. Let us start with only a slightly unwelcome idea. I gave one in the little series of free associations with which I regaled you a few moments ago. It came as a little shock to me to discover that without knowing it I was harbouring a distinctly caustic criticism of the taste with which my host, the B.B.C., had decorated its wonderful new establishment. It needed, it is true, but an instant for me to say to myself, "What about it? Why shouldn't I criticize them?" In an actual psycho-analysis the subject soon learns much about himself he had not realized before by such simple procedures as this. Often, however, the realization is very wounding or even painful, and then the self naturally strives against it by trying to explain the facts away, by discounting them, and in many other ways. In other words, the self puts up a resistance against realizing the buried truth, even when the truth is quite patent to an observer not influenced by personal feelings. Now Freud assumed—and there is good reason to accept his assumption—that this force which so plainly manifests itself as resistance must be the same force that originally prevented the self

from being aware of the unwelcome idea. In English we give the name of 'repression' to this, a word which sometimes causes confusion because of its other meanings; for example, it is sheer nonsense to say that psycho-analysis says 'a child should not be repressed.' In psycho-analysis 'repression' simply means the keeping of ideas from consciousness. Whether it is beneficial or not to repress ideas, i.e. to keep them from consciousness, is quite another question, the answer to which depends on circumstances. The process itself is up to a point familiar enough. Everyone has heard the advice to deal with a painful thought by 'putting it out of one's mind,' though few people think of asking where it goes to when it has been put out of the mind. The answer is into the unconscious, and there it may lie dormant until revived by some association or other, or it may act independently of consciousness and produce indirect results which the person does not at all understand. This half-voluntary putting things out of one's mind, however, comprises only the smallest part of what is meant by repression. By far the most important part concerns not ideas that have been put out in this way, but ideas that have never been allowed in, ideas of which the person has never been aware at all, of whose very existence he has never had the faintest glimmering. The deeper layers of the mind, the true unconscious, is really and truly unconscious in the fullest sense; no one, for example, unless he is mad is aware of a desire to eat his mother,

and yet this is a common and often powerful idea in the unconscious.

I said just now that the degree of unwelcomeness of these repressed ideas varies greatly. In many instances the unwelcomeness can readily be overcome by a slight effort. But the state of affairs is quite different with the most deeply buried ideas. Here the person will often repudiate with all the strength at his command the bare possibility of any part of his mind harbouring an idea so foreign to him. Further, so important is it to keep these deeply repressed ideas away from the conscious self that powerful reactions and defences are built up in the personality for this express purpose, and indeed these often constitute a main part of a person's character. These defences are often so precious to the personality that the individual will submit even to death itself rather than jeopardize them. Under this description you will recognize some mental attitudes that we call ideals in life. No wonder there is a violent antipathy to psycho-analysis, which seeks to uncover repressed ideas.

All this means that deep down in the mind are intense conflicts between different divisions of the mind. We do not recognize them as such. We are aware only of the end results, and many of our strivings, interests, emotions, and disharmonies are in their essence endeavours to work out in our life some way of allaying these unconscious conflicts.

You will now want to know something about the

nature of the repressed ideas and impulses I have been referring to. I will tell you something about them in the next talk, but I will forestall that to the length of saying that they may all be summed up in the two words 'love' and 'hate.' There is in the unconscious mind much more capacity for intense passion and also for much more savagery than we have any inkling of in our conscious minds. If you go further into the matter you will find that there is in man both more good and more evil than appears on the surface; in the depths of his being he is both more moral and more immoral than he knows. And all these conflicts date from the earliest years of life. If we trace the material of the unconscious back to its origin we find that it all exists in the infant. One of the most startling of Freud's discoveries, for instance (the third of the trio I alluded to earlier), was that the young child has a highly elaborate and complicated sexual life in both its body and mind, a conclusion which has aroused the greatest astonishment and opposition. Perhaps here lies the secret why it has proved so hard to accept the findings of psycho-analysis, or even to take them in without distorting them.

We have ranged from apparent trivialities to some of the greatest issues of life, the very nature of man's inmost being. I will now ask you to remember the three main discoveries that have been made by using the psycho-analytic method. The first is the existence of the unconscious mind, that there lies

below the surface of the mind we are aware of an active and complex 'unconscious' mind which greatly influences us without our ever suspecting it. The second is the fact of repression, that much of our mind is kept away from our conscious knowledge by definite forces which effect a division of the mind into separate compartments incompatible with one another. And the third is that the unconscious mind, with all its conflicts, dates from early childhood, at a time when sexual impulses play an unsuspected part in the early development of the mind.

IV

THE POWER OF THE UNCONSCIOUS

I HAVE had a great many questions addressed to me by B.B.C. correspondents, and I should like to answer one or two of them before I proceed. The question most often put was whether psycho-analysis can do anything to overcome the fears and disharmonies in the unconscious mind; what practical use is there in what seems to be theoretical knowledge? Well, you must please remember the aim of this series of talks and the limitations to which they are very properly subject. The aim is nothing more nor less than to interest you. The B.B.C. cannot be concerned with what use you make of that interest. That is your own affair. In the literature made available to you by the fivepenny pamphlet on this series of talks you can find out what can be done in practice with this knowledge. It is not for me to trespass on to the topics of how to remedy various conditions; that would soon pass into questions of medical treatment, for which broadcasting is certainly not suited.

Another question often put was what is the effect of psycho-analysis on our attitude towards moral responsibility. That I can answer in one word. It makes one more responsible and strict as regards one's own actions, but it makes one more lenient and tolerant of other people's.

In my last talk I hinted to you that the unconscious mind, the special region of the mind studied by psycho-analysis, is far from being a mere dumping-place of forgotten and useless ideas. It is the exact opposite of this. It is the prime motor of our life, the source of most of our mental energy. The power it has to influence us, i.e. our conscious minds, is exercised in two ways. Its energy is either turned into conscious energy, when it works with us, or else it stays separate and interferes with us whenever it can. Let us consider the first case. The impulses of the unconscious, all sorts of primitive cravings and strivings, are commonly transformed into conscious strivings and interests. But they are transformed only under certain conditions, only when they can be altered and refined enough to satisfy a strict censorship that is always acting automatically without our knowing it. They have to be able to bear examination. An impulse towards cruelty or criminality, for instance, can be allowed to furnish a conscious interest only on condition the person doesn't realize that any part of him has any such impulses. Then he can read detective stories or murder trials and enjoy crook films to his heart's content. Or, if he is more serious about it, he can become a criminal lawyer or judge, or a butcher or a surgeon, or follow any other career where an interest in hurting or killing plays an essential part. All goes well so long as the necessary conditions are fulfilled and the transformation of the primitive is complete.

You see I have introduced you here to two different ideas, both of which are very hard to grasp properly. It is extraordinarily strange to imagine that what we confidently know as our mind, i.e. conscious mind, the most immediate knowledge we have and the thing we know best in the whole world—our dear selves—that this is only a portion of our whole mind: that we are allowed to know only a part of ourselves that has been carefully selected for the purpose. And strictly selected. In countries where the government has complete control of the press the public must have an extremely partial view of what is going on both inside the country itself and in the rest of the world. Not only so, for even the part they are allowed to know has been carefully edited in line with certain tendencies, so the information open to the public is first selected and then distorted. Well, I can tell you that no censorship any autocratic government has ever exercised can compare in severity with that which every individual exercises within himself. And all this without his having any idea that any censoring is going on at all, or that his thoughts come from anywhere else than the self he knows so well, his conscious mind. He never stops to ask such questions as why he likes or dislikes this or that. He may invent some reason for it—a process known as rationalizing—but what he mostly means is simply 'Of course I hate this or that—that's what I'm like.' And yet what I am telling you is that really he never knows why, and

that he has no inkling of the complicated thoughts going on in the depth of his mind which decide whether he is to like or dislike this or that.

All this sounds pretty mad, I am sure. How can I make it a wee bit less so, how can I link it on to any ideas more familiar to you? After all, from time to time some of us do have vague notions that there is more inside us than we know, that we do not really understand ourselves. There floats into my mind the title of a trivial song that was popular in my youth. The first line of it ran "I don't know why I love you, but I do, do, do." The writer of that line was, probably without realizing it, expressing a profound truth. Every man in love would be hard put to it to explain how his loved one differs so totally and completely from every other girl in the world, as he feels sure she does. He rarely even stops to wonder how it is that other men do not perceive this dazzling truth and do not recognize the obvious and superlative superiority of his loved one over all other women.

Then, again, if we turn from the everyday to the rare experiences of mankind we find the same thought. Most great poets have felt that their finest work was not deliberately manufactured, but came to them on the wings of some impelling force emanating from they knew not where, from some unknown depths within. The Greeks even thought that poets were acted on by some spirit who entered into them, just as in the Middle Ages hysterical women were

believed to be possessed of devils who could be driven out. And no great religious prophet would consider that his conscious mind was the originator of his fervent messages. He is but the vehicle for the inspirations which he ascribes to divine agency.

These are only a few examples which remind us, if we pause to think, that in many situations of life we feel there must be something influencing us besides what we can consciously account for. The same is true of the other great conclusion of psycho-analysis, namely of the vast importance that internal mental conflict has for our lives. Moral and religious teachers recognize this as the strife between the good and the evil tendencies within us, and they often paint the whole of man's life as one long struggle to attain to a state of clear conscience, of good behaviour, and happy reconciliation. Indeed, the essential purpose of religion would seem to be to deal with this conflict so that the better side of man's nature may conquer the evil side. Psycho-analysis more than confirms this view of life. It holds that the sources of these disharmonies lie far deeper at the unconscious roots of the personality than had ever been guessed. This means that deep down we feel far more guilty about ourselves than we are aware.

Let me give you an illustration of this. We often nowadays hear the expression 'inferiority complex.' What is really meant by it? It is a wide term, but the word 'inferiority' is descriptive enough of the

state of mind. There is the person who suffers from self-consciousness, is preoccupied with the impression he is making on others, is touchy about fancied slights, or sensitive about the amount of recognition he obtains as he passes through life. Sometimes he is unduly concerned by any doubt about his intelligence, he is hurt or furious at being laughed at when he cannot see a joke promptly or if his opinions are criticized. With other people the feeling relates to personal appearance. Many people endure untold misery from the thought of some imperfect or defective feature: their legs are too short or too thick, their nose too long, their chin not prominent enough, and so on. I need not mention any more of the endless inferiority feelings, but I will tell you one interesting thing about all of them. Whatever the form they may assume, whether physical, social, intellectual, and so on, they one and all arise from a deep sense of *moral* inferiority. That I am sure will sound astonishing, for these feelings often afflict people who are very worthy and to whom no one would think of directing reproaches on any moral grounds. Yet some part of them is dissatisfied with its owner and condemns him as morally unworthy. And I will tell you something still odder. This over-moral part of the unconscious—it is a sort of conscience, though it is better to use another name for it, such as ‘super-ego,’ to avoid confounding it with what we ordinarily mean by conscience—has standards which are widely different from our con-

scious standards of morality. It will at times not merely permit, but even incite to, criminal acts which the conscious personality knows to be socially wrong, just as the Burmese Thugs and other sects used to murder and torture in the name of religion. This, by the way, is another of the topsy-turvy conclusions of psycho-analysis, that a good deal of ordinary criminality comes about as the result of unconscious moral conflicts; if this is confirmed, it will revolutionize our outlook on the prevention of crime. On the other hand, this over-moral part of the unconscious will often forbid actions that are not only socially permissible, but even desirable. It is quite common for it to interfere even with such simple physical acts as seeing, eating or walking, and still commoner for it to interfere with the fundamental activities of doing work and making love. Familiar instances are the difficulties one has with most children in getting them to eat various articles of food to which they have taken an inexplicable dislike, or sometimes even to eat at all.

If all this is true it is really an extraordinary state of affairs. Our bodies, if left to themselves and not attacked by accident or disease, seem to work smoothly enough. And the lives of the lower animals appear to be fairly harmonious; they always seem to know exactly what they want and to be able to bend their energies to getting it whenever possible. Only the mind of man is torn by indecisions, doubts and inner dissatisfactions. And now we are told that

all he is aware of in this respect is but a tithe of the deeper disharmonies in his nature, and that even the apparently positive expressions of his personality—his interests and daily activities—are themselves in large part merely ways of covering up his deeper conflicts, or are the conditions under which he has to live in order to prevent these unconscious conflicts from disturbing whatever peace of mind he may have acquired. Why ever should this be? How came the human mind to be built in this curiously unsatisfactory fashion? These are not only fascinating problems in themselves, but they concern matters of the highest practical importance. What thinking man can be gratified at the picture of the human race, especially at the present moment in the world's history when our self-complacency is being distinctly ruffled?

I said that many unconscious impulses are first modified and then turned into conscious activities. And I also said that many of them fail to be so transformed, but continue a life of their own in conflict with the rest of the self. This is the repressed unconscious one hears so much about and which is said to work so much mischief. These impulses, being shut off from direct expression, can act only in an underground manner, just as a suppressed political minority makes itself a nuisance by being always 'agin the Government.' The effects may be trivial or they may be serious. A man decides to post a letter; his unconscious, however, may harbour

objections to sending the letter and often enough it gets its way; the man forgets to post the letter or even mislays it. A burglar or murderer intends to escape without leaving a trace, but his guilty conscience mostly defeats him by seeing to it that he leaves what detectives call a visiting-card in the shape of some memento that affords a definite clue. The effect here is fateful: it may cost him his life. Probably four-fifths of the terrible death roll on our roads come about in the same way, by the driver's unconscious interfering with his doing the right thing in an emergency. This is a much bigger matter than forgetting to post a letter or slipping it into the wrong envelope, though I could relate cases where even such little slips in the mental machinery had tragic consequences. These self-thwarting and self-punishing tendencies play an enormous part in life. Many people have the regular habit of doing the wrong thing and acting against their interests on vital occasions, and there are very few who never stultify themselves and always succeed in using the best in them.

You will now want to know how all this comes about, and where do all these mental disharmonies come from. One of the main findings of psycho-analysis is that unconscious conflicts all arise in the first few years of life. It is in this field of early mental development that psycho-analysis has achieved its most amazing discoveries, and yet many of them are so directly in line with our ideas of biological

evolution that they should not have been so unexpected. For instance, there is good reason to believe that the young infant is endowed with crude tendencies that are probably inherited from a dark past long antedating the dawn of civilization. It is hardly an exaggeration to say that in the first four years of life the infant has to condense a hundred thousand years of mental evolution in its endeavour to adapt itself to civilized standards. From every point of view, ethical, aesthetic, even sanitary, the infant's primitive nature is in glaring contrast to these standards, hence it is little wonder that it encounters difficulties in its endeavour to bring its nature into relation with the life around it. It can see no reason why it should not bite or destroy everything it can grab, dead or alive; it has not the slightest respect for other people's belongings or their feelings. Dimly perceived impulses and fancies flit through its little mind, and some of these would be called terrible if a grown-up were to experience them, as Jack the Ripper did. But we have long ago buried and forgotten those tendencies in ourselves—they are now unconscious—and so we do not appreciate at their real significance the signs little children sometimes give of them. We discount these signs in every way we can, and in fact generally regard them as either amusing or merely annoying. To the infant, however, they are the very reverse of amusing. When a grown-up simply laughs at an outburst of savage or even murderous rage on the part of a child the

impotent resentment the child feels must be very near to tragic despair. Because of our own repressions we seem to need a magnifying glass to apply to the child's emotions before we can truly appreciate what they mean to the child. When a little boy greets his newly-born brother with the angry cry "Go away or I'll kill you," we may be a little shocked, but we never think that that is exactly what we felt towards the Zeppelins that visited London in the War.

Then there is the vexed question of the sexual life of children, about which I shall say very little on this occasion. These instincts in children differ greatly from what we grown-ups recognize as sexuality, and yet in some ways they bear striking resemblances to it. It is a world of queer sensations, of dim and concealed fancies, of odd thrills from surreptitious movements, of secret interest in what to the infant must be very mysterious bodily happenings, of dark and obscure impulses. And all these exciting agitations get closely bound up with the child's relation to its parents. More than that, they are interwoven with the aggressions and angry hatreds of which I spoke a moment ago. For both these reasons they lead to all sorts of fears and terrors, which few children are free of, and which before long give rise to a deep sense of guiltiness. We see, therefore, where the roots of internal conflict grow, and how hard it is for the child to achieve a harmonious attitude in all this perplexity.

You might say in comment on all this that surely I have been exaggerating the importance of these childish conflicts and difficulties. If a half of what I have been saying were true then who would have any chance of growing up into a confident, happy and efficient member of society? Well, my answer would be to repeat the question, "How many do?" If one examines into the private thoughts of any individual, as one does in psycho-analysis, it is very rare to find the confident happiness that is supposed to be common and normal. As a rule what one finds is a varying measure of self-dissatisfaction, of anxious efforts to preserve confidence in awkward situations, of a very precarious hold on any inner sense of happiness—though I freely admit that all this is commonly covered over and concealed by all sorts of masks. I would ask, for example, what proportion of marriages are successful in the true sense, not in the sense of preserving a veneer to the outer world, but in the sense of affording a consistent mutual understanding and felicity? What usually happens in life is that people get on pretty well, as judged by a lowly standard, so long as certain conditions are fulfilled, everyone having his own peculiar conditions in this respect. When these conditions are broken, the feeling of confidence gives way, often badly so.

How many people can face the idea of losing their means of livelihood, still less of losing their loved ones? It is the jars of life that test one's normality. How common are moods of doubt whether all the

struggle of life is worth while. And the people who deep in their hearts have an abiding dread of life are not so rare as you cheery ones might suppose. You will further notice that in all this I am quite leaving out of account the extraordinarily widespread existence of one form or another of nervous trouble: the worries, irritabilities, insomnias, and fears, the victims of drink and drug habits—not to speak of the awful words 'insanity' and 'suicide.' Oh, yes, the power of the unconscious is real enough and great enough.

Let us get away from these gloomy topics and end on a more positive note. I should like to leave you with two definite ideas. Above all is the revolutionary notion that we know only a small part of our own minds, that every minute we are being moved by forces stirring in the depths of our being of which we know absolutely nothing. That alone is an idea that will take a good deal of digesting. Secondly, I would remind you of the idea that this vast region of the unconscious is in a state of perpetual conflict, the primary driving forces seeking to obtain some form of expression through the self, and the latter either opposing them or else imposing all sorts of conditions on them. The two words 'unconscious conflict' summarize most of what psycho-analysis has to teach. Normally the energy of the unconscious, after being transformed—you may have heard the word 'sublimation' in this connexion—flows with relative freedom into the conscious mind and there

directs our interests and activities; it is the great feeding-source of our personality, although we are not aware of its very existence. Abnormally—and by that I mean usually—what happens is that some of the unconscious energy fails to find this satisfactory outlet and is thus forced into indirect channels where it agitates the personality. This latter state of affairs is the main cause of the innumerable imperfections and unsatisfactorinesses of human existence, both in the discontents of the individual and in the infirmities of our national and international life.

V

DREAMS

I AM going to talk to you to-night about dreams, and I should expect that at the very word many of you will promptly switch off. Those people who are interested only in material things are not likely to have much patience for the study of the very opposite. And what could be less material, less tangible, than dreams? So much so that one may well ask whether it is worth the trouble to study them at all. Would it not be better to dismiss them altogether, just as many practically-minded people dismiss all kinds of what they would call spook-hunting?

Here at the start we strike the first point of interest in connexion with dreams. It is, I think, easy to observe that they produce two opposite responses in people. Some people—I might call them the switchers-off—have what they feel is a healthy contempt for dream-life; they never give it a thought and if asked their opinion would declare dreams to be mere nonsense, the disordered product of a tired brain, as obviously meaningless as the wildest ravings of a lunatic. Perhaps this last analogy is worth pursuing. An eminent London physician once said to his colleagues, some fifty years ago, "Find out all about dreams, and you will then understand about insanity." The

colleagues in question scornfully ignored the remark. They doubtless thought it ridiculous to talk about understanding such meaningless things as dreams or the ravings of the insane. Such people are probably in the majority. Others, however, without finding it easy to justify their attitude, experience a half-repelled fascination for dreams. They are at times haunted by the thought of them, their mood can be affected throughout the day by a particularly vivid or emotional one, and they are moved by a vague sense of significance about them. They feel that dreams have some meaning, that they come from somewhere, that they could not be there at all without some reason, possibly even a purpose. With many people of this class their impressions degenerate into pure superstition. They attach quite arbitrary interpretations to various types of dream, they believe that they can foretell the future, and they allow their daily conduct to be guided or influenced by hints they derive from their dreams. You must all know people who will bet or gamble from numbers or other hints from dreams, who will postpone journeys because of a certain dream, and so on. Well, whatever conclusion the study of dreams themselves may lead us to, it is surely a matter of interest that these two types of people exist, those who scorn dreams and regard any interest in them as purely superstitious and those who feel they have some mysterious meaning and perhaps some importance.

One cannot help wondering what is the essential difference between these two types of people, and perhaps also what is it about dreams that they should evoke such opposite responses. I will tell you something more about the two attitudes in question. At the present day I should imagine that most people have the former attitude, the scornful one, and it is noteworthy that this should be particularly true of scientists, including those who profess special knowledge of either the brain or the mind. The other type—certainly the more superstitious members—are apt to belong to the less-educated section of the community. It was not always so. Three hundred years ago the vast majority of the population took the second view, namely, that dreams are significant, and if we go still further back we reach a time when every single person took this view and when, moreover, the more highly educated someone was the greater was the attention he paid to dreams. In other words, the position in this matter was once the exact opposite of what now prevails.

What brought about this curious change? There is good reason to connect it with the rise of modern science, with its birth about three centuries ago and its intense development and spread during the past century. Furthermore, what I have just told you about the historical contrast of the two views would be much the same if we had been talking about beliefs in witchcraft, in fairies, in magic, in fortune-telling, and a good many other similar things. Everybody

once believed in these things and long ago the more learned you were the more serious attention did you devote to them, whereas since the advent of modern science to believe in them is a hall-mark of ignorance.

Well, I hear you saying at this point—some with relief, some with disappointment—all this at least settles one question—Have dreams a meaning, and are dreams of any importance? For, surely, if it is true that more exact knowledge goes hand in hand with the growing conviction that dreams are trivial and meaningless, then why need we waste another word on them?

It certainly looks as if we were wasting our time on such a topic when the better educated people are the more do they disdain it as worthless. And yet the matter is not so simple as this. Scientists may, it is true, feel convinced that dreams are trivial and meaningless, but science itself does not pass such a judgement: it is contrary to the very essence of science to declare anything to be either trivial or meaningless. Meaningless it cannot be from the very fact of its existence, and as to its being trivial that depends not only on the point of view, but still more on the knowledge we possess of it. The markings on the wings of mosquitoes were thought to be trivial and uninteresting phenomena, until the linking up of such knowledge with the understanding of malaria showed it to be of literally vital importance to all dwellers in the tropics. Indeed, an interesting possibility opens up here.

It is not unthinkable that the attitude of scientists towards dreams may proceed not from their science but from more human sources. Cocksurenness often proves to be a will-o'-the-wisp, in science as elsewhere, whereas important discoveries are often come upon quite unexpectedly. Therefore let us keep our minds open if we can, and be prepared even for the unexpected. It would not be the first time that science had gone astray in ignoring popular wisdom, and that is specially true of psychology.

In one sense dreams must of course have a meaning, that is, be capable of rational explanation, when we know enough about them: in this sense a shower of rain has a meaning. But the far more interesting question is whether dreams have a meaning in the narrower sense, in the sense that my talk to you has a meaning and most of our thoughts. One occasionally comes across dreams where a meaning is unmistakable. For instance, it has often been observed in Polar expeditions that men undergoing extreme privation are very apt to dream they are enjoying savoury meals at their favourite restaurant. And with children it is not rare to find that on the night after a disappointment they dream they are enjoying the very treat, circus or what not, of which they had been deprived. Freud tells an amusing story of a little boy who had to carry a basket of strawberries as a birthday present to an old grandfather. That night the child was heard to mutter out of a dream "Johnnie eaten all the strawberries!" His dream

had put matters right. In both these cases it is hard to avoid inferring a connexion between the day and the night experiences and to say, "Oh yes, the poor things were making up in their imagination what was denied them in reality." If we come to this simple conclusion, however, we are venturing a big step. For, just think, we are attributing to the mind during sleep an intelligent action with a definite aim, that of using the imagination for the purpose of allaying the pangs of disappointment, and we are attributing to dreams a definite function, that of soothing the pains encountered in real life. We are assuming that disturbing thoughts persist from the waking state into sleep, and that then during sleep some part of the mind remains active enough to deal with these thoughts by imagining the very opposite of them. According to this, the dream would be whispering to the sleeping child, like a fairy godmother, "Sleep on and be happy. It is not true that you have been told you can't go to the circus. No, no, you are actually there and just see how gay and delightful it all is."

But softly, softly. Surely we are building very far-reaching and almost fantastic conclusions on a very slender basis. After all, dreams of this kind are very exceptional. Just think of the far commoner mass of nonsense we dream, full of impossible, contradictory or meaningless ideas of which we simply cannot make head or tail. Or think of nights broken by worrying and disturbing dreams, of the dreams

of horror, disgust or terror which most people have experienced one time or another. What was our fairy godmother doing then? They felt more like being hag-ridden, as it used to be called. In the face of them our pretty little theory dissolves like mist. And yet, in spite of all this, psycho-analysis holds that this pretty little theory is true—not only for the rare dreams by which I illustrated it, but for every single dream that is ever dreamt. This must sound like midsummer madness. Surely it is the turn of psycho-analysts to be asked if their theories have any intelligible meaning, not whether dreams have. But perhaps there is method in their madness, so I suggest that you restrain your impatience and listen to what they have to say.

To begin with, I think we should all agree that dreamless sleep is the most refreshing, the most healthy, so that dreams must have something to do with whatever is disturbing one's sleep. Sleep can of course be disturbed by bodily causes, such as pain or noise, or by thoughts, worrying anxieties persisting from the day before. A very good sleeper can sleep through a good deal of disturbance without dreaming. A poor sleeper is apt to be half aware of the trouble even during his sleep. But why is it that sometimes he is aware of the trouble itself and at other times he dreams instead? That shows that the dream is not the same thing as the disturbing trouble itself; more likely it is some sort of reaction to it. And in simple cases it is easy to see that it

wards off the disturbance. I remember in the war that my patients often failed to waken to the alarming barrage of our guns during an air raid and would instead dream that they were listening to some harmless noise, the roaring of a train or what not, so that they could go on sleeping. I have had several examples of tired sleepers who slept through the buzzing of an alarm clock and dreamt they were already in their office or lecture-room, a convenient arrangement whereby they spared themselves the effort of getting up and the trouble of transporting themselves to work. Behind this imaginary picture of being hard at work in the office there evidently lies the wish that they were there already without having the bother to get up and actually go there. It is a recourse to fancy in which the wish is fulfilled.

The modern theory of dreams, as of the unconscious altogether, we owe to Professor Freud of Vienna. I have already implied the essence of it in what I have just been saying. His theory is that dreams have a purpose or function: namely, to ward off anything that would disturb sleep. In fact he calls the dream '*the guardian of sleep*.' It is true that we often have disturbing dreams, but strictly speaking what is disturbing us is not the dream itself, but thoughts and anxieties which the sleeping mind is trying to ward off by converting them into a harmless and pleasant dream. Often it is not able to do this, and sometimes we even wake up with

unpleasant or terrifying emotions. This means that the disturbing thoughts have got the upper hand; the mind has not been able to turn them into a pleasant dream. There is no doubt that when we are awake we have far more power of keeping under control any unpleasant thoughts, and we can often even banish them out of sight, i.e. keep them in the unconscious by 'repression.' So we wake up.

Freud holds that the way in which the part of the sleeping mind that builds up dreams keeps disturbing thoughts at bay is a very simple one. It merely wishes that things were otherwise, and then imagines that this wish is being fulfilled. He says that *every dream represents a wish-fulfilment and nothing else*. This is certainly the simplest way to deal with an unpleasant thought; the only pity is that it doesn't often work in real life. When one is harassed by unemployment one simply indulges in the fancy that one has a cushy and well-paid job, one full of promising prospects. A young man has no luck in love. But in his imagination he woos a charming damsel who is happy to respond. How delightful! There is an old saying: "If wishes were horses, beggars would ride," and that is the pith of the whole matter.

You will say, I am sure, "Yes, that is all very well, I can see the idea with a certain type of dream: for instance, when an Arctic explorer troubled by hunger dreams he is at the Ritz, or when a disappointed child dreams he is at the circus, and also perhaps in the warding-off dreams when disturbing

noises are turned into something else. But this applies to only a very small number of dreams. What about the mass of dreams where all sorts of unpleasant things are happening and where we may even wake up with discomfort or terror? Nothing could be more absurd than to apply this theory to such dreams, for both halves of it break down: our sleep is not being preserved, nor do the dreams bear any resemblance to any sort of wish-fulfilment."

In saying this, however, you have passed by one little word in the description I gave of Freud's theory. He does not say that dreams are evidently wish-fulfilments. If this were evident I should not waste your time by talking to you about it. What he says is that they *represent* wish-fulfilments, and by that he implies that dreams—apart from the few simple ones I mentioned earlier—are not what they seem. They are disguises for other thoughts. A young woman dreamt that a giraffe was dancing in a circle; a cat came in the way, and he kicked it over. What utter nonsense! Why take notice of such an idiotic dream? I asked her, however, what thoughts the idea of a giraffe brought to her mind. She answered: "It has a long neck. That reminds me of someone very nice who has a long neck, but he is married and to such a cattish woman." You observe the 'but.' Were it not for that the gentleman would be free to offer the dreamer a circle, that is, a ring. The dream begins to have sense behind its nonsense, and it is sense that the young woman was

rather loath to admit to herself, especially as it was connected with still further thoughts which she was decidedly unwilling to face. Let me give you another example. A lady dreamt she was driving in a trap with a certain man. The horse was a bay. They came to a level-crossing and saw a warning notice with only the word 'near' on it. A train came dashing along. The man tried to cross, but the horse refused and turned round just in time, thus saving them. The man recalled to her a cousin who had once proposed to her when they were out driving. The word 'near' made her think of a 'near relative.' She thought it wrong to marry a near relative, on account of the risk to the children, and for this reason had refused her cousin's offer, although she was very fond of him. Her own name before marriage was Bay. The bay horse in the dream, who saves them from disaster, evidently stands for the dreamer herself, and the dream becomes full of meaning as soon as one recognizes that little disguise.

So one thought, or image, may be the disguise for another one that is buried or kept out of the mind, as one says. Why should this simple notion arouse so much opposition? After all, we often use language for this purpose when we talk to other people; it happens every day in Parliament and at international conferences—to cite the most harmless of occasions. In fact, a cynic once said that the purpose of language was to conceal thought. We

do this not only intentionally, but also unintentionally. Anyone psychologically minded often finds it easy to read between the lines of a letter, to infer from what is written thoughts that are not written but which are concealed behind the actual words. But what we find surprising is the idea that at times, e.g. during sleep, our own minds conjure up thoughts and images to disguise from ourselves other thoughts which are pushing forward but which some part of the mind does not want to know about. It certainly does sound uncanny, and yet there is really nothing easier to prove about dreams than that they are made up of thoughts that have been altered or disguised.

A flood of questions presses forward at this point. What are the different ways in which the underlying thoughts get altered? Are there any regular rules about the alterations? What can be the reason for this complicated process, and what can the thoughts be that have to be so thoroughly disguised? Above all, why ever should one disguise such a pleasant idea as the imaginary fulfilment of a wish? I will try to give you, however briefly, some answer to these questions, but first you will like to know a little more about how one investigates dreams to get to these underlying thoughts. That is not very difficult and you can try it yourselves. You divide a dream up into its various parts and apply to each part separately Freud's method of free association about which I told you something in my first talk.

That is to say, you concentrate on each part of the dream in its turn without doing any thinking and notice what ideas or memories come into your mind. Perhaps it is better to write them down. You then put your total results together and review them in the light of what you know about yourself.

There are well-defined ways in which the underlying thoughts get disguised. One is by simply fusing two ideas together into one. This sometimes happens with words or even names. Thus the name 'Eastgate' in a dream proved to be connected with two incidents, one of which took place at Eastbourne, the other at Margate, and the concealed thought referred to something that the two incidents had in common. At other times the main accent or emotion is shifted from the idea to which it really belongs on to a subordinate one, so that, for instance, the dreamer is terrified, not at the real source of danger, but at some unimportant detail. There are many other mechanisms, as they are called: for instance, the use of symbolism, or stock disguises, which makes the task of the interpreter easier when he knows how to recognize a symbol.

The underlying thoughts radiate from a central core which is always repressed; that is to say, it belongs to the unconscious region of the mind. This is, of course, not necessarily true of the disturbing thought that originally gave rise to the dream. But the great peculiarity of dream construction which Freud discovered—and it was a very

remarkable discovery—is that the mind deals with thoughts that tend to disturb sleep by a very round-about method. It first forges associations to bring these thoughts into connection with a repressed unconscious wish dating from childhood, it then imagines this wish as being fulfilled, and it then transforms the wish-fulfilment by the disguises of which I have just been speaking. This is an extraordinary procedure, but it has the fortunate advantage for the psychologist of affording him access into the deepest layers of the mind and the most intimate wishes of the personality. Nothing can give so profound an insight into the foundation of a person's character as to know what he dreams about. As Freud says, dream interpretation is the royal road to the unconscious. No wonder that this most intimate part of the mind has to be concealed and disguised, even during sleep.

Dreams are thus infantile wish-fulfilments. They are made up from the wishes that have unconsciously guided and influenced us most from our earliest childhood throughout life. They do not foretell the future, as used to be believed; though often enough they come true because our deepest wishes are always trying to come true and they sometimes succeed. Then the old saying comes true, that coming events cast their shadows before. •

But dreams teach us much more than things about the individual dreamer. For the deep wishes from which they spring are a most characteristic endow-

ment of the whole human race, and contain broad hints about the early history and development of the human mind. Myths, legends, superstitions, and other products of the imagination are constructed on the same pattern and are easy to read when one is familiar with the interpretation of dreams.

You will find, if you try to study dreams seriously, that they open up unexpectedly vast problems. But the gist of what I have been urging can be put in a very short sentence. What Freud discovered about dreams was that they mean just the same as our day dreams. Whether we dream by day or by night all we are really doing is wishing. How simple it all seems! But to discover what this wishing really is in its most deeply-buried sources—that is a very different matter. And the study of dreams led Freud to build up a whole new psychology, one that is revolutionizing all we previously believed about ourselves. So we may well say of dreams that “the stone the builders rejected, the same is become the head of the corner.”

II
HOW THE MIND WORKS
IN THE CHILD

*PROBLEMS IN THE DEVELOPMENT
OF THE CHILD*

By

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VI

WHAT THE CHILD STARTS WITH

It is a matter of interest to consider whether many persons can remember their early childhood well enough to give a reliable picture of a child's mind and a child's interests. If one looks back, it seems as if time had passed a hand over the record, wiping out this memory and blurring that in order that we should find it easier to occupy ourselves with things as they are *now* rather than with those which have apparently passed away.

If one had asked a psychologist eighty years ago the simple question, 'How does the mind work?' he would have told one about the mind of the adult, about the working of the senses of hearing and seeing, and about the way in which people think. He would certainly have had little to say about the child mind—about the way in which the mind has grown from its vague beginnings in the babe to its complicated activities in the man. The child's mind and its behaviour is a constant source of bewilderment to everyone who has anything to do with the young. We have all been children ourselves, but strangely enough we are rarely able to understand what children mean by their play and by their behaviour to grown-ups.

We are beginning to understand much more about

the bodily needs of the child. Child Welfare centres have sprung up all over the world to help mothers to understand the health and physical well-being of their children. The feeding of children has come in for much attention, and ill-temper is often traced to ill-health caused by wrong feeding. The mother's milk may be defective, the times of feeding and sleeping may be irregular or perhaps the baby's clothes are too tight and constrict his breathing or his digestion. Physical well-being and the satisfaction of simple bodily needs do indeed make for mental happiness.

As we go farther back in the life of the child the more intimately do we find body and mind tied together. Amongst those few recollections of our childhood, there are many that are bound up with physical discomforts and food fads. There are many people who say that a day's work is spoilt if breakfast contains a certain kind of food which they have loathed since childhood. I know of a man who actually developed nervous disorder whenever he saw the skin on the surface of boiled milk. He discovered, when he looked backwards laboriously, that a certain nurse whom he disliked for other reasons had insisted that he should eat the skin on the milk because she said it was nourishing and good for him.

On the purely mental side, some people are disagreeable for hours if they meet someone who reminds them of a person they disliked in childhood—the same is true if they visit some place or see

some scene which vaguely conjures up a disagreeable memory of something which they have lived through and tried to forget. I knew a little girl who was afraid to go to sleep at night because the shadow cast by the end of a curtain pole formed the profile of a man with a dark beard who had frightened her in infancy. How many of us realize the emotions and anxieties in the life of a child—how a thwarted desire may alter his feelings towards the person who has frustrated him and twisted his outlook?

It is a long time since many of us were children. Thousands of new interests and new obligations have entered into our lives to cover up as with a mist those early years. A whole tangle of emotions have helped to cover up the original feelings we had as babes and children. But surely there must be some method of getting a knowledge and an understanding of those early years. It is not surprising that mankind has always wondered about the origin of children and about their likes and dislikes. Uncivilized folk have many weird ideas about the origin of children. Some have the very vaguest ideas of parenthood and regard children as ancestral ghosts visiting the earth again. Some believe that the child is nearer the animals and the birds than we adults are, that they understand the language of the beasts, the whispering of the wind and the crackling of the fire, and that only with the development of language does the child forget all these things.

Of course we do not believe those fairy-tales to-day,

though we still hanker after the strange fairy world of our childhood. But there is something else we are beginning to believe—I am thinking about the uniformity of Nature and our own likeness to all other living things. Scientists have studied the way in which animals digest their food, for example, and have noticed that similar juices digest the food in our own bodies. They have studied the senses of animals and have found that they are not different from our own—the brains and nervous systems of rats and monkeys are broadly designed on the same lines as our own. And experiments on the simple methods of learning in different animals—such as dogs and monkeys and little children—show that the same foundation is there. In spite of the large gap in intelligence which separates the babe from a bright chimpanzee, there are common actions which bring them very close together. If a chimpanzee is placed in an enclosure with a couple of sticks that can fit into one another and a bunch of fruit hanging beyond his reach, he will ultimately put the sticks together and reach for the fruit. A child of three will go about the same business in the same way.

Very young babies show the same interest in the outside world displayed by dogs and cats. Like the animal which is fascinated by something that moves, the babe too will be interested in moving things rather than in stationary things. And again, take the crawling and climbing movements of babies just about to walk. These activities have been closely

studied and there are certain movements which can only be regarded as throwbacks to animal behaviour. There are some children who alarm their parents by actually retaining for some time after walking the habit of creeping on all fours. There is no more cause for alarm in such a return to animal behaviour than there is when a child is able to grasp a pencil between his toes in monkey-like fashion. Some time ago I had to see a little boy who was backward in mental development. He was six years old, with the mentality of a child under three. He seized my hand only to bite it; he gnawed the edge of my desk: he busied himself with anything in the room that could be moved and turned away from anything he could not move. He mouthed everything. He was so lively and active that his mother thought he was really bright. Her affection for him seemed to be increased by the fact that he behaved like a little animal. Another boy, George, is eight years old, quite intelligent, very affectionate, but emotionally most uncontrolled. He has a ravenous appetite, but after a hearty meal of food he settles on the floor, rolls up and falls asleep like a dog on a hearthrug.

Do you not think these kinds of behaviour are like those of animals? Is not there a family likeness at least in the behaviour of children and animals? Observe your own child and see how many times a day do you witness gestures and interests which are exactly like those of animals.

The human child, too, like the young animal, has inherited certain powers from its ancestors, and a body which enables it to exercise these powers. These powers or instincts—the power of sucking, or grasping, of crying out and so on—are on the borderline of mental life. They are powers which are also tied up with the expression of the emotions. The glands of the body about which we have learnt so much in recent years are responsible not only for the growth of the body, but for the expression of the emotions, and for the speed and eagerness with which simple instincts are carried out. Children who are born with glands which do not work properly will have peculiarities, not only in emotional expression but in intelligence too. The child with a poor thyroid gland will be misshapen, apathetic, and unintelligent. There are other glands which, if diseased in their structure, will produce extraordinary precocity in the child.

Does this not raise the interesting problem of the inheritance of mental qualities? If bodily peculiarities are inherited, if our instincts and emotions are the product of certain bodily structures, and these in their turn influence behaviour, can we not conclude that the mentality of people owes its form to some inherited peculiarity? We have all heard stories of mental qualities in grandparents that have appeared in grandchildren. We have striking examples of the inheritance of musical ability and mathematical ability. Psychologists have for a long time concerned

themselves with the way in which mental deficiency is inherited and how notorious families have been literally riddled with mental defectives and with criminals, but I must add that on these bad family trees not a few more or less distinguished men and women have also been found.

Whilst the recognition of physical peculiarities is comparatively easy in determining inheritance, the detection of inherited mental qualities is not nearly so simple. Perhaps when parents notice this or that mental quality in the child it is largely an anticipation or a wish.

I have many children under my care whose family histories have been closely investigated—some with insane parents are intelligent and without apparent disorders of conduct. Others with satisfactory family trees are dull or suffer from nervous disorders. In the investigation of problem-children, we always take care to study the mental peculiarities of parents and relations. We also make a careful investigation of the social conditions of the family and environment in which the child is brought up, and it is by no means an easy task to decide whether a child has inherited its peculiarities or whether they are the products of early years of stress and emotional conflicts arising between parents and children, and the children amongst themselves.

What we can say in observing children in relation to their parents and ancestors is that temperamental peculiarities are inherited and that these are the

soil upon which future behaviour is based. Let me consider an example. A little boy aged ten possesses a quiet and reserved disposition. He is slow in the take-up, but on mental tests proves himself to possess a superior intelligence. He is prudent, persistent, but lacks mobility, that is to say, he is somewhat inactive and slow in coming forward. But he is very timorous; he will not sleep alone; he hides his light under a bushel in the class. He needs constant encouragement to bring out his capacities. He is afraid that his mother may not be always there to comfort and protect. Now the father, temperamentally, is very much like the son. He is quiet, reserved and slow, but sure in his intellectual output. He is a steady man who has retained his job for many years, but he has never shown any signs of nervous disorder; nor did he as a child exhibit any of the nervous symptoms that his boy betrays. The family story, however, shows that the boy's life has been insecure, and that this insecurity has been intimately bound up with the mother's precarious health. At any time it was feared she might be taken away. I would conclude from this example that both nature and nurture have created this boy's problem; that the disadvantages of inheritance of a type of temperament have been carried over into life, which has not been kind.

Influences from without are closing in upon the mother when the child is arriving, and when the little one comes, we must merely consider that a

branch of the family tree has started on a new angle, that the stock has assumed a new direction owing to the mixture of parental germs, and that a beginning has not really been made but only a fresh start with a new set of influences.

Mind, as we know it in ourselves, is a very late arrival in the history of living things, but it seems to have done so much in building up human culture, our religious, social, and artistic institutions, that we feel it ought to be carried over with its acquired qualities through inheritance. The babe does not remain like an animal for long, speechless and without dexterity. If it does, then parents feel there is something seriously wrong with the child. If speech and dexterity are such essential parts of our heritage, and no one would say that the child is taught to speak and is made dexterous in the absence of a nervous system which makes these possible, even admitting that these gifts are dependent upon a physical or material organ, the brain, then why not more complex mental activities, such as the gift of mathematics, of music, and drawing? External and internal or inborn influences are together at work in the development of the child. Inheritance and environment cannot be too sharply marked off from one another, nor can physical and mental characteristics be separated. Human personality is a whole, one and indivisible. What we call Mind is the fine and subtle adjustment to changing needs and we see this at work as the child develops. The

coarse and massive activities which we inherit in our instincts are subject to fine adjustments when we meet changes in our surroundings.

I shall now turn from this topic to consider again the simple needs of the new-born child in order to illustrate the first glimmerings of intelligent behaviour and the germs of its future emotional behaviour. The needs of man and animal are at bottom the same. Many creatures when born enter the outer world sufficiently well equipped to carry on in some degree an independent life. The baby crocodile emerging from the egg does not need a mother's tender care, no crocodile tears are shed when a tiny reptile basks in the sun and snaps at the first fly and loses it. I need not stress the commonly observed facts which illustrate the rapidity with which the lower animals embark upon their life of hunting for food and struggling to live. How much more dependent is the human child at birth and during the tender months that follow? The babe gropes awkwardly for the maternal breast, it has but the vaguest sense of direction, and has only a rudimentary idea of its own limbs and of their position in space. Many a little child already walking knocks its head on the corner of a table and is as likely to rub the uninjured part as it is to comfort the part which actually received the blow. It needs the mother's help in feeding, and it actually must be cared for to prevent it from dying under the stress of external conditions, which the young of lower animals are soon able to

face. But yet it is born with simple instincts which help it in the first efforts at self-preservation. It very soon automatically draws the mother's milk, although even that simple act must be coaxed into activity. It possesses one of the most important of all instincts—the instinct of sleep—which brings perfect rest and opportunity for recuperation and growth—an instinct which in the babe comes into operation as soon as hunger is satisfied.

As the babe develops, new features of the instinct of self-preservation make their appearance. Children show striking differences in this rate of development, and mothers look for the appearance of indications of normal development. All children do not put on weight at the same rate. Some are slow in displaying a knowing interest in their surroundings and in recognizing mother or nurse. This power of recognizing familiar persons, of sensing regularities in feeding and sleeping is a very important point in development; it is the first step in education. Little girls notoriously develop in some respects more rapidly than do little boys. I have a case under my care—of twins, a boy and a girl. The little girl has developed intellectually much more rapidly than the boy, and her emotional control was established at an earlier date. This has given rise to a behaviour problem. The little boy, who has been more favoured by his mother, has resented his little sister who has repeatedly stolen a march upon him and has raced him up the school ladder. He responds by retaining

many baby ways in order to win the maternal interest which he fears might pass over to his brighter sister.

The babe does not merely grow in size; it actually changes and becomes a new kind of human being. The suckling has different digestive equipment from the child with teeth, and more important still, different emotions develop or simple emotions are modified in consequence of this physical advance. The clinging and altogether helpless suckling becomes the hungry and aggressive little creature with teeth. The hands that first groped vaguely for the source of warmth and sustenance, now grasp objects and put them in his mouth. The outside world is taken hold of and claimed as additions to the self. Self and the outside world are, to begin with, indistinguishable the one from the other. There is at first a world which is all Me mixed up with simple appetites and discomforts. Then the child vaguely senses that these happenings are not always taking place. Bits of this world come and go. They do not always come when need calls for them. Warmth may be suddenly withdrawn when most enjoyed. The breast is taken away when appetite is not completely satisfied. A cry from within may bring them back. For the first time the child must vaguely realize that there is a something not itself which obstinately opposes it or ignores it, but the cry, a magic gift, brings it back again and it cries again. In this magical world which comes and goes

at one's beck and call, the babe is the monarch of all it surveys, or at least feels itself so. It is surprising how much more frequently the child's cry is a cry of distress and not a cry of satisfaction. Laughter and pleasure expressed vocally are a much later development. It would be interesting for you to consider this fact in the light of your own experience with children. You would learn much about the simple psychology of babies and perhaps something about the origin of laughter.

Interwoven in this vague world of appetite and feeling, the mother plays an essential part. She is the immediate environment of the child—his warmth, his sustenance and his satisfaction. It is she who modifies the simple interests of the child, giving time and place to them. Mother, foster mother, and nurse are therefore the first educative forces because they regulate the coming and passing of satisfactions. They create the first simple pattern of future behaviour which is based upon nutrition and the appetites and feelings with which it is bound up. The mother times the baby's feeding and sleeping; she conditions his pleasures and his pain. When the child begins to appreciate the difference between itself and the outside world, the figure of the mother occupies the most prominent place in the child's mind because she is bound up with his first immediate desires. Physical needs and activities are tied up with her and the first intelligent understanding embodied in words and the handling of things is

largely a measure of her direction. Mothers may not make the intelligence of their babes, but they certainly direct it and give it whatever emotional colouring it eventually possesses. In exploring the mother's body, it receives the first intimation of shape and place and position. In learning the intervals between meal and meal, it gets the first intimation of the passage of time in relation to changing events which it ultimately connects with the outside world. And in all these happenings the growth of its knowledge is coloured by feeling. We are prone to draw too hard and fast a line between intelligence and feeling. To the babe and child there is no such distinction. When a child intelligently grasps an object or manipulates a toy, we witness the passionate interest it takes. When absorbed in beating a rattle or pulling at a piece of string, we are intrigued with its absorption in the object. We enjoy its little rage or pleasure. Its activities, in short, are highly coloured by feelings which are bound up with its instincts.

When a child, for example, is not absorbed in its feeding, it is probably a sickly child, or one who has already reasons for disliking its food. Every effort should be made to free a child from all forms of distraction when essential activities are being carried out. The processes of nature are very urgent ones and must be fulfilled without let or hindrance. They can, and should, be trained from the earliest days, to take place at regular times. But this training

should be carried out without compulsion and with the minimum of fussiness and concern on the part of the parent. All distraction involves the creation of conflicting interests, and conflicting interests arouse disturbing emotions which interfere with the simple, yet essential operations in the life of a child. Any undue concern on the part of the parent creates in the child's mind an over-valuation of certain bodily happenings, or if a bodily happening is held up in any way, associated passing emotions are aroused which are stored up in memory and affect the subsequent behaviour. Mothers who make too much of the act of eating, or make a ritual of the opening of the bowels, for example, are creating disturbances in the emotions and not infrequently laying the foundations of disturbed physical health also. Mothers who feed their children erratically, or at irregular intervals, who handle their babes in washing and so forth in a clumsy manner, are arousing disturbing emotions in the child which handicap its growth. For example, a child who is taught in an unemotional manner to eat in a clean way and at regular intervals, will not be the child with food fads. But if the child is made to take meals in the midst of his play, when he is enjoying the pleasures of spontaneous activity, he will be inclined to have dyspeptic ill health, whenever on some future occasions his spontaneous activities are disturbed or frustrated. We frequently find that the food fad may be switched off on to the person who has been instrumental in

producing it. If a nurse has been responsible for this, all subsequent nurses will be disliked. One adult patient refused to go to a nursing home when it was absolutely necessary for him to do so, because he said he hated nurses fussing about with his food. He, too, in childhood had reason for disliking anything in the shape of a nurse. Thus errors of this kind lead to false associations in the simple but direct mind of the child, which will create faulty attitudes in later life.

All living things are governed by rhythms and harmonies. The beating of the heart, the rate of our breathing, the alternation of sleeping and waking, are obvious examples of life's tendency to regularity. The larger movements of the body are always the alternation between contraction of one group of muscles and relaxation of others. Interruption of this leads to deadlock in movement. The maternal technique resides in the mother's power of aiding nature in these carefully-timed arrangements, and in so ordering the spontaneous life of the child that natural rhythms are not upset. Disturb them and nature revolts, and the child revolts not only mentally, but physically. If the babe has a stomach-ache and refuses to sleep, in the absence of such illnesses which call for medical assistance, the mother is herself to blame. However inadvertently, she has upset the rhythm of the child's life, and has aroused the first expression of resentment and revolt. A great deal of re-education will be necessary to correct

these initial mistakes. The mother is the first influence in producing and encouraging regularities, as the first educator in the life of the child. The father at a later date plays his part in this vital work, as we will see.

It is in these first years of training that mistakes are made, and many future peculiarities of behaviour are due to them. Above all, the emotions which the mother displays in educating the child may be disturbing factors in the child's emotional life also. Emotional stresses created by parents produce emotional peculiarities which colour not only the life of isolated children, but of the whole community, and I believe that many of our social irregularities and social problems are thus created by mothers who do not know how to handle their children, who are to become the future members of the community.

And so we leave the child for the time being with his mother's milk still wet upon his lips. What have we learnt about him? I have pointed out how difficult it is for the average person to look back and reconstruct his own childhood or to understand without study the little ways of children. We have learnt how the child comes into the world with an equipment, a nervous system for bringing him into contact with the world, an instrument for the exercise of those instincts which it inherits from its long line of human and animal forbears, but sufficient only for his immediate needs yet full of latent powers of development and modification or refinement. We

have noticed his likeness to the lower animals, a likeness which brings home as it were another aspect of universal brotherhood, the continuity of all living things. Lastly, we see the child in all his dependency upon his mother, who feeds and shelters him, yet having the power to direct and to modify for good or ill his simple interests. The babe so far is hardly a mind, yet a bundle of forces full of possibilities. But in these early months, things have been happening. Education has begun, emotional shapes have been forming, likes and dislikes have been established. In the next chapter we shall see him entering on the first stage of social life—in the midst of the family.

VII

THE FAMILY CIRCLE

IN the last chapter I dealt with the natural equipment of the babe and young child and its life while closely attached to the mother. I tried to show that during the early months the child is more or less a bundle of instincts and very vaguely shaped emotions, and that these instincts and emotions were connected with self-preservation and the mother, who provides for this instinct. The mother is so essential a part of the child's life in these days that he is still not in a position to separate her entirely from himself. She is the source of good things, pleasant feelings, and brings rest. So we see that the child's first feelings of pleasure and of peace and restfulness are tied up with that bit of the outside world which later on is known as Mother. All disagreeable sensations are removed by her, if she knows her proper task, and all activities are made regular and free from distraction if her ways as mother are good ones. Pleasant emotions and unpleasant emotions, instincts that make for pleasant living, and experiences which seem to thwart it are tied up with the maternal presence. The child's mind is like a clean slate with a few simple sentences written upon it. Upon these simple sentences many of the later reactions of the child and of the adult too are based.

Now all these happenings occur in a mind which as yet has no words with which to express itself. One might almost say that they become ingrained in the child's mind. They are, as it were, designs in the nervous system, or better still, channels or pathways beaten out along which future behaviour will naturally move with greater ease. We can say, then, that by the time the child tears itself from the mother's lap to toddle about the room, to grasp things, to bite them, to build them up and to throw them down, he already has engraved in his mind a person about whom he has certain passionate feelings although they are not clearly defined. How often do little children bring things to the mother for her approval. How soon do they realize the things which give her pleasure, and produce in her demonstrations of love. And also how quickly does the child sense in the mother's face and movements signs of disapproval. Think of the little one, already occupying its private cot, awaking at night to find a lonely room or a mother sleeping in what is to him a distant bed: or the cry that does not bring her to him. You all know how easy it is to get a baby to sleep even in the dark if the crooning voice or caress of the mother are even only gently heard and felt. In seeking to win the maternal interest and even further, greedily to monopolize it, the child will make use of those peevish cries and wild movements which can sometimes be a source of bewilderment if not actually the bane of a mother's life. It is during this period

that the mother, if she is to have future peace and a healthy child, must see that no undue indulgence is allowed in these attempts at all-powerfulness on the part of the child. It is now that the regularizing of behaviour mentioned above can be established, and it is about this time that the child gets its first impressions of an ordered life which come from the outside world. Expressed another way, we could say that the child receives its first impression of rules, and it is the gentleness, the regularity, yet the firmness of these rules which gives to the young human being the first pattern of order and of law. And in proportion as this sense of law or regularity is given to it without display of emotion and without distraction, that is, without interfering with the legitimate needs of the child, it accepts peacefully the sort of conduct which the mother wishes to establish. It is comparatively easy for the mother to impose this conduct upon the child because from her come all the good things. She gives pleasure and nourishment in return, and it is because love and order seem to have the same source that what later becomes moral behaviour is accepted and almost enjoyed.

But there is another person in the home who comes into close proximity with the child also, but not as close as does the mother. The father does not appear on the scene till somewhat later as an object in the outside world, and is not so intimately bound up with the immediate physical needs and feelings of the babe. In many ways, as we all know, his

handling is more often than not comparatively rough. His texture, if one can put it in this way, is coarser; his voice has not the same quality as the mother's. It may even be the loud noise which arouses fear in the child, and of course his presence is felt much more occasionally and therefore the child does not so easily get used to him. He always, as it were, during these early months at least, keeps a distance. He is a part of the child's environment that comes and goes; he is an episode and not an ever present reality. And so when he enters the child's life when the latter has some degree of independence, moves about a room, touches things, breaks things, and so forth, his sheer size, his ways largely so different from the mother's, must create in the child's mind a different sort of impression. In the average household from time immemorial, the master of the house has been identified with the giving of law, the making of regulations, the insisting upon this and the forbidding of that. I am not suggesting that the father should be robbed of these time-honoured privileges, that he should not keep order in his own house, but we have to recognize how the adult standard of orderly life appears to an immature child who is governed largely by primitive emotions and the desire for the spontaneous satisfaction of instincts. The child in consequence tends to identify the father-figure with the forbidden and the unpleasant. This is not the whole story by any means; admiration and love, too, enter into the child's conception of the

father. Particularly to the male child. He is so early informed that he is a little man and that one day he will be tall and big like daddy, that the father becomes a person to admire, to look up to, and whose example he must emulate. The child experiences things largely physically; size, strength, and power are what amaze him, if they do not actually frighten him. And to please this great figure is one of the desires most ardently felt by little children—to please him is to get perhaps some relaxation of his strictness, to obey him will mean that some of that love which a mother gives will also be obtained from him, and so here too, love, and orderliness which later become obedience, are combined.

A child grows emotionally as well as intellectually by absorbing things from the outside world. As far as intelligence is concerned the child gradually applies its inborn capacities to the manipulation or handling of things and to the simple elements of language. But in so far as behaviour results from the shaping of instincts and emotions from very simple events, the conduct of the child will be coloured by the emotions which have been aroused in it by those persons in its little world whom it loves, admires, fears, and obeys. This is so much the case that those persons who influence the child's conduct become part and parcel of the child's emotional, mental equipment. By loving the father and mother, the child takes them over into himself as persons who are lovable. By admiring them, it acquires an ideal

of excellence which it tries not only to find in other persons but to develop in himself. By fearing and obeying, the child takes over a system of conduct which will be worth treasuring, worth holding close to its bosom because it comes from a source which is loved and admired. I have frequently found in talking to little children in the course of my work, and in watching them at play, that they identify themselves very closely with somebody they admire even to imitating movements, a father's limp, for example. One little boy whom I saw only the other day, and whose moral ideas have become almost oppressive to him, and who has a father whom he both loves and admires, gave me a description of the baking of bread (his father is a baker) with a wealth of detail and with a passion in describing it which surprised me. He wants to be a baker but as he added "I don't think father will let me." This boy has a whole bundle of fears, some of them almost hallucinations. He sees hands appearing from behind doors, and is constantly furtively looking round for imaginary persons who are coming after him. You see then that this child of very tender years has already absorbed into himself ideas of conduct, fears about conduct, admirations and ideals of which the father is largely the pattern. The extent to which this process can go is rather nicely illustrated from the dream of an adult patient whose father died when he himself was only eight years old. He dreamt that he saw God in the sky sur-

rounded by clouds of glory, and that the Deity was dressed in the uniform of a sergeant of the Grenadiers, scarlet tunic and busby hat, and he was very frightened. But the figure put out its hands and said "Don't be frightened, Bert." The dreamer's father was a sergeant of the Grenadiers and from a very early age the patient had one consuming desire, to be a Guardsman, and his main disappointment in the War was the substitution of khaki for the scarlet tunic.

Now all these feelings that children have for their parents are during the early years not capable of expression in words, and many of the feelings are in addition unconscious ones. Why are they unconscious ones, and what is the effect upon the behaviour of their remaining unconscious?

The unconscious elements in the child's attitude towards its parents are bound up with feelings, emotions, and instincts that are forbidden. Simple appetites have to be controlled. Bodily processes are timed and even prevented when the child would like to indulge them, and all these prohibitions are naturally bound up with the parents who control them. Resentments against parents are stored up because they cannot be openly expressed, and they take a multitude of disguised forms and unexpected outlets. One little boy aged three would always be found beating the animals and dolls in the playroom—particularly the animals. He seemed to derive great pleasure in destroying them. One day while I was

talking to his mother in my room, he dashed in from the playroom, stick in hand, struck me and said in an angry voice "What are you doing to my mummy?" The mother added that that was a common occurrence in the home, the child's blows being always directed against the father, and in fact towards anyone who for a time seemed to the child to be monopolizing the mother's interest.

It has been frequently suggested, and there are certain very well developed theories based upon the deep exploring of the human mind, that there is a tendency—a universal tendency in fact—for the male child to develop an early and passionate devotion for the mother, and for the female child to develop an equally strong attachment to the father. This view goes on to state that this love of the opposite parent tends to produce an equally strong dislike of the parent of the same sex as the child. The little boy I spoke of just now certainly did show this tendency; that is to say, he was deeply attached and dependent upon his mother and regarded his father as something in the nature of an enemy, an intruder. Cases of this kind are not uncommon and I could give examples of little girls, and women too, who have shown in a variety of ways, direct and indirect, a deep devotion to their fathers and a corresponding dislike of their mothers. How early in the life of a child these cross-currents of affection and dislike show themselves is a matter of some difference of opinion and in fact there are many people who are

openly hostile to the view that this takes place in the very early years of life. It has been said that the hostility that such critics show is due to the fact that there is a deep-rooted distaste of any such emotional disposition. One must immediately agree that there is in the minds of all civilized people, and certainly of savages too, a deep-seated distaste. It is stated that this distaste has led to the burying or suppression in the depths of the mind of such feelings in all normal people, and that persons who suffer from nervous and mental disorders are those who are struggling to control the emotions and passions bound up with this state of liking and disliking which has its origin during childhood years. I think we must all agree that the child's emotions are unstable, ill-formed, and as yet uninfluenced by those social usages which make us adults the civilized beings we are. How far the sentiment which adults call love has already attached itself to male and female persons in the early years of childhood is a matter which only discloses itself to those who are intimately associated with the psychological development of children, and with the study of adult minds in their emotional struggles and conflicts. The subject of love in relation to home life enters into the child mind more intimately than we care to admit. Let us glance back for a moment at the numerous fairy tales with which children have been amused in all countries and at all times. And in how many stories do we not find the tale of the princess and the prince,

of beauty and the beast, of love made fanciful and sometimes terrifying, by beasts becoming princes, and strange monsters and serpents vexing the lives of innocent princesses; and of little boys who kill giants, and of all those childish satisfactions which are only realized "in faery lands forlorn." These fairy tales handed down to us in folklore are but the child mind of the race which lies in the mind of every one of us apparently submerged but stimulated when we hear these stories and acted out by us in our dreams and even in our lives. Parents are the kings and queens of fairy tales, the gods and goddesses, and the little children are the Tom Thumbs, and the struggling youngsters of poor woodcutters, and imprisoned princes and princesses. All the gamut of the emotions is played over in the life of the child in its contact with its parents, in fairy stories and folklore we hear how deeply these have entered the mind. The little girl sees herself as a future mother when she plays with her dolls. She imitates the washing of napkins, the bathing of baby, and the managing of the household. She beats her doll and puts it to sleep as mother does to her. The little boy, in the improvised wigwam, under the bed or table, plays mothers and fathers with his little sisters or friends and repeats not only the comedy of the home but the tragi-comedy also. The competition for love is played out, the desire for mastery is acted over, and in their little games the children expand their personalities, at first in fancy and then in play by becoming

fathers or mothers themselves. I have seen little children at play with manikins and with one another, when the whole of a family situation which was obscure to me became painfully or humorously clear.

I think it would be safe to simplify the emotional life of the child by considering the two groups of emotions which form the foundation of the child's behaviour and the disturbances of which beset its progress in the early years of life. There are two opposing groups; those which spring from love and the feeling of dependency which it produces, and the states of fear, anger, and hatred which any interference in the love interest produces. The babe, as we noted, was very reluctant to give up its dependency upon its mother and to forgo the satisfactions and the happiness which this dependency produces. In the normal child, the happy possessor of a mother who does not overwhelm it with affection and solicitude, who does not allow the child to become master not only of its own cravings but of her too; a mother in short who encourages and cultivates the child's interest in the external world; such a mother will liberate the child for normal contacts with the outside world of things and people. But where this freedom is not achieved, emotional development will be held up. There will be a failure on the part of the child to attach his emotions of devotion and love to other persons. Such a child, mother-fixed, will as it grows up lack courage in facing life's obstacles,

those normal obstacles upon which it sharpens its wits, making for emotional versatility. If such a mother-fixed child is led to fear its own emotions, or dreads that others in its immediate circle might rob it of its love for its mother and of her love for him, then fear develops and anger which is born of frustration. Anger, if persisted in, becomes a disposition, and this disposition gives rise to hatred, an emotion which the parents do everything in their power to check. The child, as we have said, is very conscious of approval and disapproval, and in its effort to please and satisfy those whom it wishes to love or to diminish the fear of those who look after its conduct, will thrust such feelings out of mind. So you see quite an interesting tangle of conflicting emotions is embroidered in the mind of the child, and at all costs a path must be cut along which life can flow. Sometimes the path will turn backwards and baby habits will be persisted in which masquerade as sickness or as fears based upon things which bear only a distant resemblance to the original fear itself. Not infrequently disturbances of behaviour are produced. The child revolts in fits of temper, in rejection of the love of those very people it wishes to bring closer to itself. The child may even wander from home only vaguely aware that it is in search of affection which its conflicting emotions do not allow it to express in the home circle. And lastly, it may become locked up in itself, in states of apathetic despair, or it may build fancies in which unsatisfied longings

are gratified, love obtained, or mastery is achieved. In this way, the child opens the windows of imagination, and in fancy and day dreaming obtains satisfaction of its desires and wishes. It is therefore very useful to allow a child to play, not only because in this free activity it learns to build up a little world of its own and acquire dexterity, but because it also works off in play-fancy many of its feelings. If we can obtain an understanding of these feelings as dramatized in play, we will be able to see not only where the child has gone wrong in its interpretation of others, but we too can learn how we have gone wrong in our attitude towards the child.

Do you realize how much parents are working off their own feelings in their attitude towards their children? The disappointed mother may vent her dissatisfaction in such an excess of love that she is responsible for tying her child to her and arresting its development. And furthermore, lest we forget it out of shame, the vaguely remembered treatment that we have received in our childhood makes us ventilate our resentment by disguised acts of jealousy, which we should be loth to admit. Would it be rash to suggest, therefore, that a child senses parental resentment and jealousy and develops a feeling of being despised and rejected, which might call up emotions of revenge and thus perhaps lay the foundations of delinquency?

The family, in the majority of cases, does not long remain the eternal triangle of mother, father, and

child. If it does, then the special problem of the only child is produced. It has been said that to be an only child is a disease in itself. When a first-born arrives, it is generally the case that the parents lavish an extraordinary amount of attention upon the newcomer. His uniqueness is accentuated. Every gesture is amazing, and its love is a very precious thing. This attitude may produce priggishness and self-sufficiency. The child is uncriticized, and that feeling of omnipotence which is natural to the babe continues to influence the child in all its later behaviour. Such opposite emotions as anger and love are exaggerated, and being so often a lonely child, it is left to ruminate on its own thoughts and feelings. Where families are large, however, something in the nature of a young republic emerges. Parental love tends to be distributed. There is much more give and take, and opportunities for the creation of social attitudes are afforded in the early years, when the mind is plastic and receptive. Of course, here and there, there may be individual members of largish families who arrived on the scene when perhaps for economic reasons or for personal reasons they have not been wanted. Such a child will sense that it is different from the others, and that it is really not receiving the love and interest which it quickly notices or feels that the others are receiving. Anomalies of character may develop in this way. Sometimes the character may be strengthened by the introduction of an incentive. 'I shall excel and prove my worth' such a child

may say. 'I shall be devoted and win back the love that is my due.'

The youngest child of a large family has also his problems and his peculiarities. He comes after a long period, when perhaps the parents are getting a little weary of bringing up children. On the other hand he may be a pleasant curiosity to the parents, a means of reviving those early married days, when the first-born was a wonder and a delight. He may be, however, a Benjamin to his parents, but a Joseph to his brethren. He has reaped the benefit of the other children, the knowledge and experience, and he may appear clever as the result of this. He is isolated amongst his brothers and sisters, and may develop a world of his own, a loneliness yet an uppishness at one and the same time. Youngest children are frequently neurotic as well as frequently bright.

Let us look back at the picture of the family, to consider the responsibilities that parents have to face in bringing up their children, and the difficulties that children have to face in adjusting themselves to those who are the foundation stones of their future lives. Let us ask ourselves when facing this problem, Are parents a handicap to the growth of children? As you know, there has been in recent years a growing body of opinion that family life is on its trial. We have learnt so much about human psychology and of the importance of the emotions to our mental growth that we may be led to believe that parents are not sufficiently equipped with self-knowledge or

with the knowledge of the child mind to allow for the free play of the child's natural inclinations. I think that this attitude is due to an accentuation of the disadvantages which blinds us to the importance of the parents in character building. Perhaps I am guilty myself of bringing home to you the dangers of parental mismanagement. But I am too conscious of those excellent traits of character which even emotional conflicts produce. The desire to shine in the eyes of beloved parents and the will to live up to ideals may, when the love is not all-consuming and the ideal is not too tyrannical, produce, and actually does produce, some of the most striking personalities in history and attractive qualities in average people who make up the community.

I have by no means exhausted the subject of the development of the child mind, but I am leaving to my colleague such topics as the growth of habit and the importance of the play activities of the child. I will now rapidly survey the field we have covered. It shows us how both parents play an enormous part in the emotional development of children. The child is born with an emotional equipment which exercises itself with, and is shaped by, parental influences and by the child's attitude towards those influences. Two opposing sets of feeling have been considered because they play such an enormous part in that final mental structure which is the adult mind. Likes and dislikes start with the first breath of life. Emotions are shifted and shunted by every human contact, and the path

of calm development is established through influences which are born of a series of oppositions between love, dependency, fear, anger, jealousy, all of which colour that essential process, the will to live as fully as possible. For social life, an essential quality of mind is a moral attitude, and I think we have seen how the child's struggle is an attempt to create a moral self, which will live in harmony with its deep-seated emotions and instinctive desires. It is the harmony that is created by careful but unemotional nurture that produces happy children and stable adults.

VIII

CHILDISH FEARS

IN this chapter I am going to deal with the fears of children and the way in which fear is produced and the effect it has upon a child's behaviour. I have had occasion to say something about this subject but so far I have considered the matter only in passing, when I dealt with the child's instincts and emotions, and with those particular fears which were brought out in family life. Now I am going to try to start at the beginning. The child, almost at birth, responds to happenings in the outside world which affect its senses. A bright light will make the child move its eyes, and a shadow suddenly passing across its eyes will not produce blinking until it is sixty-five days old, whereas the sucking at the breast is brought about after very little coaxing. Loud noises and the removal of support will produce certain protective movements and cries, stiffening of the muscles as if to ward off a danger. This response or behaviour of the child in answer to the offending event or happening is called fear. This may seem to you almost unrecognizable as fear but we have to consider what fear means. Fear is the sum total of movements, cries, changes of colour such as sudden pallor, dilating of the pupils and rapid action of the heart, associated with sudden danger. All these

bodily happenings are in reality the child's effort to escape from something which is a danger to its life. If it were able to walk or crawl, it would actually attempt to put as great a distance as possible between itself and what is about to injure it. Fear then, in short, is the bodily accompaniment or even substitute for running away, or what is called the instinct of flight. The simple responses which I have just mentioned have been carefully studied in laboratory-nurseries, as they are called, or places where a psychologist can study every gesture and cry of the child at various periods in its first few weeks of life; in other words, these responses are studied before the random influences of the outside world, which have not been carefully registered, have been allowed to play upon the babe's body and very rudimentary mind. In such laboratory-nurseries it has been found that a child that has not yet been allowed to suffer the influences of the outside world which unobserved children have to experience at the hands of careful as well as careless nurses, does not show any signs of fear whatsoever if it is brought in touch with darkness, birds, cats, fishes, snakes, and even burning paper.

Now I said that it has been discovered that there are two happenings which produce fear in the new-born babe irrespective of outside influences, and those are loud noises and removal of support. If, now, darkness or a woolly animal or a flaming fire are associated with one of other of these primary

happenings, or stimuli as they are called, then fear will be produced on all subsequent occasions if this association is repeated a few times. This production of fear, therefore, by association is called a conditional emotional response, or, more simply, the emotion of fear is now produced under certain conditions and those conditions need not necessarily have produced fear in the first instance. In other words, fear of a dog is the fear of its bark before it is fear of its bite. I think it can be said that the loud sound and the fear of falling are painful to the child. Somehow or another, the instinct of self-preservation is aroused in the child and some effort must be made to protect itself. Broadly speaking, then, pain of any kind and any happening which interferes with the self-preserving machinery of the child will produce fear and, in addition, those bodily events which are associated with it. Hunger is a pain; limitation of movements is painful. It seems, therefore, that many of the simple but essential happenings in the life of young babies are prone to produce fear. For example, the pain of hunger, which should bring the mother to the child, will be associated with a sense of something lacking, a feeling of isolation, of deprivation. In this way we account for the first expression of fear that children feel when they are left alone. It is not the darkness but the isolation and feeling of loneliness and want that come so frequently with darkness. And again, it is not the animal that produces fear

in the child but the imitative noises which parents and nurses are prone to make when babies are given woolly animals to play with. In such things as creep and crawl or suddenly dart, the sudden movements which are produced when they touch us are not in themselves fear movements; they are protective movements against a sudden injury. Fear accompanies these happenings because it is brought up by association. The minds of animals and babes, simple though they may be, are built up by this method of association or the connecting up of two happenings which do not necessarily belong to one another but which have been repeatedly happening together. It is desirable, of course, that this should be so, but it is equally desirable that the associations that are produced should help life and not hinder it. In the first education of a child, it is necessary for parents and nurses to bring about what they regard as desirable associations and to check those that are undesirable. For example, it is a good thing that a burnt child should fear the fire, that certain foods should be associated in the child's mind with danger, and that simple forms of social behaviour should be produced by making them pleasant. Suppose a child is brought up by a nurse who cannot refrain from slamming doors and talking in a loud voice; if her method of feeding the child is not altogether pleasant the nurse may easily herself become an object of fear, and feeding time a time of discomfort. To the child both nurse and feeding

are disagreeable experiences when they occur together. You know how common it is for a child to accept its food from the mother, yet refuse it from the nurse, and sometimes vice versa. A babe will cling to one person and shrivel up with fear if put into the arms of another. You remember I mentioned the case of a little girl who was afraid of the shadow cast by the end of a curtain pole. It was discovered that it brought up the face of a bearded man who had been responsible originally for fear in the child. So you see how the foundations of fear are laid. Most fears, you see, are rather complicated and children often feel afraid of things only because they are associated with something such as noise. We must always try to find out what is the *real* cause of the child's fear. But before proceeding, one must say that once children have a fear, they may become apprehensive, that is, they may look for fear, if the event which produced the original fear occurs often enough. For example, I once knew a child made physically ill because her parents quarrelled at night both frequently and noisily. The child was cured when the parents' differences were composed. But there are fears of a far more complicated character which develop in the child when it has entered the life of the family. In this world, the world which is eventually merged into the larger world outside the home and into the community, fear is largely associated with persons and with the feelings the child develops about them.

The last chapter dealt with the emotions that are aroused in the child by contact with its parents. I spoke of the emotions associated with the love that the child feels for its parents and the dependency which goes with this love. I tried to explain the way in which the child resented any feelings of rejection, and that it rebelled against those persons who frustrated its love in any way. Now when anyone, particularly a child, feels frustrated or rejected, there is a natural feeling of anger that such a thing should have happened, and anger produces dislike and even hatred. Very early in the child's moral education, an attitude of dislike is not fostered and is certainly not condoned, so that the child develops simple rules about feelings and emotions and actions with regard to persons that it now knows are good or bad, as the case may be. It knows that one set of feelings receive the approval of the parents and another their disapproval, but sometimes the feelings of dislike, of anger, and hatred, are very strong, and in order to accept the parental rules for the sake of love and peace, it will tend to hide even from itself the very feelings which call for strong expression. Punishment of a variety of kinds enter the child's life whenever its actions are forbidden ones, and the fear of punishment, that is, the pain it produces, and the fear of the person who produces it, will be shifted on to the acts and feelings which the child feels so strongly but which it knows are wrong. In this way the

child learns to fear some of its own emotions; it begins actually, as we say, to be afraid of itself. How often do people say they are afraid of themselves; nervous people in particular are afraid that what they call their impulses will get the better of them, that they might blurt out something in the wrong place. We say that we would bite off our tongues rather than say this or that, and so perhaps the fear of speaking at all may develop.

Let us go back for a moment to consider more fully the very important subject of the child's fear of its own feelings and impulses. The important point to realize is that the development of fear of one's own emotions, thoughts, and impulses, is a product of the attitude that the child takes up towards its own conduct with regard to those who govern its behaviour. I tried to bring home to you last time the way in which admiration and love produce in the child a readiness to accept the rules about forbidden and permitted things laid down by the parents. I tried to show you that as the boy loves and admires his father, he takes him into himself as an ideal of manhood that he wishes to live up to and eventually to become. It is obvious then that the child now has within its young mind a lot of emotions that it wants to express, and another set of emotions and attitudes which tend to control these private emotions which may be jealousy, anger, and hatred. These good emotions and attitudes which are now in the child's mind keep guard, as

it were, like a little policeman within the mind to direct and even to hold up the emotional traffic which would break through; little bandits who would destroy law and order, and who must be curbed at all costs. The little bandit self, the little savage, the untamed emotions of jealousy and hatred, cower before the moral policeman, now the dawning conscience of the child. Now you see how the little boy or little girl feels happy when he or she has been good, that is to say, that emotions have been curbed, and the policeman has been satisfied. But sometimes these angry feelings in the depths of the mind are so strong that they begin to worry the child, who becomes frightened of them. How can the child deal with them? How can he have peace? He dare not say, except on angry occasions, 'I am jealous,' 'I am angry,' or 'I am hateful.' No, he feels just what we adults feel when we are ashamed of our own feelings. We say we hate ourselves, or despise ourselves. There is another method which the mind adopts to overcome this strain between conscience and impulse which is forbidden. We become afraid and our fear takes shape, sometimes many shapes. In the child who is carefully studied, and the adult too, fears which originate in the mind as a result of conflicting emotions frequently find their expression in something in the outside world which has perhaps in the past been the occasion of some particular fear—the dark, animals, isolation, open spaces, high places, bridges, and

water. Let me give you some examples to illustrate this association of inward fear with some outward object which in itself is quite harmless. A little girl aged seven was afraid that buildings would fall upon her if she walked in the street. It was discovered, when her long story was told, that she had done something very wrong which she knew would bring down the wrath of her mother if the mother knew of it. This act of wrong-doing took place in a narrow street which was being rebuilt. Some days after this deed had been committed, she heard that some coping stones had fallen from the house in that narrow street. From that day onwards she refused to go out into the street unless she was accompanied by someone. She added that she would never go through that street if she were accompanied by her mother. Do you not think that this child's conscience was weighing heavily upon her? That it was the fear of discovery of wrong-doing which was shifted upon a fear of those places which vaguely reminded her of what she had done? When this little girl told me what she had done, and when I got her to tell her mother what happened, in my presence, a weight was lifted from her mind and she recovered from her fear.

Let me give another example: Harry is ten years old and is in constant fear of being alone. He is a bright boy with the most scrupulous manners. He hates to be dirty, he refused to touch anything in the playroom which might soil his hands. He always

wants to do the good thing. His fear began one morning at seven o'clock when he went down to the kitchen in a dutiful way to prepare his mother and father a cup of tea. As he opened the door, his father's strap, which had been hanging loopwise over the door, fell across his shoulders. He was frozen with terror and dashed out of the room. Since then he cannot stay anywhere alone; he sees hands coming from behind doors; he sees vague shadows run across the room to terrify him, and he is constantly thinking that people are looking at him. I know from the family story that the boy's father is very much master of the house. He disciplines, and has a great deal to say for himself, but he has a great affection for his children and is very attached to this particular boy, who admires him in return. He is the boy who described so eloquently the bakehouse in my last lecture. I think it is obvious that this boy is conscience-ridden. To be good and clean and obedient is the consuming aim of his life. To be like father and to satisfy his father is everything to him. He fears to fall below that standard. I have a shrewd idea that he would like to fall below that standard; he would like to let himself go a little, but the father's strap descends upon his neck, and hands appear from behind doors, and shadows pursue him, and people look at him.

Reviewing for a moment the fears that children develop, they can be seen to fall under two heads in accordance with the degree of development of

the child. The first group of fears, simple and direct in character, concerns the instinct of self-preservation. These will include all the everyday fears of children which are easily noticed. Fears of harm to the self will include such terrors as the dark, of animals, of being kidnapped, and of being injured by burglars, but as you must have noticed from the account I gave you of those fears which develop in connexion with the fear of the disapproval of the parents and the fear of moral lapses, the terrors I have just mentioned can have two aspects or sides to them. Take darkness, for example; it is perfectly true that the child may regard darkness as isolation; it is the condition in which one is left alone unprotected and un comforted; it is the place where you see nothing and where any of the dangers of life might come from nowhere. This is what is called the fear of the unknown, which many uncivilized peoples have, and which they guard against by all sorts of strange practices, charms, and magic words. Perhaps when the little boy whistles to himself as he goes up the dark staircase, or counts up to ten, or stamps upon the floor to get the comfort of his own friendly footsteps, he too, like the savage, is charming away the evil that lurks in the dark. But the darkness, because of this terror it produces, is turned into a person; it becomes the place or person which is going to punish you, and perhaps the burglars and vague things that it imagines in the dark are forms that its torturing conscience takes. In order to

prevent the development of the first or simple form of fear, it is necessary to train children to sleep alone from the earliest years and to accept darkness as a state of affairs which is associated with the coming of peaceful sleep. If this training is carried out by the parent or nurse in the kindest way and in the earliest years before bogey associations have been introduced into the child's life, there is no need to teach a child to be brave because there will be no fear which it must learn to control. To be brave is a moral attitude; it means that the child must have developed a control which it has borrowed from someone it admires, or that it has accepted a standard of fearlessness of which the father may be a shining example. Training children to sleep is a very important matter because sleep is a time of recovery from the activities of the day, and the child should be put to bed, not suddenly with its mind full of the after fancies of play, but after a period of restfulness when it is having its last simple meal without interruption so that it can slip almost imperceptibly into a mood or state of mind and body which accepts sleep as the next step in the daily round.

The second group of fears which, as I have suggested, borrow their form from the first group, are undoubtedly tied up with the simple guilt feelings which develop in the child in contact with those who control its conduct. The examples I have given can be multiplied indefinitely, but they should bring home the method whereby guilt is created and the way in which fears grow up almost as

punishments which the child makes out of its own sense of goodness controlling what it has learnt to believe is the badness of itself.

Placid parents will produce fearless children: in the first place, because they themselves are stable-minded with emotions well organized and therefore they are examples to their children, whose powers of imitation and suggestion are very strongly developed. Secondly, placid parents will not produce in the child tormenting feelings of goodness. This tormenting feeling of goodness becomes a conscience which demands too much, and because the child's imagination is so much more vivid than is that of the adult, because things seen and heard are so easily made food for the mind, they become embroidered into the texture of a child's fears, producing monsters of terror which belong to the world of fairy tale and savage life. I told you how fairy tales are picturesque forms of the child's way of expressing its longings and doubts with regard to the grown-ups that enter its life, but in addition fairy tales also include most of the child's fears; for example, there are the dragons and the giants, and what is still more strange, the changing of beasts into human beings. Many a child in its own private language has some animal to represent its father, and in the adult language of poetry these metaphors are used. This naturally will make you question the value of fairy tales to children. Many mothers have told me that they have tried to cure their children of fears by keeping them away from fairy

tales. It is true that fairy tales will feed a child's imagination, but they will not make a child's imagination. The child, by its very nature, is a maker of fairy tales, in the same way as plants cannot help producing flowers. What, however, will remove from the child's fancy the fearful and the terrifying will be the careful nurture in early years and the development of self-control by mild measures which will prevent the manufacture of a conscience which can become a bogey in itself.

In brief, we find that the fears of children are largely created by experience through errors in training. They are firstly the fears which are self-protective, signals of danger to prepare for flight from injury, and there are secondly the fears which are not in the nature of the child but which are by its first contacts with those human beings who are responsible for its moral development which asks that conduct should move along orderly channels which lead on to orderly social life. If we make this shaping of conduct an oppression by curbing and muzzling what are, after all, the natural and innocent motives of children, we must expect disturbances in the form of rebellion, bad temper, and fear. The latter—Fear—is produced when the child is afraid of itself. Such a state of affairs merely cuts the personality in two, a good half and an evil half—but it is only in harmonious development that the good and the seemingly evil are combined and transformed into a new thing—the well-balanced person.

**PROBLEMS IN THE TREATMENT
OF THE CHILD**

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IX

INSTINCT AND HABIT

MUCH has been written on the subject of the instincts, and yet there is little agreement as to their nature and even their number, though all believe that both humans and animals are capable of carrying out certain very complicated procedures, necessary to life and survival, without instruction or example.

The sucking of an infant, the running away from danger, the desire for marriage, and the tendency to protect the young are all instinctive, and are clearly observable, but there are other less definite tendencies such as the egotism of the toddler, the group spirit of the ten-year-old, and the philosophical attitude of the adolescent, which may rightly be included amongst the instincts; and it is with this broad conception in view that I shall deal with them.

Habit is also a term which it is hard to define. We talk of bad and good habits and of 'getting into the habit' of behaving in a certain way. Thinkers have spent much time discussing the exact meaning of the word. For our purpose we may consider a habit as a series of acts which are repeated from time to time, often quite automatically, as a response to a certain situation. We make a habit of rising at a certain time each morning. As soon as the clock

indicates the particular hour, we get up and proceed with our dressing. As the day goes on, our routine is composed of innumerable habits. We are unconscious of the less complicated of these, and would even deny their existence if they were pointed out to us. How few of us are aware of those little habits which we call mannerisms, often the cause of amusement or maybe of irritation to our friends or relations. Even complicated habits, such as dressing, may go on with only the slightest supervision from our conscious mind, so long as the routine is not interfered with, but the lost collar stud or the broken shoelace will suddenly bring us back to reality with a jerk. Habits can have their origin in instinctive behaviour, but many habitual actions are the result of learning and training.

Now let us stop a moment to consider why we need to think so much about our minds and those of our children and how they work. It is, after all, healthy to inquire how things work, and in asking how minds work we are merely going a stage further than the child who takes his engine to pieces, and are but little behind the mathematician who seeks a formula for the orbit of a star. The 'How?' and the 'Why?' of the child may be very fatiguing to the parent and the destruction of the engine irritating, but they are manifestations of a desire for knowledge, which is one of the fundamentals of human advance. Knowledge about the minds of our children makes them, to some of us at least, of much

greater interest, just as an understanding of our motor-car may increase the pleasure of driving it.

In thinking of the working of the mind, it is essential that we do not concentrate on the abnormal only. Study of our children's minds should increase our interest in them, and enable us more fully to understand them—so that we view lesser behaviour difficulties calmly and without worry. Let us keep firmly in our minds the knowledge that nature works towards normality, but in many cases by a process of trial and error, so that when we see the errors (and they appear constantly in nature), we should remember that in the vast majority of cases she corrects them herself, and also sees to it that they do not occur again. This principle of trial and error plays a very great part, too, in the development and persistence of instincts, and the formation of habits. The indication of error is dissatisfaction or some unpleasant association, and therefore the particular act tends to be given up, and some other method will probably be tried in future.

Instinctive behaviour arises from tendencies which actually exist in the mind of the child at birth. It occurs spontaneously and without any influence from outside. The hungry baby searches for food, and if unsatisfied says so in the only way he knows. The instinct of the baby is met, however, by the instinct of the mother, who holds him so that the source of nourishment is easily reached. If all goes well then a normal feeding habit will be formed;

if not, feeding difficulties may arise, unless some substitute can be evolved to give the baby satisfaction. Then an alternative food habit is developed. Feeding by sucking is one of the earliest instinctive reactions to appear, but it is rapidly followed by others, such as the raising of the head when the baby is lying on his face, to avoid possible suffocation, the turning over on the back, crawling, walking, and the rest.

For the completely normal evolution of what we may call the child's instinctive life, it is necessary that he should be cared for by persons who supply him with the normal emotional environment in which to develop. By this I do not mean that a complete household, consisting of a mother and a father and brothers and sisters, is necessary. Often this is not possible, yet that does not mean that normal development cannot take place. What I want you to realize is that, just as in the case of the sucking situation we have already mentioned, the infant and the parent each plays an instinctive part, so later on the instincts of parent and child react on each other, and when there is a normal relation between parent and child normal growth is the more easy.

I said just now that instincts appear, develop, and disappear, in the normal course of events. Take, for instance, the instinct to crawl. At an age which is very variable, almost every child discovers that he can crawl, and after a few days' practice he manages

to get about quite well in this way. He gets lots of fun out of it, and his world accordingly becomes much bigger. A little later, however, as his nervous system becomes still more mature, he discovers that a more practical way of getting about is to walk like the grown-ups, and he quickly gives up crawling. It is interesting and important to note, however, that the mechanism of crawling is not really lost, and that the adult may revert to its use under certain circumstances, such as strong emotion. If we suddenly find ourselves in some perilous situation, on a high ledge, or on a narrow bridge without hand railings, the tendency is to drop on our hands and knees and crawl—we feel safer that way. Another factor, however, enters into this question of regression to primitive instinctive modes of behaviour. If the *instinctive behaviour, when originally formed, was the cause of much satisfaction and pleasure, then the chances of its being reverted to later are much greater.* If a child is deprived of present satisfaction, then he will naturally tend to try adopting some old line of behaviour from which he got pleasure in the past. This is, in many instances, a completely unconscious procedure, and is not carried out by design. A child who has learned to connect marked satisfaction with the act of sucking may, during situations of stress or depression, take to thumb-sucking, even though long after weaning age; while another, who succeeded in getting and much enjoyed a lot of attention during a difficult weaning,

may, at a later date, develop food fads. This regression is very commonly seen in the behaviour of children who are faced with some emotional difficulty, and from this one can easily imagine how important it is to recognize the natural rhythm of instinctive development, and to allow it to flow freely and without undue emphasis at any stage. During the very early days, the instinctive drives are such as to ensure that nourishment is taken, and that the parents' attention is attracted when need arises. There are also many minor reactions such as gripping solid objects for greater security, and the tendency to raise the head when lying on the face, as has already been mentioned. During this period the parents are caused by their own instincts to behave in a particular way, the mother toward the child and the father to the mother and also to the child, though to a somewhat lesser extent than the mother. When the infant begins to crawl, and has got past the weaning stage, he is much more independent, though he naturally still relies on the parents, but in a somewhat different degree. Then the parents become more equally to be relied on by the child for his physical care, although, naturally, the mother is still the more important and tends to be more protective. Here we have a situation which does sometimes give rise to difficulty—since, especially in the case of boys, the father is often a little alarmed at what he sees as maternal over-protection. He need not, however,

take it too seriously—solicitous maternal care at this stage seldom does much harm, unless, of course, it is grossly overdone.

As independence develops, so the child himself begins to feel that he is more and more of a person, and he becomes increasingly egotistical. Further, he usually attempts to increase his personal value by displaying his power over others and acquiring property. He often acquires his property in unorthodox manners, and tries to dominate not only his contemporaries, but his parents as well. Another method of making himself self-important, which probably we have all come across, is the recital of fantastic tales of his own achievements. None of these activities need cause any anxiety—they are natural. We must remember, however, that the best antidote for them is to allow the child the satisfaction of achievement. If he is given affection, playmates, and outlets for his activities, all will go forward quite naturally and the phase will pass. This stage will occupy the period between about two years and five, but naturally an evolution will be taking place all the while.

Interests will be constantly changing, and he will show signs of the development of social instincts in preparation for his joining in social activities. Small children like friends of similar age to themselves, but do not show much interest in co-operating with large groups. They will play at make-believe in twos and threes, but are not much interested in

sharing things, and not at all in combining into groups working for a common end, as in team activities. These come later, and are well developed about the age of seven. This is why the younger groups of Scouts are organized at that age. About seven we usually find a well-developed group spirit, with an instinctive desire to work for the common good and to fill some position in relation to contemporaries. This is a most constructive instinct, and the success or failure of the individual depends very greatly on the balance between his childish conceit and his self-protective tendencies, which together lie behind his drive for success, and his ability to gain that success while keeping in view the welfare of his social group, and the rights of others. This drive for self-advancement is not always a bad thing, and to some extent is essential for success, but, as can easily be seen, at the same time the balance must be struck between self-protection and self-gain. This balance is all the more difficult to maintain later on when the interests of wife and family may be added to the interests of self.

Though differences exist, fortunately, between children, they are on the whole very much alike, and we know that they pass through various stages of development in instincts, in behaviour, and, if I may use the word, in character. We know that from time to time they display variations from the normal course, and that all comes out well in the end, so long as we do not exaggerate and fix these

temporary deviations by drawing attention to them. After all, when an infant is learning to walk, and stumbles, we do not blame him or make a fuss over his supposed injury, we lend a helping hand and give a word of encouragement—and, above all, we do not prevent him from trying to walk again. We must realize that instincts exist, that they grow and disappear in accordance with the natural development of the child, and it is for us to lend a helping hand or a word of advice, and beyond all things to allow free play for each type of instinctive behaviour, as and when it develops. As instinctive behaviour passes through its changes, so the habits which are proper to each phase will come and go, but, as I said before, the word 'habit' covers a very wide range of behaviour reactions. Habits are responses, requiring a minimum of mental exertion, which we employ in situations which are familiar to us. They are almost automatic, and may appear quite unconsciously.

Habits may be excellent servants or bad masters. The man who can leave to habit matters of daily routine relieves his mind of much necessity for thought, and so saves his mental energy for occasions when new situations, requiring judgment, have to be met. The orderly mind, which works in a routine way, is usually expert in developing habits. A bad habit, i.e. a habitual reaction of an undesirable type, on the other hand, may be just as easily developed. It is, however, a fallacy to believe that

bad habits are more easily acquired than good ones. This is by no means always the case. As I have already pointed out, a habitual action tends to be repeated when suitable occasions arise, so long as the result gives satisfaction, and in fostering habits in a child, careful routine is necessary. The habitual response should be encouraged only when the identical situation exists, and care must be taken that the final result is pleasurable. In getting rid of bad habits, similarly, we must arrange that, as far as possible, the conditions favouring the habitual response do not occur, and that, if they do occur and the habit appears, the result should not be pleasurable or should be made definitely unpleasant. It is extremely important in any attempts to form new habits that punishment should not follow failure, since, under these circumstances, the whole situation is given such a tone of unpleasantness that training becomes all the more difficult. Praise and reward for success are much more likely to produce good results than blame and punishment for failure. In the case of bad habits, by taking away some much-prized privilege or by arranging some unpleasant results, you can make the carrying out of the habit unpleasant and so help to make it disappear.

The question of punishment is, however, a very difficult one, and has so many aspects that it is impossible to generalize on it. With young children, by far the best method of getting rid of bad habits is the substitution for them of activities from which

the child derives greater pleasure. In most instances an infant develops a bad habit purely by chance. His mind and hands are unoccupied, and he stumbles upon some occupation which turns out to be enjoyable. Naturally he repeats the experiment and a habit is formed. That Satan finds mischief for idle hands is universally true, and the provision of legitimate activity for the hands will abolish their idleness, and in time also eliminate the mischief. Time, however, is important, and it cannot be expected that a habit that has become fixed will disappear at once. It is always harmful to associate an idea of wickedness with undesirable habits, for the same reason. The child is unconscious of his fault, and does not feel responsible for it. He also is unaware of the evil of his act. To be blamed for something which is practically beyond his control, and which he feels is innocent, is contrary to his sense of justice. Children are essentially just and logical, and such a situation may raise serious complications in his relations with the disciplining adult. Certain aspects of habit formation cannot be forced on the child, because there are factors within his own body upon which some habits depend. It is useless, for instance, to draw up a rigid scheme of feeding, without reference to his appetite, his size, or his exercise and sleeping periods. Certain children, as a result of special bodily needs, require different diet, and are not properly satisfied by food which has proved quite satisfactory to others. In the case of

older children, who have developed an appreciation of what is done and what is not done, the matter assumes a different aspect, but I am considering here, more especially, the younger child. When dealing with those of tender years, it is invariably best to leave out all questions of moral values, and to use simple and direct methods of implanting desirable forms of behaviour, and eliminating others.

In conclusion, and this is so important that I shall repeat it, we must study and understand our children, keeping always in mind that such study ought only to make our relations with them more interesting and satisfying. Our knowledge will enable us to observe calmly these apparent peculiarities which develop from time to time in all healthy children ; and to view them merely as natural errors in the course of adjustment and growth, instead of allowing our imagination to exaggerate their significance.

X

THE CHILD AT PLAY

WE are very much inclined to consider play as something useless, which has no end in view. I have heard parents tell their children not to waste time playing, but play is by no means always a waste of time, though in excess of course it may be. I think probably, in considering the play of children, it will simplify matters if we divide up the types of play and consider them separately. First of all, there is the play from which the child learns facts concerning the things round about him. The older child learns about machinery, how engines work, levers, pulleys and wheels, railways. The second type of play is that in which a number of children co-operate. They play together in groups, fighting or struggling, or playing some organized game. The third type of play leads on from the last. That is a type where some kind of make-believe takes place. This is easiest, of course, with groups of children.

It is interesting to watch animals at play—kittens or puppies, but there is even more interest in watching children because children bring a lot of make-believe into their play, and if we listen carefully to a child's running commentary we can often get lots of clues about his thoughts. A parent listening to a child muttering to a doll or a pet

animal will often learn a good deal about himself, and particularly the child's opinion of him, if he cares to do a very little thinking. It is quite common, too, to hear an infant attributing her own faults and difficulties to a doll or pet. One small child showed me her doll the other day, saying proudly, "Dolly does not cry when her hair is washed now," with marked emphasis on the 'now.' It was quite clear that hair-washing had meant trouble, but that things were now improving in that direction. The mother at once told me that this was so. Children's ideas are very thinly disguised and easily interpreted.

Psychologists tell us that play is an instinct—that is, one of those tendencies like feeding and sleeping which are born in us, and those of us who are normal simply cannot help playing. Even in this age of strain we must play sometimes. When we talk of adults we do not only use the word 'play,' we talk of pastimes or recreations. I personally do not like the word 'pastime' very much, because it suggests doing something merely to pass time. That is not really play. The word 'recreation' conveys a much more healthy idea. Re-creation suggests the rebuilding of the individual, almost making a new man of him through some relaxing and amusing occupation which is not work. It suggests driving away tiredness and boredom and making us fresh again to start off on our business. In the case of children the whole thing is different. Play is the child's work, and is necessary for the child's develop-

ment. It is practice for life, and the harder he works at his play, the better he will fit into life later on.

Let us think now about just what makes a child put so much energy into his play. All instincts are associated with the production of energy. Fear fills us with energy and our flight is made faster; anger makes our actions more violent, and the urge to play makes the child romp, or dance about, or get rid of the energy produced by the instinct in some such way. The child who is not given a chance to set this energy free becomes irritable and restless. Sometimes this energy can be used in mental activity, and a certain amount of mental play is good. And again a child who, for instance, is ill in bed and cannot romp, can do a lot by keeping his mind employed, but in health there should be a balance between what we might call muscular and mental play—the play of the body and of the mind. Very young children play almost entirely by means of their muscles, but as they grow older, more and more mental play seems to be needed, and many grown-ups stop indulging in muscular play altogether. School should, and often does, supply the needed mental play for children, because lessons are made so interesting nowadays they cannot really be called work.

Looked at in one way, then, play is the necessary outlet for energy which rises from the play instinct. Now let us think a little about the kinds of play which I spoke of at the beginning, and consider

what they mean. The very young child plays by handling simple objects that happen to be within his reach. He will grip a spoon and beat on the floor with it, or at a later age, throw it, or he will knock two blocks together or do some simple thing of that kind, and all the time he is learning a lot. He is not merely learning to use his muscles or to 'co-ordinate' his movements, as psychologists call it—that is, to make his muscles all work together harmoniously—but he is learning a good deal about the objects he is handling: their hardness, their weight, their temperature, whether they break easily or not. Consequently he begins to know about the world he lives in.

As his movements become surer, and his brain capable of more complicated thinking, then he begins to use things with some plan in view, such as tools to build something; this is a big step forward. With the exception of the highest apes, no animal actually uses tools, though, of course, many animals build. He begins by building bricks one upon another. He may use a stick to pull things towards him. He uses things to throw, and the more he learns the more complicated are the things he likes to do. The baby, of course, is satisfied with his bricks and bits of paper, but the older boy must have his constructional set, and the girl a doll that she can dress and undress. Children are lucky nowadays in the great variety of play material which can be got, but really it cuts both ways, because the present-day

tendency is to give children toys which they cannot understand or manage, and that is one reason why young children pull a toy to bits instead of playing with it; their interest in how the thing works is greater than their interest in making it go.

The faculty for imitative play—for making play out of say a locomotive engine—develops later than the 'why and wherefore' enquiring tendency. Then again the desire to know how it works is strongly developed in all children, and so the engine is pulled apart rather than made to run. Children loathe toys that they cannot understand. This play with ordinary things gives the child very valuable training in the use of his fingers and also teaches him about ordinary every-day objects, but, of course, the way the child handles and uses these things varies with the age and also to some extent with what he has been taught. One child will be imitative in play, another will make-believe a great deal, while a third may be very matter-of-fact and try to do real things.

Now we come to the second kind of play. As a child becomes older and begins to mix with other children and becomes socially-minded, so his play with them becomes more of a group activity, and this group play is extremely valuable as a method of teaching him how he must mix with other members of society as he becomes older. Group play may consist simply of a number of children inventing and playing some game together, or perhaps an

organized team game. The experience does the child good, teaching him how he must behave in order to be accepted in society. Children are very quick to remark on any unacceptable forms of behaviour and they soon correct bad social habits in one of their group.

Play, then, with material and toys, and also with playmates, may be looked upon as a necessary activity of children, and I do not think there is the least doubt that it is essential to every child's development; but there is another side of play which is most important. This is the last of the three I mentioned in opening. While playing many children allow their fancies to run riot and they make-believe with anything they may happen to be playing at the moment. Sometimes this is done in groups. A whole family may have a phantasy play which they will carry on. Each member of the family has an imaginary name and character, and when the children meet they carry on the phantasy story from the point it was left last time. One family well known to me personally used, when young, to get a lot of fun out of this kind of play. They are now writers of considerable merit. This family phantasy play is extremely interesting and is a normal form of amusement. It never does any harm. The lonely phantasy play of a child, however, may or may not be a good thing. Some imaginative children use play as a relief for their feelings. They compensate, as it were, in this play for the deprivations of their

real life. If they are lonely children for some reason or another, and unable to have companions, they may invent imaginary friends and have a social life with them. This is a common state of affairs where for some reason or another companions are not available, but if children have companions, but do not mix with them, preferring to retire into a life of fancy, then things are different and the reason must be looked for. A child who adopts a too retiring attitude will in later life avoid his responsibilities and shrink from facing reality.

One very important side to all play is the sense of achievement it can bring. The child building a castle or competing in a game may be deeply affected by his success or failure—not necessarily at the moment only but in his general attitude to life. This is one reason why play, of whatever kind it may be, ought to be suited to the child's capabilities—and, in the case of games of skill, he should be encouraged to practise so that when he competes he can put up a good show against his companions. In this, however, as in all things, we must strike a balance between playing a game in a slovenly and careless way and making a fetish of it.

To sum up what we have just been saying, then, play is useful and necessary. It is really the child's method of practising to live and the energy which he puts into his play is that naturally produced by the instinctive desire to play. Play teaches the child about the world he lives in and about the people

with whom he lives and with whom he is going to mix later on. We must keep in mind that the child develops and that at each stage of his existence he will use play material of a differing kind, at first simple but becoming more complicated as he grows up. His group play changes in the same way. When a baby he likes to play by himself, when an infant in small groups, and when older with teams, so that if he is to develop normally we must make sure that he has suitable playmates and opportunities to meet them as well as toys chosen to fit his age and powers.

If parents keep these simple points in mind, and give a little thought to their children's play, they will find their trouble amply repaid. Their children will develop more fully and will be more contented and happy, and many trivial but worrying behaviour difficulties will disappear.

III
HOW THE MIND WORKS
IN SOCIETY

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XI

THE PSYCHOLOGY OF THE SEXES

HITHERTO we have confined ourselves to the psychology of the individual—to the mind of the adult and the mind of the child, each studied in isolation. Human beings, however, live together in groups; and the social influences that surround them considerably affect the working of their minds. Unfortunately, social psychology is a much newer branch than individual psychology; and, though its problems are of first importance, our knowledge is here less detailed or assured.

The ordinary man talks glibly about the mental characteristics of various human groups—about the differences between the two sexes, between the various social classes, between foreign nations and ourselves. Has the scientist taken up these questions? And, if so, what conclusions has he reached?

Let us start by putting each sex under the microscope, and inquiring whether the mind works identically in woman and in man.

Almost the whole animal kingdom, and a large part of the world of plants, is divided into two halves—male and female. What purpose can be served by such a cleavage? Primarily the distinction has to do with procreation. Were each of us born from one parent alone, then (so it has been argued) heredity

would make us all exactly like our progenitors. There would be no diversity; and hence no chance for change or progress. But when each successive birth is produced by the mingling of two germ-plasms, the upshot is a third and novel creature unlike either of those who begot him. In this way, nature is always experimenting; and the struggle for existence kills off the ill-adapted, while the fittest alone survive and hand down to posterity their improved endowment.

The essential sex-differences, therefore, are really the differences in the reproductive organs or glands. Now we know that these glands affect both bodily growth and emotion or temperament. Hence the primary differences in the glands bring with them certain secondary differences in body and in mind. The primary sex-differences need not concern us further. The secondary sex-differences, however, we may subdivide into the physical and mental. Physically the marks of sex are sufficiently obvious. Among ourselves, for example, the males are usually taller, heavier, bonier, and more muscular: they have bass voices and hairy chins. Woman, on the other hand—so Schopenhauer, at any rate, informs us—"far from being a model of physical grace, appears, when set by the side of man, a narrow-chested, large-breasted, short-legged, broad-hipped, fat-thighed, knock-kneed anomaly." Schopenhauer perhaps has overdrawn the picture. But we shall all agree that from puberty onwards, though appro-

priately moulded for child-bearing and child-rearing, the bodily structure of the weaker sex forms a substantial handicap for many kinds of work—for fighting, trekking, or hunting.

Her mental peculiarities are more obscure. At first sight, the two sexes, as we meet them in the civilized world, appear widely separated in their general outlook. Dressed according to principles that are peculiarly her own, tinted, scented, elaborately waved, woman achieves by artifice a sex distinction more extreme than that of any other vertebrate. Her motives seem more alien still. To man, indeed, her mind has always been something of a mystery and an enigma. Many profess to have hit upon the key: but their explanations are usually deduced from some sweeping theory of their own, based more on guesswork than on fact.

Of all such explanations the simplest is that which ascribes the mental divergence entirely to social influences. It has been formulated most clearly by John Stuart Mill in his book on *The Subjection of Women*—a work once hailed as the testament of the suffragette movement. While men, it is argued, go forth to battle or to business, women stay at home to keep house and tend the children. Hence women come to form a clique apart, while a kind of freemasonry springs up among the men. As a result of the special occupations of each group, specialized habits are acquired. If the civilization of the future led to the mingling of the two sexes

on equal terms, gave them the same dress, the same trades, the same education, then the mental disparity between women and men would become practically extinct. On this view the inborn differences are skin-deep only; the rest is due to training and tradition.

“ ’Tis but a difference in name,
And man and woman are the same;
So, sir, a woman’s constitution,
The Sphinx’s riddle, finds at last solution.”

A second theory admits the premise, but denies the inference. It claims that, since these factors have been shaping the two sexes for generation after generation, the acquired habits must at last have become ingrained and by now are surely hereditary. This view found favour with Darwin; and was worked out in detail by the Italian criminologist Lombroso. There is, however, no evidence to show that acquired characteristics are ever inherited in this way, at any rate on any appreciable scale; and further, even were they inherited, we should have to ask why the mothers hand on their feminine characteristics exclusively to the daughters, and the fathers their masculine characteristics exclusively to the sons, seeing that sons and daughters are alike the offspring of both sexes.

A third explanation, on which Darwin himself laid the greater stress, is that of sexual selection. In savage times (so it might be imagined) the most powerful and pugnacious cave-man captured the

female, and the most coy and charming cave-woman secured the attention of the male. If, in the course of hereditary transmission, the sex-characteristics kept sorting out in accordance with Mendelian laws, then we could understand how strength and pugnacity remained masculine traits, while charm and subtlety distinguished the female. In fact, one writer attributes the inferior intelligence of woman to the fact that the blue-stocking seldom marries.

A fourth theory, associated chiefly with the name of Herbert Spencer, supposes that both sexes inherit much the same constitution, but that at puberty the change in the female reproductive system brings about an early arrest in development. Thus Spencer's woman is a kind of undeveloped or rudimentary man, and remains more of a child and something of a savage.

The last theory, put forward most clearly by Professors Geddes and Thomson, is far more radical. It contends that from the very start the chemistry of the male and female body exhibits a fundamental contrast. The male germ cell is small and active; the female germ cell is large and inert. In chemical language, the former is katabolic—expending energy; the latter anabolic—storing it up. And this physiological difference in the germ-cells is supposed to be reflected in a similar contrast affecting bodily form and temperament. Man is active, woman passive; man is inventive, woman receptive; man is rational, woman emotional; man is interested in himself,

woman is interested in the species and its young. Thus, in the words of Tennyson, "woman is not undeveloped man, but diverse." As in body, so in mind, neither sex is inferior: each is the equal and the opposite of the other.

Until recently, the views of the scientific thinker, like the views of the man in the street, were based mainly upon theoretical deductions, supplemented perhaps by philosophical or biological conjectures. Modern psychology prefers to check such theories by definite experiment. Nowadays, by the aid of standardized tests, we can measure mental differences with accuracy and ease. Thousands of boys and girls, hundreds of men and women, have been tested; and the measurements have been carefully analysed by exact statistical means.

Let us take the lowest mental levels first of all, and begin with simple movement. As regards sheer muscular strength, the difference is unquestionable. In the earliest researches, carried out by Sir Francis Galton about fifty years ago, it was found that the average man was about twice as strong as the average woman. It is significant, however, that, since girls have taken to a more athletic, outdoor life, the inequality has appreciably diminished. In speed of movement the contrast is not so great. And in muscular skill—a higher and more complex function—it is smaller, and varies for various tasks. The popular view here favours the woman; but it is undoubtedly far too sweeping. Since women are

the seamstresses, the embroiderers, the lace-makers, the stenographers and typists of the world, it is supposed that they must be born with some special aptitude for quick deft movements of the fingers. Certainly, disturbances of finer muscular control are rarer among women and girls: stuttering, stammering, squinting, and left-handedness are far commoner among boys and men. But in the laboratory boys and men prove to be superior in most tests of manipulation that are not dependent on practice or training.

Let us turn from movement to sensation, and start once again from the simpler levels. In touch women are nearly twice as sensitive as men. Touch is almost the only capacity in which children prove to be sharper than adults, and savages superior to civilized man. Here, therefore, is one striking instance in which the female resembles both the savage and the child. In muscle sense—the sense of movement, position, and weight (a sense often confused with touch)—men are undoubtedly more acute.

As regards pain, there is some variety of opinion. Dentists, surgeons, and hospital nurses are almost unanimous in declaring that women endure pain more patiently than men. But this doubtless springs from a difference in emotional response, or perhaps from habituation, rather than from a fundamental difference in sheer sensitivity. In laboratory tests, women are usually more sensitive to pain, just as

they are to touch. Cold is also borne better by women. Here, however, the explanation is physical rather than psychological: women need less clothing simply because they possess a thicker garment of natural fat.

Smell and taste are more highly developed sensations; and in these the divergences are smaller. Women, indeed, are poor connoisseurs of wine, and in occupations like tea-tasting, sorting perfumes, and even the highest grades of cookery, they are rarely employed; but here fashion or opportunity may be the dominant factor. In the laboratory it appears that women are quicker to recognize the presence of odours and tastes, while men are sharper in discriminating their qualities.

In the highest senses of all—those of hearing and sight—the divergence is smaller still. At discriminating sounds and colours, women are superior; but at discriminating shape or form the men surpass the women. More women need spectacles, though—like the lady in Henry James' pathetic story—they often decline to disfigure their faces. Sheer blindness is mainly a masculine affliction; but that comes simply from greater exposure to accident or disease. Colour-blindness is almost a monopoly of the male: about one man in thirty is partly colour-blind, but barely one woman in a thousand. Its mode of inheritance is instructive. If a colour-blind man marries a woman with normal vision, his daughters will not be colour-blind; but if they in

turn marry men with normal vision, then colour-blindness may reappear in their sons. This is strongly suggestive of Mendelian laws of sex-linked heredity; and indicates a possible explanation of the way in which sex qualities may be transmitted to one sex and not to the other.

But let us leave sensation and pass to the higher planes of memory and imagination. In nearly all forms of memory-test women excel. Where sheer mechanical retentiveness is sufficient, they make, on the average, far better learners than men. As regards imagery, women, like children, are usually vivid visualizers. Among men auditory types and motor types seem commoner; men, as a rule, tend to think more frequently in terms of inner speech than in terms of mental pictures. In creative imagination, however, and particularly in invention, man seems undoubtedly more fertile.

Here perhaps is the explanation of a fact so commonly noted. Women are more assimilative; men are more original. For routine work, where patience, application, and a ready recollection are chiefly required, women seem to be almost universally preferred in business. On the other hand, in discovery and research, men have far more triumphs to their credit. Even in women's own sphere nearly all the newer domestic appliances—the sewing machine, the weaving loom, the labour-saving tools for the kitchen and the home—have been invented not by women but by men.

Finally, let us turn to the highest processes of all—those of intelligence and reasoning. Here the male view is unhesitating. It is expressed by the dentist in *You Never can Tell*. "Intellect," he says to the girl who stands up for women's rights, "why it is a masculine speciality!" But the dentist was young and inexperienced, and discovered his blunder before the curtain fell. What is the verdict of the psychologist's tests? In intelligence and reasoning the innate dissimilarity is so slight as to be all but indiscernible. In ordinary life, women may appear less logical than men: that, however, is mainly due, not to sheer inability to reason, but to the disturbances introduced by emotional factors and to a fondness for depending on imaginative insight and quick sympathetic reaction. In practically every test of the higher mental processes, so far as they turn on inborn capacity, the averages for the two sexes are almost identical.

Those who dispute this conclusion usually take their facts from history. Count up, they say, the entries in the dictionaries of national biography: out of the thousand most eminent celebrities in the history of the world, you will find but thirty-two women, and most of these are famous in one field only, namely, that of fiction or *belles lettres*; the rest owe their fame simply to the accident of birth or beauty. Here, however, there are two grave fallacies. First of all, the minor part played by women in science or in history is easily explained

by lack of opportunity. Secondly, it is most unfair to judge a group exclusively by one end of the scale. Men usually vary much more widely amongst themselves than women. Hence more men are found among the extremes. Go to the asylums and the gaols, and you will discover that, if men have furnished the greatest number of philanthropists and intellectual geniuses, they have also furnished the largest number of criminals, lunatics, and imbeciles. The only safe way, therefore, to detect a difference in inborn capacity is to apply special psychological tests to large representative samples. The results invariably reveal that, so far as general intelligence is concerned, the sex-differences are exceedingly small.

In acquired attainments the results are different. Girls usually shine in literary subjects—reading, spelling, composition, and the like. Boys are better at mathematics. Even in arithmetic, however, girls are generally more accurate in mechanical work, where mere memorization of rules and tables is required: boys are usually sharper at problems and riders. Boys excel in ancient and classical languages; girls in modern languages, especially where oral work is concerned. Boys are slightly better in geography, girls in history; boys in the physical sciences, chemical sciences, and engineering, girls in the biological sciences, particularly in botany. What is found in the schoolroom usually repeats itself in the university. But all through, the variations plainly

depend upon the varying systems of instruction. Where boys and girls have been brought up in mixed or co-educational schools, with precisely the same teaching, and practically the same curriculum, there the contrast is far smaller. Indeed, it would appear that any real distinction must be mainly due, not so much to innate aptitude but rather to interest and mental outlook. In short, it turns more on temperament than on capacity.

When we turn to the temperamental side, the fundamental differences are less easy to determine. Certainly, as judged by outward expression, women appear to be more emotional than men. The 'effervescing point' (to use a term coined by Mr. Arnold Bennett) seems much lower among women: they melt more easily and bubble over more rapidly into speech or tears. Internally, however, the emotions of men are often deeper and more prolonged. A man's feelings are thus like a ground swell—vast, steady, and barely perceptible; a woman's emotions are more like the ripples and the little waves—sharp, sudden, and conspicuous, but transient and often shallow. But the difference is more apparent than real.)

The basis of temperament and character lies in the common human instincts; and here it is plain that neither sex inherits any definite instinct which is not also inherited by the other. On the whole, in the male sex the aggressive instincts tend to predominate, while the inhibitive or repressive instincts are more powerful in the female. This is usually

true even among the lower animals. As a little girl once wrote in an essay on 'The Farmyard,' "The fiercest kind of cows are nearly always bulls"; and Dr. Syntax confirmed her conclusion when he went in search of a wife: "The grey mare's the better horse: she rules by seeming to obey." Pugnacity, leadership, the wandering instinct, the hunting instinct, the constructive instinct, curiosity (except perhaps where persons are concerned), these appear stronger in men. Sorrow (at any rate in the sense of proneness to tears), fear and secretiveness, the parental instinct, the self-submissive instinct, the innate liability to disgust—these seem stronger in women. As regards the sex instinct, it is hard to generalize. In *Man and Superman* Mr. Bernard Shaw, among others, has endeavoured to explode the nineteenth-century superstition that those who hunted the opposite sex were males rather than females. Among medical psychologists the prevailing impression would appear to be this. The most passionate woman seems far more over-sexed than the most over-sexed man; the most under-sexed woman is far more frigid than the most under-sexed man. Here for once, therefore, the extremes are found chiefly in the female sex. Perhaps this is the ground of the poet's distinction:

Men at most differ as Heaven and Earth;
Women, best and worst, as Heaven and Hell.

As to moral qualities, the paradox most commonly noted is that women are more conscientious and

at the same time more addicted to dissimulation. There is one psychological contrast, however, that seems almost universal; it recurs in every country, in every century, and at every age of life: crime is about five times as frequent among males as it is among females. This, no doubt, is mainly owing to the more aggressive character of the male, though in the past women and girls have perhaps had less opportunities for law-breaking.

As regards the economic outlook for woman, it is clear that her conscientiousness, her assimilative power, her readiness to accept a sedentary life, are valuable assets in certain callings. In other respects, however, her sex-characteristics may place her at a slight disadvantage. Her emotional dependence, her liability to complications of sentiment and feeling, her poor initiative and weak power of organization, her lack of inventiveness, originality, and resource, these may often constitute (except where she shrewdly trades upon them) a distinct commercial drawback. Yet defects of character, unlike defects of intellect, can be changed or overcome; hence such restrictions need not endure for ever, and in any case weigh only on certain individuals, not on every woman as such. The physical disabilities are more deeply rooted. Her slighter strength, her incapacity for violent or sustained exertion, her susceptibility to slight but recurrent ill-health—such handicaps may seem to justify the name of the 'weaker sex.' But all these alleged disadvantages

are far less hampering in civilized life than in uncivilized; and many may be increasingly lightened by a better upbringing or by newer codes and customs.

Conditions are rapidly changing. Motherhood, the inalienable function of woman, is now a brief and exceptional phase. The training of children has been handed over to the school; the protective services of the male have been taken over by the police; domestic duties are partly performed by professional cleaners or caterers, and the rest have been greatly simplified by better machinery and tools. The modern woman is beginning to turn her interest in new directions. She not only drives her car; she hunts big game, and pilots an aeroplane on record flights. She practises medicine; she pleads in the courts; she may run a big business of her own. Not long ago a Russian ship arrived in the Port of London with a woman as her captain. Soon we shall be driven to inquire is there anything which the limitations of her mind or will can prevent the woman of the future from attempting? Had Rip Van Winkle gone to sleep in 1883 and waked up in 1933 after a trance of fifty years, the greatest surprise that would greet him would undoubtedly be the amazing revolution that has taken place already in the position of women. What he would witness after another half-century we may leave the professional prophet to predict.

Let us return and recapitulate our present results. That certain sex-differences are innate can

hardly be denied; but it is evident that they are far less potent than has commonly been assumed. They are smaller in mind than in body, and in intellectual ability than in emotion or temperament. So far as mind is concerned, they seem largest on the lowest mental levels of all—greatest in movement and in the simpler senses such as touch, fairly large in mechanical work such as mere memorization, but progressively diminishing as we rise to the higher processes. But, wherever we find a mental divergence, it seems generally to rest, not upon an innate difference in mind as such, but either upon a difference in training and tradition, or else upon a difference in physique—peculiarities in the muscles, in the sense organs, and, above all, in the glands. As we have already seen, the glands of internal secretion—the sex-glands, the thyroid, the adrenals, and the rest—have a profound influence on the instincts and emotions. It is conceivable, therefore, that the glandular differences between the two sexes may produce a sex-bias in emotional disposition, and that this in turn may modify even the purely intellectual processes.

One point is too often overlooked. The differences that I have mentioned are based on calculated averages. When we study the separate persons from whom these averages are drawn, we discover that the differences between the individuals are so enormous that the difference between the averages generally shrivels into insignificance. One man

differs from another, and one woman from another woman, far more than the average man differs from the average woman. Thus sex as such is the cause of only a small fraction of the mental differences observable among human beings. Accordingly, in deciding the type of education or in selecting the type of career suited for any given child, the main factor to be considered is not so much the child's sex, as his—or her—special aptitudes and character; and the future development of the mental life of women will undoubtedly be determined less by the innate psychological characteristics of her sex, and more and more by social necessities and by individual ideals.

XII

THE PSYCHOLOGY OF NATIONS

WE have considered the mental differences between the sexes, and found them to arise partly from inborn differences, but chiefly from training and tradition. Let us turn to the mental characteristics of other social groups, and see how far they are innate or acquired. There are many who believe that the mind works so differently in different races and classes that real co-operation, national or international, is nothing but a faddist's dream. "You can only exterminate the Prussian ideal by exterminating the Prussian:" we heard that said not twenty years ago.

East is East, and West is West,
And never the twain shall meet.

What, then, is the outlook? French and German, Chinese and Japanese, Irish and English, capitalists and trades unionists—men of widely varying origin and interests, are to gather together and sit side by side in conferences, discussing, more earnestly than ever before, the social, the political, and the economic crises that are threatening to reduce the world to chaos: is there any chance that they will succeed?

At bottom it is a question of psychology. But the real issue is concerned with causes rather than with facts. That nations, races, social and economic

classes disagree in their mental outlook, no one could possibly deny. The essential problem to settle, however, is whether such divergences are basic and unchangeable. What keeps them alive? Are they, for example, due to inherited temperament, to something in each individual's blood, which no human agency can alter? Are they due to a kind of social consciousness which exists over and above the individual consciousness of each separate man, and guides and governs it with an invisible sway? Or are they due simply to the accidents of isolation, to historical, geographical or social barriers, that have allowed each group to develop in the past a standpoint and a tradition peculiarly its own, although in the future such differences must quickly disappear with increasing travel, a world-wide commerce, and a wireless that spans the globe?

Here are three possible explanations, all of which have been put forward by various thinkers at different times. Which of them is true?

(1) *The Social Consciousness.* Let us begin with the view which seems the most far-fetched to the plain man, but was held by many psychologists and philosophers towards the close of last century. This is the rather romantic notion that every social group may develop a soul and a consciousness of its own. We sometimes speak of the spirit of a people, of the national will, of a whole country acting as one man. These phrases, it was maintained, are something more than patriotic metaphors: they are literal facts.

The chief arguments in support of this theory are arguments by analogy, drawn chiefly from animal or physiological life. Consider the social groups that are found among the lowlier animals—the pink coral or the yellow sponge. Each, as we find it living in the sea, is not so much a single animal as a colony of animals; and yet the whole colony behaves like a single creature. Herbert Spencer argued that a human society itself might be thought of as a complex organism of this kind; it acts in a united manner like the coral or the sponge. If so, why not go a step further and add that such an organism must have a unitary mind? Or, again, watch a flock of birds wheeling overhead, or a swarm of bees buzzing away to settle on a neighbouring bough. The whole group is so uniform in action, so unanimous in feeling, that a single thought or purpose seems to guide it. We talk of a ‘body’ of men and say that its ‘members’ act as one man: why not explain their action by supposing that the ‘body’ has a soul?

You may perhaps have chopped a worm through with your spade. The squirming halves wriggle off like two separate creatures. The gardener used to tell me, when I was a boy, that sometimes they would meet and join together again; and so once more there would be one worm and not two. He declared that he had once cut up ten worms and joined the middle bits together, so as to make a single worm a dozen inches long! Now when you cut a worm in two, you apparently cut his consciousness

into two separate halves; and accordingly, it is at least conceivable that, if you can cut one consciousness into two, you could also join two consciousnesses together and so make one: and if two can combine why not a hundred or a million?

Some writers have supposed that each cell in the brain, each corpuscle in the blood, is a distinct animalcule with a consciousness of its own; and that the larger consciousness of the whole individual—of you or me, for example—arises in some miraculous way as a joint product of the separate consciousnesses belonging to our constituent cells. On the same principle, it is suggested, the consciousness of a nation might be a kind of collective consciousness, embracing the consciousnesses of all the several individuals. The forty million souls that inhabit Great Britain may thus in some mysterious fashion fuse or unite to produce a single British mind. Indeed, there is no limit to the size of the group which may thus have a special consciousness to itself. When we come to the psychology of religion, we shall find that many have supposed that even the Deity may be conceived as a kind of world consciousness—what Pantheists like Shelley and Emerson would have called an Over-soul, pervading the whole universe.

Is there, then, a special over-soul for each particular nation and for every social group? It is a theory that could hardly be disproved. But there are two obvious difficulties. First of all, we should have an appalling number of souls. Birmingham and Leeds,

Harrow School and Oxford University, Newcastle United and the Arsenal team as well, every trade union, every committee, every parish council, every crowd that gathers in the street—each would have its own individual consciousness. What a tremendous assumption to make! Secondly, are we not forgetting that a body, to be genuinely a body, must constitute a physical whole—that there must be actual nerve connection between the several parts of its brain? Even the Siamese twins have two minds and not one. My gardener, I fancy, only thought his ten worms became one when they actually grew together into a single living string. And generally we assume a unitary consciousness exists only where the members of the same body join in physiological contact.

I do not contend that either of these objections is fatal to the view put forward. But the real point is whether the facts cannot be explained more easily without it.

The peculiarities of mass-behaviour, which at first sight seem to suggest a collective consciousness or a collective will, deserve a more detailed analysis. It will be found that most of them spring from two widespread psychological processes that may be taken as unquestionably established. The first is sometimes known as 'primitive sympathy.' It might almost be termed 'emotional imitation,' except that imitation suggests deliberate copying rather than a blind instinctive reaction. The essential facts are these. In most gregarious animals the mere expression

of an instinct by one member of the herd is sufficient to excite that instinct in the remainder. Thus in birds the instinct of flight is normally aroused by the sudden appearance of a strange and dangerous creature—a furtive cat or a sportsman with a gun; but the same instinct may also be aroused in those who have not seen the intruder by simply perceiving the flight of the other birds. One crow screams and takes to its wings: all the rest follow suit. Human beings are subject to the same process. Smile at a baby and it smiles back. Weep and the child weeps with you. Start yawning or coughing, and you will immediately set your neighbours yawning or coughing as well. If instead of a single individual you have in front of you a crowd of several hundred, then the emotional expression is reflected to and fro from every face, and excitement not only spreads like a prairie fire throughout the whole assembly, but is enormously intensified in the process.

Here lie some of the secrets of mob-oratory and crowd-contagion. If a few sympathizers or paid claqueurs cheer and clap the speaker's points, the rest of the company will begin to applaud. If one man guffaws the others will start grinning too, though they have neither heard nor seen the joke. How well the comedian's feeble anecdote went down with a packed audience, each listener chuckling with the rest! How tame it sounds when you relate it to a solitary friend! A skilful demagogue, like an experienced actor, knows how to make full capital out of

these infectious tendencies. For the first few moments he will skilfully play on emotions which all his hearers share. The sympathetic tension tightens; and then, instead of a hundred men and women in the hall, there is only a single unit. Panics are due to much the same process. If, on the outbreak of a theatre-fire, a few spectators in the stalls make an alarmed and agitated exit, the scare will race round the circle and the pit, who as yet may have seen neither the smoke nor the flames, and a general stampede will quickly ensue. Wars, revolutions, lynching and looting, are largely the outcome of such reciprocal reactions—the several members of the mob playing quite unconsciously on one another's feelings. And, in less dramatic fashion, this imitative impulse is always quietly at work to counteract our individual eccentricities: it makes us dress alike and think alike, adopt the same ideas, the same ideals, and even the same phrases and accent. Thus, to account for the spread of feeling, we have no need to postulate a single soul possessed by the group as such; we need merely assume that the expression of an emotion by one member prompts the same emotion in the rest.

Primitive sympathy, therefore, will easily explain unanimity of action on the lower mental levels—among gregarious animals or within an unorganized rabble. On a higher plane a second factor supervenes. This is the consciousness which each member acquires of the group to which he belongs. Birds in a flock do

not think of the flock as such; the individuals in a mob seldom think of the mob as such. But members of a school, of an army, or of a nation, have generally a clear idea of the organized body they constitute. They think of that body as having a definite ideal or a definite aim. They are interested in it, proud of it, fond of it; anxious for its welfare and survival. They name it; they talk about it amongst themselves; they develop a love and a loyalty towards it. The love of one's country may so far exceed self-love that the hero will hazard his life for its sake. It is this sentiment or conscious feeling for the group that supplies the motive force for what is popularly called the group will. When, therefore, we speak of a community as exercising its will, what we really mean is that the members are exercising their own several wills, and exercising them in the same direction and in the interests of the whole: this they can do because each one is conscious of the organization that includes him, and regards its objects as his own. Thus, phrases like national consciousness or national will do not imply that the nation as such is a conscious organism possessing a special mind or soul, but merely that the individuals comprising the nation are each of them conscious of the nation they comprise.

Here, then, are two tendencies that make for unanimous action. Are there any definable conditions to be fulfilled before either can take effect? Clearly the second principle at least presupposes a capacity

for appreciating abstract ideas ; for the idea of a nation is an abstraction. But it also presupposes a certain degree of unity binding the group together, else the group would never be thought of as a single whole. This unity springs partly from the gregarious instinct which brings and keeps the individuals together. But its realization on any wide scale must depend in part on happy accidents of geography and history. A nation is a group occupying a well-defined area of land, speaking the same language, obeying the same government, possessing a common memory of vicissitudes and victories, and revering the same great names. All of this, however, plainly rests upon a deeper condition still—the homogeneity of its members. A menagerie which consisted of a snake, a tiger, an elephant, and a wasp, could never act in unison, like a herd of buffaloes or wolves. Yet each creature has its own consciousness : why, then, cannot their several consciousnesses fuse ? Evidently they possess no interests in common, no identity of purpose, and no means of communication. A pack of wolves, on the other hand, can combine against a common enemy ; a troop of savages can band themselves into a tribe. Clearly, therefore, the fundamental condition for unity of action is not the possibility of a common soul, but the fact of a common endowment based on a common descent.

(2) *Racial Inheritance.* Let us, then, examine this second mode of explanation : that the national char-

acter is at bottom due, not to a national consciousness in any literal sense, but rather to a national inheritance—to a special mental constitution shared by each member of the race.

First, what evidence is there for racial heredity? To begin with, no one will deny that races differ in physique, and that these physical differences are ineradicable because they are inborn. Stroll through the streets of any big town. That quaint, dapper little man, with the slanting eyes is obviously a native of Japan. That handsome, coffee-coloured youth is doubtless an Indian student. The deep-voiced negro, the moon-faced Chinaman, the Jew with his gentle lisp—you recognize them all on a first encounter. Talk to them in turn; and you will soon discover that they differ almost as much in temperament as they do in physique. The excitable negro, the silent Chinese, the Hebrew merchant with his interest in money and music—the racial origin of each seems stamped as deeply on his mind as on his body.

Let us keep for the moment to Europe; and see how far the psychological characteristics of each nation can be explained by a difference in racial constitution. Various lines of evidence combine to suggest that the European population of today is descended in the main from three distinguishable races. These no doubt produced innumerable sub-varieties and countless inter-mixtures; and more recent investigations show that culture does not always coincide with racial stock so completely as was once supposed.

Still, let us take a simple version of this three-fold theory, and then ask how far it helps us.

(i) Ignoring the few alleged descendants of Palæolithic man—man of the Old Stone Age, the first and the oldest extant European race seems to have consisted of a short and swarthy people, with long, narrow heads, and long, oval faces, so dark in hair-colour, eye-colour, and complexion, that they have sometimes been called the 'brown race.' Such types are found today with greatest frequency in Southern Italy and Spain. Hence they are often termed the Mediterranean race: perhaps a simpler name would be *South European*. In physique its members resemble in many ways the men of neolithic culture—the workers of the New Stone Age, who left their implements of polished stone, with their short skeletons and long skulls, interred in long barrows or mounds. The older histories of England used to call them Iberians; and their descendants seem nowadays to form the chief element in our Celtic-speaking populations. In this country they are found chiefly in the West—in Cornwall, in Wales, in the remoter parts of Ireland and Scotland. Here and in Brittany their ancestors are said to have left those huge monuments of unhewn stone—the dolmens and strange stone circles, such as are seen at Stonehenge.

(ii) These early inhabitants were followed by a second race, neither so short nor yet so dark, distinguished chiefly by a broad, round head, a broad, square face, a stockish build, and a marked dispos-

ition to obesity. There is some evidence that nomadic tribes of this kind, wandering, like Abraham with his flock, in search of better pastures, brought a knowledge of grain, domesticated animals, and the use of bronze, into western Europe, driven perhaps from Mongolian Asia by famine and drought : indeed, their broad faces are at first sight reminiscent of certain Mongolian races. They settled down as peasants. John Bull, the burly farmer, might serve as a portrait of the type. The Prussian and the Russian of the comic paper, with globular head and skull running sheer up from the neck, show the distinctive features pushed to the limit of caricature. Today their representatives are chiefly found in and about the Alps, in Germany, especially towards the South, in Central France, and in a large part of European Russia : the ancient Hittites and the modern Jews perhaps form a sub-variety. Some of the invaders seem to have forced their way to these islands, and to have brought with them the early Gaelic form of the Celtic language. They taught it to the older inhabitants ; and then for the most part died out themselves. Their round skulls are found buried in round barrows, often with a leaf-shaped sword of bronze and a 'beaker' or drinking-cup at their side containing sustenance for their souls on the journey to the other world. Thus, in spite of the wide overlapping between the customs of the different races, we may roughly identify these roundheads with the men of the Bronze Age. They

are variously known as the Alpine, Celtic, or Celto-Slavic race. But at one time or another members of all the three main races appear to have talked a kind of Celtic; so perhaps the best name is *Central European*.

(iii) Last of all, in successive waves of invasion, comes a tall, fair-haired, blue-eyed race, with long narrow head and long narrow face. It is said that they were the first people to tame the wild horse; and, as they rode in on the terrified natives, they left behind them the legend of the Centaur—that fierce mythological creature with the head and trunk of a man and the body and legs of a horse. We find them emerging in hordes from the steppes of South Russia, invading Greece, and settling during historic times in the North European plains and the coastal regions round the Baltic. Like the Mediterranean races, they are narrow-headed; but unlike them they are blondes instead of brunettes. Hence some have supposed that a variety of the Mediterranean race, roaming northwards, became fair instead of dark, as the brown bear becomes white in the polar regions. It is they who, as yellow-haired chieftains, are said to have led the so-called Celtic immigrants to these islands, and brought with them the Cymric or later Celtic language and a knowledge of the use of iron. We might roughly identify them with the men of the early Iron Age. Julius Caesar mentions these fierce and fair-haired giants; and later writers call them Brythons—a name which the British still proudly preserve. Later descendants of

this tall and military stock—Saxons, Danes, Norse, Franks, Lombards, Normans, Ostro-Goths and Visi-Goths—over-ran all Europe, thrusting the older races into remoter uplands and the isolated peninsulas. At the present time their purest representatives are to be found in Norway and Sweden. Put a Swede by the side of a Spaniard, and you will at once observe the contrast. Both have long heads and faces; but the Swede is a tall blonde, while the Spaniard is a short brunette. In England, men of a tall, fair-haired type are still common in the East and in the South, though some of similar physique seem to have voyaged round to Cumberland in the days of the Vikings and to have settled there upon the hills and by the lakes. All these are varieties of the so-called Nordic or Teutonic race: once more perhaps the simplest name would be *North European*.

Here, then, in a simplified, schematic picture, are the three main racial types that have peopled the continent of Europe—the North European, the South European, and the Central European, respectively. We in these islands seem descended mainly from the first two: John Bull and the round-heads have almost died out. We are predominantly a long-headed, long-faced people, tending to be tall and fair in the South and East, and short and dark in the West and North. During recent centuries, however, there has been so much movement and travel that it might be supposed that inter-marriage would have led to a thorough mingling of the earlier types, and that consequently

racial differences would have vanished except in the most unfrequented districts. There is some evidence, however, to show that, even when dark and fair types intermarry, the characteristic qualities tend at times to sort out, rather in accordance with what are known as the Mendelian laws of heredity. In the first generation the dark-haired qualities usually dominate; and (though probably for other reasons) they are certainly becoming more numerous in the towns. But in subsequent generations it is frequently found that the two types separate out, so that marriage does not necessarily involve a nondescript blending in the later descendants.

The question that concerns us here, however, is whether these differences in body bring with them any well-marked differences in mind. Here we must bear in mind that the racial origins of a modern nation are so mixed that it would be wiser to drop the word race altogether. Tests of intelligence have now been applied to samples of almost every European nation. Such tests are intended to measure innate or hereditary qualities. But, except where practical rather than verbal tests have been used, the variety of the languages renders comparison a little awkward. One psychologist has tried this method, another has tried that; but all the researches seem broadly to agree. According to the American army tests, for example, the English recruits are the best (that surely is flattering!); the Scotch, Dutch, German, Danes, and Scandinavians follow in that order;

Poles, Italians, Greeks, Russians, Belgians, and Irish sink toward the bottom of the list. If the various recruits could be accepted as fair samples, truly representing the countries from which they come, we might infer that the tall, light-haired races were the more intelligent, and the short, dark-haired races rather less intelligent. The generalizations, however, so popular in certain quarters, about the superiority of the so-called Aryan races to the Semitic, or of the white to the yellow and the black, can hardly be maintained in their crude and sweeping form. Certainly, so far as tests have been applied, the average negro seems to show only about nine-tenths of the intelligence of the average white. But the Chinese and the Japanese are quite up to Western standards. And tests carried out by two of my own students indicate that the Jews' intelligence is, if anything, above the Gentiles'; this, too, is confirmed by investigators in the United States. Have centuries of persecution allowed only the shrewder stocks to survive?

Such differences, however, between the different races, even where well-established, are never very large. What we observed in the sexes holds good of racial groups: so far as intelligence is concerned, the wide differences between individuals belonging to one and the same nation practically swamp the smaller differences between one nation and another. It is in temperament rather than intelligence that the most striking contrasts emerge.

Here we no longer have scientific tests to help us. We can only trust to observation and impression—very precarious guides. Let us return to the three great races of Europe. To the English traveller in Italy or Spain the temperamental differences are most striking. These dark-haired races of the South are so excitable, sociable, and talkative, so highly impulsive and impetuous, so full of vivacity and wit. They in turn when they arrive in England say that they seemed to have walked into a nation of wax-works. To them the fair-haired Northerner appears a mute and phlegmatic creature, as independent as he is reserved. The flatterer, of course, describes us as strong, silent men of action, quiet up to a point, but breaking out in vigorous deeds once we are thoroughly roused. In the jargon of the modern psychologist, the Southerner is styled an extravert, the Northerner an introvert: the one is demonstrative and expansive, reacting easily upon the outer world; the other represses his emotions and seems absorbed and centred in himself.

The difference comes out most clearly in literature and art. Think of the sharp contrast between a Greek or Roman temple and the Gothic cathedrals of Winchester or Chartres; between the verse of Sophocles, Dante, or Racine, and that of Shakespeare, Goethe, or Byron. What a gulf divides the music of Gounod or Gluck from the harmony of Beethoven and Wagner! And what change in aim and conception from the pictures of Raphael, Perugino, Poussin,

or Ingres, to those of Rembrandt, Dürer, Turner, or Blake! Alike in Italy and France, the painting, the architecture, the poetry, and the music tend towards the 'classic' type; in Germany and England they are predominantly 'romantic.' The one is formal, rational, conventional, smoothly expressing itself with clearness and balance. The other is wild, erratic, introspective, bursting into extravagance and revolt. The art of the former is public art, the art of a communicative people, giving direct and immediate expression to its feelings. The art of the latter is private, individualistic, mystical, breaking out irregularly against solemn social restraints. The art of Italy is clear and sunny like its climate; that of the north, misty and capricious like the northern weather. In fact the weather and the climate of the several countries have by some been held responsible for the temperaments produced.

As for the round-headed races of Central Europe, they stand somewhat apart. It has been said, perhaps a little hastily, that their bent is not so much for art and literature as for systematization and science. In character they fall perhaps midway between the two other stocks. While the fair-haired, long-headed races of the north are adventurous, self-assertive rovers, the best colonists in the world, the round-heads are a stolid, stay-at-home people, patient and thrifty, good organizers, interested in money and what it can buy, but imitative and submissive rather than original or free.

Those who like a simple formula may sum up the differences alleged by saying that the North European is a practical creature, the Central European a theoretical creature, and the South European an emotional creature; the first aims at action, the second at truth, and the third at beauty. The one makes a nation of shopkeepers, the second a nation of philosophers, and the third a nation of artists.

But directly he hears these wholesale generalizations the cautious scientist grows restive and suspicious. The facts of human nature seldom fit such clear-cut subdivisions. No doubt there are broad underlying differences; but it is improbable that they correspond exactly with these neat, antithetical schemes. The views that I have summarized here, then, are too tentative to be taken as true; I offer them merely as illustrations of the theories that psychologists have sometimes raised. Do not conclude that nations are of one character or quality throughout, or that you can safely guess a man's inherited temperament from the contour of his head or the colour of his hair.

Speculations such as I have described had a great vogue before the war. In France, M. Gobineau and his disciples, in Germany, Mr. Houston Chamberlain and a host of others, were arguing that all differences in national outlook, the progress or the failure of every state in turn, could have been foretold from its racial composition. Civilization, it was claimed, owed everything to the 'Aryans' and

nothing to the Jews; everything to the white 'Japhetic' races—the Indo-European—alike in the East and in the West, nothing at all to the black, 'Hamitic' races of the South, little or nothing to the yellow races of China or Japan, and less than nothing to the Semitic races of Palestine, Babylon, and Egypt.¹ Among the 'Aryan' races, needless to say, the Germans proved to their own satisfaction that the Teuton was the noblest of all: success was his heritage; his was the chosen people, born to conquer and subdue the effete and effeminate Latin of Italy, Spain, and France. You may remember how Mr. Hilaire Belloc has satirized this gospel:

Behold, my child, the Nordic man,
And be as like him as you can:
His legs are long, his mind is slow,
His hair is lank and made of tow.

And here we have the Alpine Race:
Oh, what a broad and brutal face!
But most degraded of them all
Mediterranean we call.

¹ The old-fashioned terminology only adds confusion to the attempts at distinguishing social contributions, being indeed based originally more on language than on race. The modern Jew shows Hittite rather than Semite characteristics, and seems akin to the Alpine stock. The Hamite is not a black race, though often mingled with the negroid: he, indeed, shows affinities rather with the Mediterranean stock. Some investigators have recently maintained that the ancient Sumerian civilization of Mesopotamia was Hamito-Semitic, and earlier than any so-called Aryan culture, even in India.

English opinion, indeed, has always been sceptical over innate racial characteristics. We in this country have inclined towards the opposite view: we have believed more in the power of training and tradition than in that of heredity or race.

(3) *Social Tradition*. And this brings me to the last of the three explanations that I mentioned at the outset: namely, that the differences between nations are chiefly due to the customs and conventions handed down by history from the past, moulding one generation after another through the home, the school, the national literature, and all the subtle influences of everyday life. The old British psychologist Locke, for example, declared that every child was born as plastic as a lump of soft clay, ready to be shaped by his education and surroundings, but with no definite character of his own. Mill, and the earlier writers who developed this doctrine, attributed all our mental differences to our social environment. Buckle, in his great *History of Civilization*, attributed them rather to the physical environment: the Scots were vigorous and hardy because they lived in the mountains; the negroes idle and thriftless because they inhabited the hot luxuriant tropics. Again and again, as historians have noted, the views of these British philosophers, more or less explicitly adopted, have played a large part in deciding British policy in its dealings with dependent populations, particularly, for instance, with the peoples of India and the nations of the East.

One point, I think, we may now take as generally admitted: neither race alone, nor mere geographical environment, will explain the wide divergences between successive civilizations. We have only to remember how the Roman language and the Roman customs have dominated half the states of Europe to see how the characteristics of a particular nation may spread far beyond the race or territory that originally gave them birth. Or should we infer that, because we in England now use Latin words and obey the Roman law, therefore we must be descended from the invading legions brought hither by Julius Caesar? There is no need for such wild conjectures. Simpler processes come into play. People resemble one another not only because they have sprung from a common stock and share the same country or climate, but also because they have imitated each other or have copied a common ideal.

Imitation, however, is a word that covers many different tendencies. At its simplest, as we have seen, it depends on a kind of primitive sympathy, more or less instinctive. Here for brevity let us use the term to include all those processes whereby one individual reproduces the thoughts, the feelings, or the actions of another. In this sense imitation is an essential condition of all collective mental life. Man differs from the highest animals chiefly in possessing a far greater power of learning; and this capacity enables him to learn, not only from his own experience, but also from the experiences of others. He does so more

by unconsciously accepting a type than by consciously accepting an argument. Thus, little by little, through assimilating the traditions around them, the inhabitants of each well-defined area come to form a homogeneous group, and advance together in knowledge, invention, and harmonious habits of action.

We may realize more clearly the importance of such processes if we picture what would happen on a wholesale exchange of populations. Suppose, for example, that as a result of some new world-war all the babies in England could be transported to Germany, there to grow up amid German institutions, speaking the German language, reading German books, and surrounded by German influences on every side; and suppose that each German child at birth were sent over to this country, to be brought up amid a culture that was wholly English: I imagine that, despite the new difference of innate racial temperament, no sudden change would be observable in habits or mental outlook. The German children would imitate their English foster-parents; and their inborn national peculiarities, such as they are, would show themselves only in slight and trivial ways. Any modification that overtook the country as a result would be slow and gradual, not swift or revolutionary. The weight of tradition would at first outbalance the influence of new blood or mental constitution: only in the course of a century or two would the latter reveal its small but cumulative effects.

Animals have evolved into sharply differentiated

groups solely by altering their hereditary nature—an extremely slow method of advance; man has progressed more rapidly—and progressed along different lines—by modifying and increasing the volume of beliefs, ideas, and customs that are handed on by imitation from one generation to the next. Thus the existing differences between the countries of today depend primarily on these traditional elements. By taking over the civilization of a distant portion of the world—as the Japanese, for example, have adopted the culture of Europe and America—a nation may, on the surface at any rate, entirely transform its characteristics.

There are, however, limits to such changes; and it is here that the inherited temperament of each people exerts its subtle influence. We may see this most plainly in political and religious institutions. France has become a republic; but under her republic the French show comparatively little of the initiative and self-assertion that are so strongly marked in the republic of the United States: when France overthrew her monarchy, she did not overthrow the centralized system of government that had been perfected under Louis XIV and Napoleon. Or take religion. One instance often cited by psychologists is the way in which Buddhism has almost died out in the country of its birth, the region round about the Ganges, and has been gradually superseded by the Mohammedan religion, which has advanced from the North-West as far as Bengal—a religion,

so one eminent anthropologist has argued, much more in tune with the fatalistic temper of the Hindu. Or, again, note how the two great divisions of Christianity in Western Europe—the Protestant with its vigorous independence and the Roman Catholic with its obedience to authority and its love of colour and music—correspond in their distribution to that of the North European and the South European races respectively.

We are led, therefore, to admit some germ of truth in each of the three theories we have discussed. Racial inheritance, popular tradition, and a social self-consciousness, all play their part in making each nation what it is.

The course of national development we might epitomize in the following way. Mental differences between one race and another no doubt existed to start with. So far as they are inherited, they are permanent and almost unchanging. But at the same time they are comparatively small. Slight as they are, they must nevertheless have determined the broad diverging lines along which customs and culture should first advance. Then, when migration, travel, and world-wide intercourse began to bring fashions and fresh ideas from other countries to our own, there was a kind of natural selection. Each nation absorbs what is congenial to its special temperament, and rejects or remodels the rest.

Institutions, habits, and conventions, first adopted because they issue from or fit the original character

of each people, begin in their turn to react upon that character, and to strengthen and reinforce it by accumulated tradition. Finally, as the nation grows aware of itself as a nation, it begins to formulate and talk about its own distinctive aims. In this sense the public mind becomes not only conscious but self-conscious. The consciousness, however, resides solely within the individuals who comprise it, and does not necessarily imply a collective personality or a national soul. But, like all forms of conscious effort, it leads to the most rapid method of advance.

If this conclusion is sound, certain practical consequences ensue. Mixed as we are, our racial intelligence and temperament no doubt impose certain minor limitations upon each community; but within those limitations there is no reason why custom and culture should not be reorganized and changed. Just as within the British Isles we have fused together two if not three different stocks and produced a single nation, so within Europe, and perhaps throughout the globe, we may unite the entire population in one commonwealth and give it a character of its own, and thus ultimately evolve, not only a national consciousness, but a world consciousness, not only an ideal for each country, but an ideal for the whole human race.

XIII

THE PSYCHOLOGY OF POLITICS

WE have reviewed the development of nations in the past. What is the outlook for their progress in the future? To bring out the psychological factors involved let me begin with a personal question.

How did you vote at the last election? And what made you vote as you did? From your newspaper, you will say, and from the fellow-members of your club or union, you first got a thorough grasp of the issues involved, and then, after due reflection, you decided that the facts all pointed to one very obvious solution—the solution offered by the candidate who earned your vote. Your motives were purely logical, your reasoning strictly scientific!

And the men who voted for the opposite side? They no doubt would claim as good a knowledge of the data, and as good a use of their reason, as you have done. But their reasons, of course, are just after-thoughts: you and I could guess all along how *they* would vote. Brown and Robinson are plainly prejudiced by temperament—Brown is a soft-hearted idealist, Robinson a hard-hearted revolutionary; and the emotional bias of each colours all his political thinking. Smith votes as he does from sheer force of habit: throughout his life he has given his allegiance to the side he so blindly favours. As for Hobbs,

Nobbs, and Higgins, they just support the party that will remedy their private grievances or maintain their vested interests—the candidate who promises to reduce the income tax for the benefit of wealthy Nobbs; or the candidate who proposes to increase it and make work for Hobbs and Higgins who are chronically unemployed.

Temperament, habit, resentment, personal hopes and fears, these, and similar influences of an obscurer kind, are evidently of far more weight than first-hand knowledge or conscientious reasoning. Plainly the party-organizer who is out to win votes must turn psychologist, and study the illogical motives of all who go to the poll. As a matter of fact, he has already begun to do so. And American journalists have lately introduced a new word to describe the electioneering agent: they call him a 'spell-binder,' implying that his chief task is to trade on the feelings of the masses and to beguile or sway them to his special ends.

The truth is that with the progress of civilization the difficulty of applying rational methods to political problems has become greater instead of less. That is an inevitable result of the increasing size and complexity of the modern civic state. The issues of politics have grown so vast and intricate that no one man, even if he gives every hour to the subject, can possibly grasp them; much less, therefore, is the average voter capable of mastering all the facts and offering a logical decision. The old form of political reasoning, deduction from common-sense principles, could be

easily followed by the man in the street; but the modern form of political reasoning—the careful sifting of innumerable data and the analysis of the results by statistics—needs the trained mind of a specialist. Hence, to convert a constituency to his views, the politician is forced to simplify his programme and to borrow the artifices of the commercial advertiser. By various psychological devices, he plays upon the suggestibility of the voters, treating them less as rational or well-informed citizens than as creatures whose impulses are to be influenced by catchwords and emotional stimulation.

The fact that politics is really a kind of applied psychology has been realized, implicitly or explicitly, by every great thinker who has dealt with the deeper issues. The word politics itself has commonly been defined as the science and art of government. But in its original use it signified rather the philosophy of the state; and the state was identified, not merely with the agents and institutions by which government is carried on, but with the whole body of citizens. A state is essentially an organized group of conscious minds. Hence it follows that psychology, as the science of the mind, must be for the political philosopher the most relevant of all the sciences. Plato and Aristotle, Locke and Rousseau, Bentham and Bosanquet, Spencer and Sorel—almost every one who writes upon politics starts off with certain psychological assumptions, and from them deduces his theory of the state.

Sometimes, however, he fails to perceive quite clearly that his assumptions embody problems of psychology, and are points for scientific research. Too often he regards them as self-evident axioms; and thus, through over-simplifying the facts, he slips constantly into fallacy or blind exaggeration. It is, indeed, remarkable how political philosophers in the past have ignored the obvious truism that both the voter and the politician, both the citizen and the ruler, being after all but human beings, must be emotional as well as rational creatures. Human nature is highly complex; and, when men philosophize about social life, they are prone to lay exclusive stress on one or other of its contradictory features, closing their eyes to the rest. The political philosopher rightly sees us as individuals grouped together to form a single state; but he finds it difficult to give both aspects equal weight. One writer will emphasize the state, while another will emphasize the isolated individuals. And the result is generally a one-sided theory, either predominantly individualist, or else predominantly collectivist: if individualist, it leans towards liberalism; if collectivist, it is either conservative or (in these modern days) socialistic.

You remember the pronouncement of the sentinel in *Iolanthe*:

That every boy and every gal
That's born into the world alive
Is either a little Liberal
Or else a Conservative.

Had he said "either a little Individualist or else a Collectivist," his psychology would have been sounder still. But the point he was after was a suggestive one—namely, that not merely custom or self-interest or the problems of the day, but (most of all) a man's own natural temperament inclines him towards one or other of the two antithetical views.

The German idealists of the nineteenth century, for example, all glorified the state. On the lines of the theory we have already discussed, they thought of the state as a kind of mystic super-being, with a consciousness and a will of its own—a kind of spiritual Leviathan. The state was sovereign and the state was supreme. The interests of the nation rose above all questions of morality: they were more important than the interests of the individuals, more important apparently than the interests of any other nation, or even of the world at large. This swiftly leads to the dangers of a narrow nationalism, and may make not only for oppression within the state but also for war outside it.

Yet there are germs of truth in the doctrine. It upholds the value of collective action; and thus, strangely enough, its principles are invoked by two parties that we often think of as antagonistic—the Tories, on the one hand, and the Socialists, on the other: while abroad the Fascist in Italy and the Communist in Russia both set the Community or the Nation above the individual.

Now we are not concerned here to criticize these various political schemes. We are merely trying to understand the psychology which they apparently take for granted. We may, I think, safely agree that, in the limited sense explained in the last chapter, a civilized state can achieve a kind of group consciousness. But the psychology goes wrong when it assumes that the state is the *only* body with a social consciousness of this sort. Other bodies may possess a corporate consciousness as well. For example, the world is, or might be, one vast, all-inclusive, organized group: more and more we are beginning to appeal to the common conscience of the whole civilized globe. Or again, within the group that we call the nation there are minor groups that may also attain a kind of group spirit—families, cities, churches, trade unions, professional bodies, and local or municipal councils: these, too, may develop a collective consciousness of their own which may at times conceivably command a stronger allegiance. On one fundamental point, however, the idealist is right: man, if not always a citizen, is always a member of some group. There are no Robinson Crusoes.

Nevertheless, a group consciousness, as we have already seen, can exist only in the consciousnesses of the separate individuals—of persons like you and me. And this is the aspect mainly stressed by the English individualists. The individualists deny the over-ruling supremacy of the state as a transcendent super-soul, and proclaim the imperative need for freedom as the

prime condition without which the individual consciousness can never develop to the full.

In the lanes of Hendon, just over a hundred years ago, you might have met a quaint old lawyer, trotting along with a lively step, followed by his favourite cat. In the college where I am writing you may still see his skeleton. It is seated in a chair, grasping an old-fashioned walking-stick; the face is covered by a wax mask, and the whole is clothed in the costume of 1830. The man was Jeremy Bentham, a thinker who has exercised more influence on English politics than any other single writer. While Hegel in Germany was preaching the paramount authority of the state, Bentham in England was issuing lengthy tomes, filled with long words that he himself invented, maintaining the incontestable importance of the individual.

His treatise opens with a famous phrase which announces his psychological starting-point: "Nature has placed mankind under the governance of two sovereign masters—pleasure and pain." He argues that all that we do is dictated by these two elementary motives. Each one of us, before he undertakes any course of action, begins by weighing its consequences: he calculates, like a clerk drawing up a balance sheet, the probable excess of pleasure over pain; as a result, he decides on that particular line of conduct which will help him to avoid all possible pain and to secure a maximum of pleasure.

At first sight this seems a plausible psychology.

But it is too simple to be true. Bentham, however, was eager to sweep away the vague metaphysical notions on which previous political thinking had been based—theories which he gibed at as “nonsense on stilts.” He yearned to make straight for what he called utility. From his own simple postulates he deduced his well-known formula—“the greatest happiness of the greatest number.” That was to be the politician’s aim. That was to be the touchstone by which we were to test every time-honoured law and every fresh proposal. His ‘utilitarian’ followers were for the most part liberals or radicals—‘philosophical radicals’ they were dubbed; and with Bentham’s motto on their banners, the most far-reaching reforms were introduced. Laws were revised; the suffrage was extended; and universal education was established. When, in the most civilized countries of the world, barely half the population was able to live in comfort, much less to develop the human capacities latent in each one, such a watchword had a plain and practical value. But, as applied to the more complex problems of an industrialized life, this version of individual motives rapidly broke down; and it is not surprising to find Macaulay retorting “it is utterly impossible to deduce the science of government from the principles of human nature.”

It was on this same utilitarian basis that the new science of economics, a science characteristically English, was first founded. But here it was easy to see that individualism might soon lead to indifference

and disaster rather than to reform. Individualism begins by assuming that each man knows where his own happiness lies; and that each will pursue it more energetically than anyone else would pursue it for him. What follows? The logical outcome is the policy of *laissez-faire*, which we might translate: "Leave the individual alone, and let all things take their course." Where, then, does the state come in? It was to come in as little as possible. In the economic game it was to act solely as policeman or as referee. It was to refrain from anything constructive. It was no longer to be "a Jack-of-all-Trades, a Lady Bountiful in every parish, and a Paul Pry in every house." It was to confine itself to holding the ring, while private initiative was allowed full play; free trade and free competition were held to be psychologically essential. Any interference in the economic dealings between one man and another was unreservedly condemned, as being not only undesirable, but futile and inept, since the iron laws of supply and demand would immediately annul it.

It is striking to note how, within a few short years, theory and practice have changed. On the practical side, we have only to think of modern factory inspection and modern sanitary reform, of the Trade Boards Acts, the Unemployment Insurance Acts, the Old Age Pensions Acts, to see how the state has once again been compelled to intervene. As regards theory, many of the utilitarian arguments have been completely reversed, and the need for them undermined

by the progress of events. The competitive capitalism of the nineteenth century has largely passed away; and the monopolist capitalism of the twentieth century has been slowly taking its place. Hence the modern economist lays far more stress on the exceptions to *laissez-faire* than on *laissez-faire* as a fundamental rule, and his attention has turned from the production and circulation of wealth to its consumption.

Here, too, it is instructive to recall that the first to challenge the Benthamite principles were not so much the politicians or the scientists; they were the men of letters like Macaulay, Ruskin, Dickens, or Carlyle. And they criticized it from a psychological standpoint. Ruskin, despite his grandiloquent extravagances, has helped more than any other writer to banish to limbo the abstract 'economic man,' and has taught us that "the only man for political science to consider is the whole man—man with all his social affections, man in all his social relations." Indeed, it is not surprising that the historian, the novelist, and the moralist, showed a truer insight into human nature than a dear old hermit like Bentham who passed his days at Ford Abbey in quiet seclusion, training mice to run up his legs and eat the crumbs from his lap.

Let us consider a little more closely where the individualists' assumptions led them astray. It was one of their accepted dogmas that each man came into the world with a mind as empty as his body was unclothed. His soul was like a plain piece of wax

which education could easily mould and perfect. Mental inheritance was wholly denied. From the scientific side the fatal blow to this theory was struck by Darwin with his work on *The Descent of Man*. The direct outcome of the biological approach was this. It was recognized that man, whatever else he may be, is at least an animal. Like other animals, he inherits certain tendencies. He brings with him, when he is born, first of all, a whole repertory of crude and powerful instincts, and, secondly, a varying limitation in his intelligence and mental capacity.

Of this view the immediate corollary is to deny that the average human being can be regarded as a mere intellectual machine. His actions, at any rate at the outset, are not governed by a deliberate search for pleasure or a conscious resolve to shirk pain; they are the result of certain primitive emotions, driving him to behave in a specific way, without letting him stop to think what private benefits will ensue. As he grows up, these instincts, more or less modified, turn into fixed tendencies or habits. But all through life his motives are still based, not so much on clear and conscious reflection, as on impulses which are as unpremeditated as waking up in the morning or eating each meal as it comes. This is the more modern theory. Here no doubt the psychologist runs the danger of flying to the other extreme, and depicting human beings as far more irrational than they are. Yet there can be little question that these instincts exist, and profoundly affect our social life, though,

as we shall see in a moment, reason may supervene to modify or refine their operation.

What, then, is the nature of these impulses with which we are all endowed? To begin with, our race inherits, like sheep and wolves, or bees and ants, a peculiar instinct that definitely impels us to live together in groups. It is commonly called the herd instinct. Picture the prisoner shut up in his solitary cell or the sailor marooned on a lonely island; think of the wild glee that the healthy lad enjoys when he escapes from his office stool and jostles with a thousand others in a football crush: you will then begin to realize that, if people dread solitude and throng together in groups, it is not from calm reflection or well-calculated prudence, but simply in virtue of a blind unreasoning impulse. It is by nature rather than arrangement that we live together in crowds. Indeed, apart from his fellows, man would not be human. The state, therefore, is not to be explained as a kind of limited liability company, whose members have signed an agreement for mutual aid and protection; it has arisen, not from artificial convention, but by natural growth. Society, in short, rests on a social instinct, not on a social contract.

Once gregarious animals get herded together, other simple, semi-automatic tendencies come swiftly into play. In nearly all social creatures, including ourselves, two further instincts are seen to emerge—the instinct of leadership and the instinct of self-submission. The former issues in a love of power; and

this, whether beneficial or oppressive, is always a potent motive with the statesman. The latter leads to docility and obedience; and largely explains why men in the mass are so surprisingly willing to accept the conditions they find around them. How is it that in every community the multitude is so ready to obey the lead that is set by the few, whether those few are their own representatives or not? The compliance of the rank and file is a psychological puzzle that has perplexed each social philosopher in turn. Fear is the favourite explanation; and in the days of Hobbes, when political thinking was so perilous that you were forced to flee from London to Paris one year, and back from Paris to London the next, fear was the most obvious emotion for the philosopher to cite. Modern psychological experience, however, shows that, in a healthy social atmosphere, individuals need far less intimidation than was formerly deemed essential. In the classroom of fifty years ago the teacher believed that he ruled by fear; he would have thought it crazy to leave a set of children entirely to themselves and expect them, not merely to behave, but to press on with their work. In modern schools, where the cane has been abolished and 'free discipline' set up, that is an everyday experience. Provided the tone of the group is sound, internal control takes the place of external control. A similar tendency to trust rather than coerce is beginning to permeate our social life: the park railings are removed; goods are freely exposed on the counters of our shops; and the English-

man's house is no longer a barred and bolted castle.

Nor is the economist compelled to assume that adults will only work when forced to do so, whether by the tacit threat of starvation or by the open inducement of pay. The prevalence of over-work led many to suppose that all work was equally repulsive. Dull work, dirty work, and dangerous work call certainly for extra compensation. But the acquisitive instinct is not the sole incentive; the creative and constructive instincts also clamour to be up and doing. If only the labour is congenial, most grown-ups, like most children, are happiest when they are busy; paradoxical as it sounds, they then toil away, not for remoter pleasures, but because exertion is natural and pleasant. In science and art, in business and invention, the best things are achieved not under the stimulus of material gain, but because the ability for this or that kind of work brings with it a strong and dominating wish to do that kind of work. Indeed, as Mr. Bernard Shaw has observed, "a perpetual holiday would be a good definition of hell."

Thus our primitive impulses are by no means selfish, narrow, and lazy. Indeed, perhaps the most remarkable instinct of all is what is sometimes called the parental or protective instinct. It is the root of all altruistic behaviour; and, in the past, the political thinker has too often failed to realize that unselfish conduct has an instinctive basis quite as much as selfish conduct. It is part of our nature to cherish and

care for the weak, not to crush or ignore them. Were men by constitution simply self-seeking egoists, each bent on his own private pleasure, why should those in power have so often introduced humanitarian laws which were actually against their own interests? For example, the liberation of the slaves in the British West Indies cost the English people twenty millions of hard cash; and time after time, in smaller issues, it has proved quite as effective for a political speaker to play on sympathy and sentiment as to stir his audience with fierce invective or with promises of private gain.

These and similar instincts, then, are the original, if not the sole sources, of all human energy: they dictate the ends which men, organized in society, will always pursue. It is, however, almost as easy to magnify the emotional and non-rational factors as it is to overrate the influence of reason and abstract thinking. In the human race, these inherited instincts are far more indefinite and plastic than they are in our animal cousins. Through experience they can be modified; through training they can be cultivated, intellectualized, or restrained. The process may best be illustrated by another instinct that has been widely debated during recent years—the instinct of pugnacity. Many have argued that war is biologically inevitable, and that human society is and must be ruled by a competitive struggle for existence. Thus, Spencer was led to denounce all forms of state relief to the poor and all collective effort on behalf of the

distressed; and militarists have invoked the doctrine of natural selection to justify warfare between civilized states. Much the same arguments were advanced two or three hundred years ago to prove that street-fighting, duelling, and murder would never disappear; yet in the twentieth century we none of us wear swords, and few of us carry pistols. Anger, indignation, mutual rivalry, we shall always have with us: but, like other instincts, they tend with the advance of civilization to find higher and less harmful outlets; they seek social rather than anti-social outlets; in a word, they become 'sublimated.'

The methods by which these changes are achieved are too complex to be examined in detail here: partly they are due to the operation of conscious, rational ideals—the products mainly of the world's great men—which, through education and literature, through the press, the pulpit, and the stage, and during recent years the radio and the cinema, gradually percolate to the entire community; partly they are the effect of unconscious processes—of suggestion, imitation, and, above all, habit, the flywheel of society. But, in either case, the essential factor modifying or controlling instinct is intelligence.

And so I come to the second of the main contributions that modern psychology is making to political theory—the study of innate intelligence. Men have lately begun to wonder whether the principle of 'one man one vote' is working quite as well as they hoped. This growing disappointment over the out-

come of democracy has led to grave doubts about the intelligence of the democratic population. Is it fair to count the number of heads without stopping to consider their contents?

Let us glance at the chief views that have been put forward in the past. The first and the oldest assumes that the population is divided into two or more layers, roughly represented by social castes or economic classes, one of which alone is fit to govern, while the others are deemed unfit for the franchise or even for freedom. The later view denies all difference in natural rank; it insists that all men are equal, not only in rights but also in intelligence, and that nothing is wanted except education to bring out their dormant gifts. We have seen how Bentham and his followers developed this doctrine, maintaining that intellectual differences arise, not from heredity or inborn constitution, but simply from lack of wealth, opportunity, training, or the like. The American republic has been dedicated to the equality of man; and you will recall the scorn which Carlyle poured out upon the principle as he conceived it: "Any man equal to any other—Quashee nigger to Socrates or Shakespeare."

Here is definitely a problem for psychology; and psychologists have definitely solved it. Quite recently they have made a number of careful mental surveys of whole areas throughout the country. The results show plainly that the views as traditionally put forward are each of them erroneous, because they

are each of them extreme. The average intelligence of different social groups does certainly differ; but the difference between the averages is far smaller than the difference between the individuals. The new and all-important discovery is the enormous range of inborn intelligence exhibited by the members of every social class and the population as a whole. It is found that on an average nearly 1 per cent. of the inhabitants of most civilized countries are mentally defective, and that 10 per cent. are (in the old Parliamentary phrase) 'dull or backward.' The evidence, moreover, shows that these deficiencies are not due solely to lack of education, as was formerly imagined; they are largely innate and therefore ineradicable. Here lurks a new political puzzle. If we give special care to the mentally deficient, provide them with special instruction in a modern special school, put a superficial polish upon them, and then send them forth into the world, what happens? Because of their low intelligence and their lack of self-control, they breed far more prolifically than the normal and the bright. Suppose this to go on for several generations, and the mentally defective will inevitably swamp out the rest. Already, there is reason to believe that the average level of intelligence throughout the whole community has begun to decline.

The remedy at first sight seems obvious. Acts of Parliament have been passed which enable us to certify the mentally deficient and shut them up in

institutions: we have only to extend and enforce these statutes. Yet we can hardly do this with the big borderline group that I have termed the dull and backward; and, as a matter of fact, just because this group is far more numerous, it is from them that the majority of our paupers, criminals, and ne'er-dowells are drawn. Nevertheless, eugenic measures are growing urgent and essential. You may remember, in Mr. Aldous Huxley's vision of the *Brave New World*, how the students all troop in to the 'Human Hatchery,' and gaze at the test-tubes and incubators in which male and female infants of the very highest type are being bred on principles hitherto adopted for breeding plants, horses, and pedigree pups. At present, however, our actual knowledge about mental heredity is far too small for any sweeping reforms. In this country few psychologists would be prepared as yet to enforce, by any comprehensive scheme, compulsory methods for controlling births, like sterilization, or even the segregation of large numbers. But these are possibilities which we are bound to explore in the near future.¹

Let us turn, however, to the upper end of the scale

¹ Since these lines were written the Board of Control has set up a departmental committee to consider the problems of sterilization, and the Nazi government has introduced a bill for the sterilization of those suffering from 'hereditary disease,' including congenital feeble-mindedness and certain forms of insanity. It will be interesting to observe whether these measures will prove more effective in Germany than those introduced some years ago in many of the American states.

Here the psychologist has discovered that there are quite as many above the average as there are below it, as many mental giants as there are mental dwarfs—a symmetrical balance that, of course, does not hold good in the distribution of property or income. Nature provides, ready-made, what used to be called 'an aristocracy of talent': but hitherto it has commonly been claimed that the talent is mainly confined to the aristocracy. Psychological testing, indeed, actually shows that the average intelligence of the professional classes is somewhat above that of the less skilled workman—say, for example, the casual labourer; and at first sight, therefore, psychology might seem to justify the old organization of the state into castes and separate social strata. But the division according to intelligence would by no means coincide with the division according to rank, wealth, or even occupation. As we have seen more than once in these pages, whatever groups you compare—men and women, fair races and dark, rich and poor, illiterate and educated—the difference between the individuals always tends to outrun the difference between the averages for each class. In the families of dock labourers, scholarship winners may be rare, but they do exist. In the families of teachers, doctors, and lawyers, defectives may be rare, but they do exist. It was, of course, a risky argument to base the equality of political rights upon a supposed equality of intelligence and brains. The conclusion may be sound enough in practice, though the premiss is a

theorist's delusion. Indeed, one of the best reasons for assuming that all men are politically equal is that, by granting them equal opportunity, we shall more readily discover who are actually the best. And the best will be discovered, not in any one class as judged by birth or social status; they are to be found sprinkled about in every layer of society, like sultanas in a bread and butter pudding.

Can we trust that in the long run they will float to the top? Being human, they need, not to float, but to climb. The state, in fact, must erect a double ladder—a ladder whereby the intelligent can climb up to their proper place, while the less intelligent, from whatever sphere, drop down to their own true level. In this way, while the nation helps the individual, the individual will help the nation. For the psychologist suspects that the old opposition with which we began between the individual and the nation—"man *versus* the state"—is a false antithesis. Neither can exist without the other; neither can realize its full well-being without the other's aid

XIV

THE PSYCHOLOGY OF LEISURE

PSYCHOLOGISTS have made countless investigations on the problems of work; they have paid but little attention to the problems of leisure. In the world of today, however, while work has been getting more and more scarce, leisure has increased, not only in amount, but also in fullness and variety.

At the moment, out of a population of forty-five million, nearly three million are wholly unemployed: as a group they must form the biggest 'leisured class' that the country has ever possessed. Yet, long before the present economic crisis arose, leisure had gradually been spreading to a larger number of persons and over a larger number of hours. The increase was due to a variety of causes, some accidental, some designed. The most important was the introduction of machinery to do the work formerly done by men or women. The industrial revolution was followed by the mechanical revolution; today we travel, manufacture, farm, spin, sew, paint, write, and even add, by means of machines. The growth of leisure has been in part an unforeseen upshot of this change. It has arisen as an involuntary by-product; and, like all by-products, it is apt to be despised and even thrown away.

At the same time, and from other quarters, there

has also come a conscious demand for greater leisure. Workers will strike for shorter hours. Public opinion, too, is tending to the view that every man, whether a worker or not, has the right to a reasonable amount of off-time: for, it is argued, if a man stops working at appropriate spells, he will work all the better when he begins anew. On that theory, leisure might be supposed to exist primarily for the sake of work. On the other hand, those whose work is uncongenial generally claim that they work solely for the sake of leisure.

And when we have got it, what do we do? I have a strong suspicion that we waste it. Most of us apparently believe that spare time is spare time just because it can be spared. If we took our pleasures seriously, occupying each free moment as it came, would they not cease to be pleasures? Do we not cherish these empty intervals just because they are unfilled? Surely they must be preserved for rest and idle recreation. If, for example, we did not lie down daily in our beds and there dissipate in sheer unconsciousness eight hours out of every twenty-four, both our bodies and our minds would soon collapse.

Now I am ready to admit that periods of sleep are needed for the body; but I am not prepared to infer that additional periods of idleness are requisite for the mind. People have a notion that the mind is a hollow tank which contains mental energy, but only to a limited amount. They suppose that, while we are working, mental energy is steadily drawn

off; and hence the mind has to stop operations at regular intervals while a fresh supply is poured in. That may be roughly true in regard to the energy of the body; but there is little to show that we also keep a stock of psychic energy that can be stored, consumed, and then replenished, like so many gallons of petrol.

Some amazing experiments have been carried out which indicate that true mental exhaustion hardly ever occurs. When we complain of mental exhaustion, what is really exhausted is not our energy but our interest. We have reached not so much a state of fatigue as a state of boredom. You may come home protesting that your brain is utterly worn out; yet pick up a detective novel or start a rubber of bridge, and you find your wits as lively and alert as ever. No doubt a genuine fatigue of some sort is very often present. But what we take to be *mental* fatigue proves on analysis to be mainly *physical* fatigue, due partly to the accumulation of home-made poisons within the body, partly to the exhaustion not of mental energy but of muscular. At times, I agree, mental breakdown may be the penalty of overwork; but in such cases it results, not from mental fatigue or exhaustion of the brain (as many are apt to assume), but either from the unhealthy bodily existence that brainwork commonly entails, or (far more frequently) from worry, strain, and disappointment—in short, from emotional causes rather than from intellectual.

The old idea, therefore, that the sole excuse for leisure is to grant us a pause to regain our mental breath is based on a false analogy. Holidays need not be vacant, nor week-ends devoted to sleep. The best way to recuperate is not to do nothing, but to vary the kind of mental work. A mind that is entirely unoccupied is not improving its condition but impairing it: it is rusting rather than resting.

Leisure, however, has not only changed in amount; it has also changed its nature. The inventions of science, besides shortening the hours of labour, have introduced new sources of amusement for the intervals between. The motor-car, the cinema, the gramophone, the wireless, provide facilities for entertainment and diversion in a form never dreamt of by our grandfathers. And, directly or indirectly, the state has begun to aid the process. We have public libraries, public playing-fields and baths, municipal picture galleries, museums, and bands, a Broadcasting Corporation set up by Act of Parliament, and, in several European countries, theatres and opera-houses subsidized by the exchequer. Thus leisure is becoming something more than a hollow interlude between two stretches of work; and the scramble for pleasure has become keener, noisier, more varied, and in some directions a little more enlightened.

What, then, is the effect of this double change? High civilizations have always been distinguished far more by the creations of their leisure than by the

products of their work. Is there any hope that the fine culture achieved by the leisured classes in Greece, Rome, Florence, or France can be reached in a democratic age through the leisure of the people?

As psychologists, let us begin by inquiring—how do men and women actually spend their hours of ease? What drives them to choose this enjoyment or that? We may then perhaps predict the probable results of this revolution in our mode of life, and discover what kind of men and women are being produced, not only by the new conditions of employment, but also by the new conditions of leisure.

How instructive it would be if we could make a census of occupations during spare hours similar to the census of occupations that are officially called 'gainful.' No doubt to some extent we should find the same activities entered under both heads: one man's business is another man's hobby. Sometimes the pursuits taken up for holidays or evenings are just a continuation of the pursuits imposed by the man's own trade or profession. Read the story of any self-made celebrity—Edison, Lincoln, or Ford—and you will usually find that this is how he filled the empty spaces in his time-table, and rose over the heads of idlers to success and fame. But among the less ambitious the favourite leisure occupations are more frequently adopted, not as an extension of the man's work, but as an antidote to it. His choice is the result of a reaction; and offers him a loophole of escape from the dreary daily grind. During his

hours of relaxation the worker seeks to satisfy those human capabilities that are starved in the office or the factory. Where toil is heavy and tedious, tiring the body without engaging the mind, there his free moments will be mainly filled with amusements that are stimulating to the mind but restful to the body. He takes a plush-covered arm-chair at the cinema, buys a packet of cigarettes for himself and a box of chocolates for his companion, and prepares to revel in "moving accidents by flood and field, and hair-breadth 'scapes i' the imminent deadly breach."

In the United States about 120 million people attend the movies every week. Out of its whole annual income—so at least we are assured—the American public spends 13 per cent. on tobacco, 11 per cent. on candy, 10 per cent. on the cinema, 8 per cent. on sport (including pleasure-tours in motor-cars), 5 per cent. on what are called 'soft drinks,' 3 per cent. on the wireless, and only $\frac{1}{2}$ per cent. on books.

What has been the influence of all these innovations upon the modern world? Let us examine, to begin with, their effects on the different ranks of society. The most obvious outcome is the blurring of class distinctions. The types of amusement that were the monopoly of the rich are spreading in cheapened forms to the middle classes and the poor. Indeed, the working man of today can command a far greater range of sports and pastimes than the

wealthy of two centuries ago. And, however crude his use of it, he is beginning to value his spare time and to insist upon it. He demands the same holidays as his employer.

But there are other results almost equally evident. Travelling has been speeded up; and far more can therefore be got into a few short hours of freedom. The distance that the squire could cover in a day on horseback can be accomplished in less than sixty minutes in a motor-bus or char-à-banc. As a consequence, men and women of every class are beginning to swarm over the country and to 'do the globe' with the hustle of an American tourist. In going about, they mix with the well-to-do on almost equal terms. The bank-clerk travels to business or to sport side by side with the baronet. The shop-girl puts on her evening clothes and comes up by tube to the west-end restaurant. The poor can thus watch the rich, criticize the rich, and copy the rich. And so, in every town and civilized land, dress, manners, and customs are becoming more and more uniform.

The effect has been still further augmented by the appearance of the cinema and the radio. The humblest hovel has its aerial; and the poorest families pay their weekly visit to the pictures. On the screen they see how the wealthy behave (or at any rate how the producer at Hollywood thinks they behave, or, shall we say, how he thinks his public expects them to behave); and thus all the

world over a dominating pattern is set, and local differences are smoothed away. The radio brings dance-music, vaudeville, and an educated speech into the remotest cottage; a public school accent is no longer a dialect unintelligible to the masses, or mocked at as an affectation of the toff.

Not only are the barriers dissolving between one class and another; they are beginning to give way between country and town. Rural life is less cut off from city life. The towns have been brought nearer to the country, and the country has been brought nearer to the towns. Today there is hardly a village in England without a city, market town, or borough accessible by rail or bus. Picture the monotony of village life on a winter's evening a century or two ago. The farm hands might tramp down to the village inn; but the rest of the family had to huddle in one smoky room, lit with a tallow candle or a farthing dip, unable to read or write, and with very little to chat about. A hunt for witches in the dusk was welcomed as a grand, enlivening pastime after weeks of boredom. Throughout the nineteenth century the craving for interest and excitement drove the country population into the towns: now the tide has turned, and the spread of 'urban amenities' to the villages is converting the countryside into one vast suburb of the nearest country town. Today in the farthest corners of the land, the latest play, the latest news, the latest tunes, may be heard over the wireless or enjoyed

at the cinema. The man who works in Leeds or Liverpool or London can now live outside the industrial area, and travel to and fro by train or tram; or if he is forced to live next door to his place of business, he can easily escape from the smoke and clatter by going off for golf or for a hiking expedition during his brief week-ends.

The immediate results are obvious: a more animated mind for the rustic and a healthier body for the townsman. But, further, the whole world is being drawn more closely together, regardless of locality. Rich and poor, educated and uneducated, the citizen and the countryman, are sharing the same pleasures and participating in the same amusements. As a consequence, they have far more ideas and problems in common. When they meet, they not only comprehend each other's pronunciation; they also appreciate each other's point of view. And hence a new sense of fellowship is springing up. If the working man wishes to use his leisure for political purposes, he can use it with greater understanding and a better chance of being understood. If his son rises into a higher social sphere, the new life is no longer embarrassingly strange. The manners of today are the manners of a community of equals; and social intercourse, in all directions, is freer, richer, and easier, far less hampered by narrow conventions or by mutual suspicion and reserve.

Secondly, let us consider the effect of these changes on the two sexes. The typewriter, the telephone, and

all the novel conditions of industrial and commercial life, have brought with them new openings for women, and given them an independence and earnings of their own. The woman of today leaves the house for business; and naturally she wants to do the same for pleasure.

Nor is it the business woman only who benefits in this way. Our grandmothers used to lament that a woman's work was never ended; and their husbands retorted that the woman's place was the home. But modern invention has minimized work in the house quite as much as work in the factory. Electricity warms and lights our rooms; electricity cooks our meals; electricity works our lifts and our vacuum-cleaners. Children are fewer; and food—tinned, canned, or otherwise prepared—can be bought at the lowest prices. Hence the post-war wife or the post-war mother has far more time on her hands. She has as much leisure as her husband or brother; and demands the same latitude in using it.

What is the inevitable outcome? There is, first, an increasing equality between the sexes, and, secondly, a freer mingling of the two. Youths and young women go in pairs to the cinema or to the cheap dance hall. With the invention of lighter fabrics and the consequent changes in feminine attire, women and girls of every class can take an increasing share in sport, and can join the hikers on their rambles. As a result, the mental outlook of the sexes shows far less divergence than before; and

girls and youths know much more about each other than their parents did.

Thus, among the sexes as well as among the different social classes, life is tending towards the same general level. But there is a further change that I think we can discern. Although the average is becoming more uniform, within each group there is far more variety. Once different groups start mixing, their codes and customs clash, and begin to cancel out. The mill girl is no longer expected to dress always in clogs and shawls; nor are women of whatever class compelled always to wear skirts and never shorts or trousers. And all the world over, people are beginning to change their ideas and habits as swiftly as they change their costume. They try new foods; they fly to fresh places; they hunt for untapped sources of amusement. In every direction, old conventions are being discarded; and there is a new and vigorous disposition to experiment.

We have discussed the men; we have discussed the women; what about the children? I fancy that the most far-reaching change in the distribution of leisure consists in the added leisure that we now allow to the child. The proverbs so dear to our grandmothers—that children should be seen and not heard, or that the child would be spoiled if the rod was spared—have become almost obsolete, and are cited no longer. In school and out of it the modern child is encouraged to indulge his natural love of

free, unfettered activity. Work out of school hours—selling papers, trading in the streets, going round with the milk in the morning—has been rigidly restricted. The days of the child chimney-sweep and the little factory slave are gone for ever. Play centres and playing fields, cricket pitches in the parks, sports grounds just outside the town, country holidays for boys and girls when term is over, these and many other innovations all indicate that we are beginning to set a high value upon the child's use and enjoyment of his liberty. Education itself has been transformed by the introduction of what is called the play-way into the classroom.

But, however well taught, the traditional subjects of the curriculum are not sufficient to prepare the child for his future in the world at large. Indeed, when things have been made so easy in school, the youth may be tempted to hate hard work when it is forced on him, and to do nothing but loaf and loll as soon as work is ended. Education, we are told, should be an education for life; and a genuine education for life must include a training for leisure as well as for labour. A step is made in this direction when the school takes over the supervision of play-time as well as of the hours spent over the desk. Organized games now bulk largely in the activities of many modern schools. Outside the school the most significant movement has been the appearance of the Boy Scouts and Girl Guides. This also represents not only a new use of leisure,

but a new attitude towards it. The old motto has been silently transposed. Play while you work, and work while you play—that is the modern version: a sound psychological maxim that might be extended to adult life as well.

But what has altered the child's leisure most of all has been the cinema. What is the cinema doing for the growing mind? Is it encouraging the youngster to imitate the crimes he witnesses on the screen? Is it leading him to think that an ideal existence would be one frivolous round of fun—like the revels of a Hollywood star? Or is it giving him truthful pictures of the world at large, such as may help him to grasp more vividly all that he is taught at school, and to understand more clearly the conditions of life around him, and so prepare him to take his place in it more fitly as a full-grown man?

These and similar questions are part of a far wider problem. What is it that drives us all—men, women, and children—to spend our free hours in these seemingly useless activities? No other animal in the whole of creation puts such effort and such energy into proceedings so unnecessary. What is the motive? We commonly describe it as the search for pleasure. But that is false psychology. What these creatures are seeking is not so much pleasure as excitement, not happiness but thrills.

Now excitement is most easily got by stirring up the primitive instincts. In savage times these instincts found a full satisfaction in the day-to-day struggle

for existence—in hunting for food, in fighting the foe, in tramping off to find more fruitful pastures: without these inborn impulses neither the savage nor his tribe could have survived. But in the work of a civilized community—in the factory, the office, or the shop—such instincts are no longer needed. Yet we still inherit them. Nothing can stamp them out. They remain the deepest elements of our mental constitution. Hence they have to find their outlet in leisure and in play.

In the modern world, to provoke and to cater for these instincts has become one of the most lucrative forms of commerce. No appetite is neglected, no impulse is overlooked. The public-house and the restaurant exploit the needs of thirst and hunger, and turn them into pastimes. The music-hall, the dance-hall, the cheap novelette—all thrive by tactfully stimulating the universal instinct of sex. Boxing, football, cricket, every form of sport that involves rivalry or competition, spring largely from the instinct of pugnacity. The instinct of self-display finds gratification in dress. The instincts of curiosity and roving turn us into travellers and wanderers, gaping at all the sights. The herd instinct draws us in swarms to league matches, greyhound races, spectacles of every kind, or, when all else fails, to parade up and down the crowded lamp-lit streets. Gambling, betting, and the winning of newspaper prizes, depend on the forcible excitement of the acquisitive instinct, with the delicious prospect,

more or less fictitious, of its being rapidly and abundantly indulged. And finally there is the film, with wider possibilities than any other mode of stimulation, to provide us with ready-made daydreams, whereby, for a whole afternoon or evening, you and I can picture ourselves adventurous heroes or entrancing heroines—princes, millionaires, theatrical stars, according to sex and taste. It may be said, therefore, that all our leisure occupations tend to fulfil, usually in an artificial and imaginary form, those primitive cravings which in working hours remain ungratified and temporarily repressed. Indeed, the very monotony of industrial routine sets up, by an inevitable reaction, a feverish hankering for sensation: and these hectic delights are there to minister to it. Not joy but excitement seems to offer to the fagged and jaded worker the most natural remedy and the speediest relief.

What, then, must be the ultimate effect of this new thirst for stimulus upon the rising generation? Where is it leading us? Is it not breeding a light-hearted, irresponsible race, which seeks to drown the woes of drudgery, and to forget the imminence of the next world war, in a whirl of gaiety and fun? Have we not lost the intellectual seriousness of the high Victorian epoch? Are we not relapsing into a cruder, more primitive, more instinctive life?

We need not, I think, judge the post-war age too sternly. Could we but turn back and review the leisure activities of a hundred years ago, we

should find that the same instincts were at work in the majority, and often in far coarser shape. Is greyhound-racing a more degenerate pastime than cock-fighting or bear-baiting? Is the cinema more enervating than the public-house?

After all, if the instincts are there, it may be better for them to find some harmless safety-valve than to be summarily repressed. And further, as we saw in an earlier discussion, these instincts can be trained and enlightened. What is needed is a study of the best use of leisure. In the art of living we are most of us disillusioned bunglers from sheer lack of knowledge and practice. All the finer pleasures are acquired and cultivated tastes. To those who have it, the enjoyment of music, painting, and literature has generally come through some lucky accident. But why leave it to chance? The new generation must be deliberately taught how to make the most of its increasing hours of freedom. Take, for example, the creative or constructive instinct. There are some whose leisure hobbies definitely aim at creation or construction, or at acquiring the necessary skill. Why are they so few? These higher pleasures, if we only knew it, are at once the most satisfying and the most fruitful. Some of the greatest achievements of the past were the outcome of men's leisure moments. The greatest writers, the greatest scientists, and the greatest painters and musicians have often been men who cultivated the thing for which they were famous in their own spare time. Keats was a

chemist's assistant; Charles Lamb a government clerk; Matthew Arnold an inspector of schools. Most of them looked on what we call their work not as work at all, but as an absorbing pursuit for their hours of relaxation. You may remember how Queen Victoria was so entranced by *Alice in Wonderland* that she asked for the next book published by the same author. She was horrified to receive a volume on the *Fifth Book of Euclid Treated Algebraically*. The thought had never occurred to her that *Alice in Wonderland* was just a holiday pastime of a college tutor whose regular duty was to prepare the Oxford undergraduate for mathematical degrees.

Already, there are signs that the new generation is beginning to take itself more seriously: in Germany, in France, and to a less extent in England and America, 'youth movements' are springing up, not imposed upon the youths from outside, but organized spontaneously by the youths themselves.¹ In some cases, it aims at 'a return to nature'—a quieter, healthier, less urbanized life; in others it aims at social reform. Moreover, what happens in the school when free discipline is first introduced is likely to occur in the newly emancipated classes: a phase of riotous licence and pandemonium first of all, then a search for more satisfying activities. I know a young bricklayer whose one resolve is to

¹ These talks were written before the Nazi revolution in Germany: but that movement is itself in part an outcome of the reaction here described.

write good English in order to compile a first-rate treatise on architecture in brick; I know a taxi-driver whose great ambition is to master every instrument of music. I do not offer them as models; but they assure me they find far more fascination in these new hobbies than they ever discovered in cards or crossword puzzles.

And their psychology is much sounder than the psychology of those who think pleasure can be obtained without working for it—by just shutting the eyes, and opening the mouth, and passively expecting delight to drop in like a child at a Christmas party. It is a paradoxical law of our feelings that pleasure in itself is never so consoling as a pleasurable pursuit. The deliberate swallowing of enjoyments resembles the deliberate drinking of brandy or wine: mental excitement, like cocktails and cocaine, soon palls, and leaves behind a deeper boredom than the boredom it was meant to kill. You need larger and stronger doses to get an adequate kick.

Pleasure is not a goal: it is a cul-de-sac. The surest way to reach happiness is not to drive directly at it. Joy cannot be bought with pounds, shillings, or pence, as you purchase an icecream or a ticket to Monte Carlo. It overtakes you, unsought and unexpected, while you are engrossed with something else. Aim, therefore, at leisure occupations that will yield an increasing, not a diminishing, gratification. You will find them chiefly in the progressive acquire-

ment of skill or in the progressive construction of some more or less lasting monument of your ideas and your activities. Of all pursuits, the most satisfying are those that lead on from one little triumph to another without ever coming to a dead end. Learning to play a game is far more enthralling than mere watching. Learning to see new beauties is a joy for ever. Trying to create them is best of all. But all this, of course, means work, steady strenuous work, not indolent passivity; voluntary work outside the time-limits for which you are paid, yet work which is no mere drudgery because it is work in the line of each man's special interest.

Thus, as time goes on, the individual's main contribution to his own development, and even to the life of the community, may come not from his hours of labour but from his hours of leisure; and, ultimately, as leisure enlarges, the whole distinction between leisure and labour may tend to disappear. And so, when we reach Utopia, we shall find ourselves in the paradise described by the mad priest—"the commonwealth where work is play and play is life: three in one and one in three."

XV

THE PSYCHOLOGY OF ART

THE psychology of art embraces two vast problems—the creation of beauty and the enjoyment of beauty, or, in other terms, the psychology of the artist and the psychology of the spectator. Let us take the problem of the artist first.

I

Art has been hailed as “the supreme manifestation of the human spirit”; and the artist himself has been extolled as an inspired and heaven-sent genius above the rank of other mortals. Hence the question that confronts the psychologist at the outset is this: is the artistic impulse a unique faculty and a special gift, or is it merely a kind of by-product that has grown quite naturally out of ordinary mental processes, such as every man and woman possesses, and such as enter into our commonplace, day-to-day transactions? With this issue in view, the methods and the motives of the artist have been closely studied along scientific lines. Goethe and Zola, Byron and Keats, Wagner and Beethoven, Turner and Leonardo—the lives of these and many others have been re-examined and compared; nothing has been neglected that might throw light on their

mental development or their special work. The psychologist has even enticed poets and painters to his laboratory, to measure their sensitivity and test their intellectual powers. From all these various sources the answer to our question is the same. As regards both general intelligence and specialized capacity the artist certainly is a man of rare innate endowment: yet the difference is one of degree rather than of kind. The ability to create a work of art, like the ability to appreciate it, is dependent upon no additional faculty that stands apart from the rest of our daily life. Although on a higher plane, it is simply one particular outcome of the natural working of the mind.

The problem would seem less puzzling if we could trace art back to its earlier sources and see how it originates. Here the psychologist can glean much from the records of the first artistic impulses in the savage and the child.

All art, it has been said, is in its origin simply a form of play. The man who makes a tune and the man who listens to a tune are both engaged in a kind of game. They are playing with their emotions. Primarily our emotions are given us, not for their own sake, but for the practical consequences to which they spur us on. Every feeling, every idea, tends to force itself out in action: sometimes the action is useful, and we call it work; but sometimes it seems superfluous, and then we call it play. On this principle, even a football match might be

classed as an artistic production: dancing lies almost between the two; in a post-war ballroom you are never quite sure whether you are assisting at an ancient form of art or at a modern form of sport.

The point of resemblance is this: art and play both seem useless—exciting, passionate, emotional, but useless. That is why our Victorian grandmothers frowned so suspiciously alike on artists and on amusements. Play was not work; therefore it was waste of time: art was not business; therefore it should be despised. Hence no age, I imagine, has been at once so prosperous, so moral, so scrupulously scientific—and yet so inordinately ugly.

Up to a point their arguments were sound and cogent. Both in play and in art you are exciting your instincts and emotions—yet all to no obvious practical end; and the analogy becomes plainer still when we examine a few instances of each in the behaviour of the growing child.

Suppose a huge Alsatian comes yelping after your small daughter: the creature's size and noisy bark will arouse in her a natural instinct of fear, and her fear will automatically vent itself in flight and screams for aid. Here both the movement and the cries are useful, since they help to rescue her from danger. But suppose now you pretend to frighten her by jerking her teddy-bear up to her face: the child may positively enjoy the little thrill of fear; and when you say 'Bo!' she shrieks with delicious alarm, and shouts, 'Do it again, Daddy.' Now you are both

just *playing* with fear. Yet this little drama that you have invented is something more than an idle pastime. In these playful experiments the child is practising for the more serious situations of later life: she is learning how to control and how to use her emotions. And that, as we have seen in an earlier chapter, is why Nature encourages us to play.

Mary, however, need not wait for her father or the dog to stimulate her emotions. When the sun is shining, she may feel so gay and full of life that she starts skipping and humming to herself. She thus gets rid of surplus energy; and, by the self-same action, she braces her slender muscles and heightens her merry mood. The ebb and flow of her feelings will weave her movements and her utterances into a pattern of their own—into gesture and dance and song. And thus, in these playful cries and motions, we see, spontaneously arising, the earliest forms of art.

It is more especially when our exuberant emotions have no essential work on which to occupy themselves that they tend to vent their energy in expressive exercises of this sort. This is the regular state of the tiny child; with his needs supplied by others, he is free to romp and play. Let us go back to the first example. When Mary, who had escaped for a moment from parental protection, ran home again, panting with fright, and calling out—"Daddy, shut the door: there's a big dog coming," her statement was neither a game nor an artistic effort; it was a record of fact and an earnest appeal. But in the

evening her fears return. This time she knows herself safe in the nursery. So she relates her adventure once again, partly to dispel the last relics of her terror, partly to enjoy the excitement afresh in comfortable retrospect. Now her story is turning into a work of art. It is, as Wordsworth puts it, "the expression of an emotion recollected in tranquillity." And soon other motives begin to join the first—the instinct of self-display (showing off, arousing interest in one's own experiences), the social instinct (the desire for sympathy, the urge to communicate one's experiences to others), the constructive instinct (the fun of constructing or creating something new). More or less unconsciously, she embellishes her actual adventure. The dog, she says, was "almost as large as an elephant," and "its eyes were shining like bulbs." In fact, she might almost be making the whole thing up. But whether the story is true or whether it is sheer fancy, the main incentive is still the unnecessary, pent-up fear. Her utterance is no longer a call for help, but a means of relieving her emotional tension by some kind of outward expression. Its function, as Aristotle would have told us, is to purge her mind of its troublesome feelings. If Mary had not worked off her shudders in this way, she would probably have had a nightmare that very night.

The artist in his studio, the poet at his desk, are not unlike the child in the nursery. Each, in creating his work of art, is ventilating a superfluous emotion that finds no adequate satisfaction in the actual

world. The reader, the spectator, the appreciative listener, is doing much the same for himself with the aid of the artist's superior skill. Neither artist nor poet is concerned directly with immediate facts as they are. They are not trying to plan out something useful for to-morrow. They are not trying to record the events of the day. That is why we sometimes call a work of art a work of the imagination. It might be better to risk a paradox, and speak of it as a work of play.

Yet, like all other forms of play, artistic playing may be of indirect service. In a roundabout fashion it arises out of the past, and expresses a doubtful wish about the future. It is a compensation for what we have yearned for and have failed to gain. It provides an outlet for unappeased emotions, and at the same time helps us to rule and to regulate them by first exercising them in imaginary situations. As every teacher knows, we nowadays believe that even children's games fill an essential function in their emotional training: and art, too—artistic self-expression and artistic appreciation—should be given a large place in the school curriculum as a means of developing wholesome aspirations and of refining the cruder feelings. I do not suggest that this is the sole reason for its practice: but I urge, as strongly as I can, that it is of psychological importance to cultivate all sides of our humanity—the sense of beauty, as well as the sense of goodness and of truth; and I contend that an artistic educa-

tion, helping as it does to form the character, is a necessary supplement to a scholastic instruction which, in its current form, tends to be preponderantly linguistic, scientific, or practical.

From our study of the child, then, we reach this fruitful conclusion. All art has its origin in some powerful emotion that finds no natural outlet in the biological or business needs of everyday life. And this leads us to a second point—a point brought out more clearly by the study of the civilized adult. In many respects art forms a kind of wish-fulfilment. The Londoner hangs Constables and Leaders on his walls because in looking at them he escapes for a moment into the country. Rubens with his *Garden of Love*, Watteau with his *Island of Cythera*, Turner with his pilgrimages to Italy where the sky is always blue—are inviting us to embark for the land of the heart's desire. And so we may be tempted to declare that a picture, like a poem or novel, is often a kind of realized daydream—a daydream which we show to another or set down on paper or canvas.

The psycho-analyst's examination both of dreams and daydreams has shed a flood of light on the working of the mind in the artist. The comparison lays bare one vital fact. The creative work of an artist, like that of the daydream, is to a large extent an unconscious process. What seems to be a simple flash of inspiration or a unique creative impulse, proves on a closer scrutiny to be exceedingly complex—the product of numerous impulses, working

below the conscious surface. These impulses continue their work unconsciously just because they have been repressed; and their effects appear simple and inexplicable because their sources remain concealed. Once recognize that the mind, even in its ordinary everyday problems, continually carries on unconscious trains of activity, and the mystery of artistic construction disappears.

This, indeed, is the explanation which the artist generally gives. "The great creative writer," says Stevenson, "shows us the realization and the apotheosis of the daydreams of common men. His stories may be nourished with the realities of life; but their true mark is to satisfy the nameless longings of the reader and to obey the ideal laws of the daydream." Elsewhere he relates how he himself came to write that exquisite work of art, the story of *Dr. Jekyll and Mr. Hyde*. The process is described in his *Chapter on Dreams*. "The real work," he says, "is done by some unseen collaborator whom I keep locked in a back garret . . . by the little people of the brain, who do one-half my work for me while I am fast asleep, and in all human likelihood do the rest for me when I am wide awake and fondly suppose I do it for myself. For myself—what I call I, my conscious ego, the man with the hat and boots, the man with the conscience and the disappearing balance at the bank—I am sometimes tempted to suppose he is no artist at all, but a creature as matter-of-fact as any cheesemonger or any cheese."

This picturesque account is amply confirmed by hints from other writers. "Was it really I who wrote that?" Voltaire once exclaimed as he sat in the *loge* watching his own play. George Eliot, whose philosophy by no means disposed her to believe in supernatural psychic powers, declared that, while she was writing *Adam Bede*, it was "as though another mind had taken possession of her pen and guided it." Coleridge is said to have composed his best-known poem while drugged with opium, and Blake his greatest pictures while in a 'state of active sleep.' Goethe himself asserts that he wrote his finest novel during a dreamy trance which he compares with that of a somnambulist.

Or, if we seek evidence from living writers, Professor Housman is ready to tell us in what way his own poems were written. "I think," he says, "that the production of poetry is less an active than a passive and involuntary process." And he goes on to explain how the inspiration came to him for *The Shropshire Lad*. "Having drunk a pint of beer at luncheon—beer is a sedative to the brain, and my afternoons are the least intellectual portion of my life—I would go out for a walk. As I went along, thinking of nothing in particular, there would flow into my mind, with sudden and unaccountable emotion, sometimes a line or two of verse, sometimes a whole stanza at once, accompanied, not preceded, by a vague notion of the poem as a whole. Then there would usually be a lull, and perhaps the spring would

bubble up again. I say bubble up, because the source of the suggestions thus proffered to the brain was an abyss"; and he humorously adds that he thinks the abyss must have been "the pit of the stomach."

All this fits in very aptly with the studies of the psycho-analyst. We need, therefore, no longer hesitate to accept the psycho-analyst's main conclusion—that the best poems, the best stories, and the best pictures, are largely products of the mind's unconscious working. You may be tempted to suppose that this is but another way of expressing the time-honoured belief that genius and madness are closely akin. There is, to be sure, a broad analogy between the fancies of the madman and the 'fine frenzy' of the artist. But that does not mean that every genius must be mad. And I am far from maintaining that the artist is nothing but a neurotic daydreamer like the Bulpington of Blup.

In the highest forms of art, the emotions seem to be far more disinterested and impersonal than those egoistic yearnings that give rise to our morbid little daydreams: such pettiness is just the stuff of which the popular film and the cheap novelette are made. In the greatest works we may certainly discern that singular detachment from immediate needs which we find in these states of half-unconscious reverie; but it is carried to a higher degree, and works on a loftier plane. In some corner of the universe the artist's eye has been caught by a dance of light and

colour: and this glamour seems to give the objects and their history some deeper meaning in and for themselves. It is simply his absorption in this deeper meaning that makes the artist seem at times abstracted, irresponsible, remote, an absent-minded dreamer lost in ethereal visions.

Yet it is this deeper meaning, sought quite apart from all selfish desires and all wish for effective action, that is the concern of the highest art. For the artist the tree is no longer a piece of timber to be cut and sold for a price; the sunset no longer a meteorological phenomenon, prognostic of tomorrow's weather. Each is felt to be something possessing a value just as it is seen; and, to bring out this visible value, and to emphasize this meaning, the artist (like Mary in her story of the dog) may modify, distort, and idealize. He will simplify the lines, and accentuate the hues and harmonies. If you ask him why, he will either shrug his shoulders and say he cannot tell, or else perhaps talk in mystical language about the aesthetic experience that he had as he looked out of his study-window at the chequered leaves, and how he is trying to set down and fix that experience on his canvas. Unlike the practical man, his interest lies in contemplation rather than in utility, and he is concerned with a different set of values.

We detect much the same motive in poetry, most of all in the great tragic dramas. In tragedy there are no crude wish-fulfilments; no happy

endings; no cheap poetic justice to hide the cruelties of actual life. But once more some deeper meaning is dimly implied. The deaths of Othello and Cordelia somehow convey to us that pain and failure are not so final as we thought; that they belong only to a fragment of reality wrongly taken for the whole, to a part of some wider totality that lies beyond our view: so that, could we but see the tragic facts in their true light and full perspective—as, indeed, the poet in some measure helps us to do—we should find them, not of course abolished, but in some way transfigured and transcended. Thus the aim of the tragedy is not (like that of the daydream or the popular romance) to *compensate* for the hardness of our lot, but to *reconcile* us to its hidden nature. That is why a tragic ending does not plunge us, as we might expect, into a mood of deep depression; on the contrary, it evokes, paradoxically enough, a kind of cosmic exultation—an exultation which, we may be sure, the poet himself, in some sharp moment of his life, must have first intensely experienced.

Whether this, too, is more than an amiable illusion, a trick played by the clever manipulation of our feelings, is a problem for the philosopher rather than the psychologist, or perhaps indeed for personal faith and temperament rather than for science. Be that as it may: the psychologist's matter-of-fact inquiries leave no doubt that the true artist, the sensitive soul with the poetic vision, does have

some sort of spiritual thrill, a thrill that has nothing to do with the hum-drum claims of earthly existence. The artist may regard that thrill as something worth having in and for itself: or he may regard it as conveying a genuine glimpse of ultimate values, of a real worth-while-ness somewhere at the bottom of life and the universe. But, however he explains its origin, it is this thrill that he wants to express in his picture or his poem.

Art, then, to put it in a single phrase, is essentially a mode of expression. Now all expression, in a sociable creature like man, is at the same time a form of communication. What is it that art communicates? We have already had glimpses of the answer—experience: the artist imparts his experience to us: for we, by re-creating that experience with his aid, live through it again for ourselves. And thus the psychologist must turn next to study the experience of the listener or spectator. What does he feel when he contemplates a work of art, when he looks at Botticelli's *Venus*, or listens to Bach's *Fugues*, or reads the plays of Shakespeare? And so we come to the second of our two main problems—the psychology of artistic appreciation.

II

The most fruitful experiments on artistic appreciation have been carried out by a device that psychologists have termed the method of paired comparison.

Two pictures, two vases, two poems are placed before you ; and you are asked to say which you like the best and to give reasons for your choice.

It seems a simple experiment. Yet it has led to most pregnant conclusions. Indeed, it would be impossible in one short chapter to summarize all the results of these fertile researches. The main outcome is to show that our mental attitude towards what we take to be an object of beauty is exceedingly complex, and differs in different persons. In this country the earliest and the most important investigation was carried out by Dr. Bullough in the psychological laboratory at Cambridge. Experimenting first of all with plain colours, he found that there were four common ways of judging, and was therefore inclined to suggest that persons may often be classified as belonging to one of four main types. A single colour does not itself form a work of art : it is only one element in the whole. But similar experiments have been made with material of different or more elaborate nature—with musical tones and chords, for example, and with poems, melodies, and pictures ; and the results have generally revealed types and tendencies of a similar kind.

1. The commonest type is termed the *associative type*. A man's preference is determined, not by the colour, the music, or the picture itself, but by the associations it arouses—the vague memories and joys that it brings back to his mind. One person dislikes red "because it reminds him of blood."

A second explains that he prefers a pale and rather faded yellow-green "because it reminds him of leaves in the autumn." Another declares she "loves the minor third because it sounds so like the cuckoo in the spring."

Such motives appear to be rather more frequent (at any rate in clear and conscious form) among women than among men; and they come most plainly to the surface in the comments passed by children. "I like the picture of *Adam and Eve* best," said one little girl to me, "because, you see, I know the tale." "I liked *The Boyhood of Raleigh*," said her younger brother, "'cos we have it in our nursery." Their mother's favourite was *St. Michael's Mount*, "because," said she, "we went there for our honeymoon." Similarly, music suggests to such persons a romantic scene or story. "Chopin's *Funeral March* makes you see the procession: first you hear the tolling bells, and then the soldiers' tramp dying away in the distance."

With furniture, and objects of industrial art, the most natural associations are ideas about the article's purpose or use. Here, therefore, many base their preferences, not so much on the visible design, but on speculations about efficient functioning. "The first chair is the best, because it would be so comfy to sit in." "You can see how nicely that teapot would pour out." Even colours have their uses: thus a woman will declare that she "likes that shade of blue because it always suits me," or "goes

so well with my complexion." Many psychologists have even declared that our sense of beauty springs solely from associations of this kind—associations with what is easy or pleasing. We think red cheeks are beautiful, because they are a sign of health; we think red hands are ugly, because they remind us of hard work at the washing-tub.

✓ Now it must be admitted that much of the success of the artist depends on his skill in evoking associations in other people's minds—in arousing echoes, images, and feelings that in some way answer to his own. This is most evident in literature: and it leads to a singular paradox. The writer has to build up his book with the contents of *our* brains rather than his own. The reader's mind is the author's box of paints. But the same is true of every art. The inventive musician may be as deaf as Beethoven: for a symphony really consists of the sounds the audience hears, not of the sounds originally heard or imagined by the composer. To him those are simply a guide. And if this is true of the initial sensations, how much more is it true of the meanings and moods which those sensations are intended to call forth. Thus, in art, the act of communication turns out to be a process unexpectedly complex and singularly indirect.

2. In one sense, therefore, we all belong to the associative type. But in some the associations come right to the front; in others they are less explicit, or take on a more specialized form.

Among these latter we may distinguish a second and a smaller group—those who try to explain their predilections, not in terms of memories or associated ideas, but rather in terms of the peculiar psychological effects which sounds and colours have upon them, effects which they describe in physiological or emotional terms. "That crimson is so warm," they exclaim; "that green so restful and soothing"; "the yellow dazzles the eye"; "the vermilion makes you feel hot all over." They say of Raphael's *Madonna and Child*, "What a lovely girl," and "What a chubby little baby"; or of the C minor Symphony, "How that 'knocking on the door' strikes a cold dread into your heart." This group has been variously called the *physiological* or *subjective* type. Chords, tunes, and pictures are relished because of the sensuous instincts they excite. The infant Samuel, Psyche at her bath, the doctor by the dying child, the battle-scene, the storm at sea, Hogarth's marriages *à la mode*—these gently touch the man's parental or sexual emotions, or rouse a twinge of laughter, sympathy, or fear. One recurrent note is a gushing admiration at the artist's skill: "It might be a photograph!" "Don't the fur and the pearls look real?" "You could almost eat those grapes." These are with many the richest terms of praise.

Commercial art appeals largely to these motives. The views of Venice on the railway poster, the snow-clad churches on the Christmas-cards, the

luscious girls on the chocolate boxes, they have all been chosen by the advertiser for the emotional interests they arouse, not for the inherent merits of the painting. If you watch the prices fetched by works of art, you will find that the millionaire will often pay more for a sentimental nymph or a simpering child by Greuze than he would for a wizened greybeard from the brush of Leonardo or Rembrandt.

In this motive we have the germ of another modern theory—the theory that art is not concerned with beauty, but is simply the expression of emotion. And by emotion is meant, not the single, simple reaction to beauty, but any concrete emotion to which human nature is prone. No doubt, much that passes for art is primarily concerned, not to express or arouse *aesthetic* feeling, but to express or arouse *instinctive* feeling. We might even admit that aesthetic feeling, like logical or moral feeling, has developed out of the cruder emotions that attend the primary instincts, and that it is still largely fused with the latter; yet the final distinction remains. Aesthetic feeling is concerned with the value that an object or experience has in and for itself: instinctive feeling is concerned with the value of that object or experience for our practical terrestrial life. In the first case our standpoint is really metaphysical; in the second case it is really biological. Once more, therefore, the theory seems to have seized on only one psychological factor out of many—the factor,

perhaps, that lies uppermost in the temperament of the theorist himself.

3. A third group in their comments attribute a kind of personality to whatever they see. They have been named the *character type*. "What a jolly fat jug!" says one child; "it almost seems to be laughing at you." Even colours are described as though they had human qualities. "That yellow is too aggressive"; "this scarlet too loud and frivolous"; "that pink so sweet and demure"; and one person speaks of "a very coy shade of blue." To these romantic natures a willow is not a willow, it is a weeping dryad; a stream is not a stream, it is a water-nymph. They will say that the sea 'looks angry' and the landscape 'smiles.' Even a line is no longer a line but something alive with a movement of its own. Spires they always think of as soaring nobly upwards; and they revel in the seagull's flight, because they can feel in their own bodies the sensations of its graceful plunge or light and buoyant poise. For them, it would seem, the actual things depicted always embody some personal experience into which they themselves can enter with a kind of active sympathy. The imagination, as Ruskin puts it, "rejoicing in its own life, puts gesture into clouds, and joy into waves, and voices into rocks."

Watch a group of spectators absorbed in following a difficult feat—gazing at a gymnast swinging over a trapeze, or at a billiard-player sending a ball into the pocket: you will often see them hold their breath,

and make little movements of their own, as though each one was himself the acrobat snatching at the bar, or the rolling ball striving to swerve towards the corner. When the band strikes up a syncopated dance, they start swaying their shoulders in unison. At the cinema they visibly flinch when the villain lashes the heroine with his whip or tortures her young brother with a red-hot iron: and afterwards they will explain how they were themselves transported into the picture and felt the blows and burns on their own tender skins. Even with simple material they still project themselves into whatever they look at: a vertical straight line makes them stand up erect; a slanting line causes them to droop or to feel as though they were toppling over; a pattern of coiling spirals turns them sick and giddy. This experience, which in some is so marked as to be morbid, is probably confined to a limited number of persons only. But it has given rise to an important theory of art; and is technically termed *Einfühlung* or Empathy, that is, not a feeling *with* (which is sympathy), but a feeling *in*, the picture or the object. According to this view, what is imparted to the spectator is not so much the *artist's* experience, as the experiences—the imaginary experiences, of course—of objects he portrays.

4. The last type, and the rarest, is definitely *objective*. The persons in this group adopt an attitude that is intellectual and critical rather than emotional. Where others are voluble with praise, they stand

silent with wonder. With colours their preferences are based on the quality of the colour as a colour, and not on its associations or effects. They like this ultramarine "because it is such a pure blue"; they dislike that cobalt "because it is too dull." In the clearest instances they seem to possess a definite standard of what each colour ought to be, and judge the tint that is shown them according as it comes up to, or falls short of, their implicit ideal. "That green has too much yellow in it to be a really good green." "I like that red; it seems so rich and saturated: the other was almost brown." With pictures they often pass over the subject and the title, and speak rather of the arrangement and the composition, of the hues, the harmonies, the light and shade. This group is the smallest of all; and is always far harder to please. They are not necessarily the persons with the best aesthetic taste. But their comments suggest one broad, psychological criterion: the aesthetic mind not only seeks and is satisfied by beauty; it also suffers, far more acutely than the rest, from the spectacle of downright ugliness.

Here, then, are the four main types which earlier experiments along these lines have tended to disclose. We might summarize each type as follows. Their comments reveal that their chief interest lies—(1) in the thing actually shown (the objective type); (2) not in the thing shown, but in its effects upon themselves (the subjective type); (3) not in the thing

shown but in other recollected things that this thing brings back to mind (the associative type); (4) in the thing regarded not as a mere thing, but as a living personality (the character type). Later experiments with more complex material show that the groups are not sharply defined. Each of these four tendencies, indeed, may be discerned in nearly all of us, according to our mood and the type of object presented. The difference is thus a difference rather of predominance or degree, not strictly of types or of mutually exclusive classes. And eventually, no doubt, the original classification may need much rearrangement both in principle and in detail. So far as it goes, however, it serves to illustrate, in simple and suggestive form, the methods and the chief results of a psychological approach.

The main outcome of all such researches is one undeniable conclusion. The majority of people, when asked to judge the beauty of an object, seldom really think of its beauty at all. They offer not aesthetic judgments but personal judgments. All kinds of irrelevant factors seem to affect them. And if we are thus swayed in our conscious explanations, what a bias must be introduced when the same factors move us unawares!

It is largely on grounds such as these that many critics and psychologists have maintained that beauty is purely subjective, and that artistic preferences are simply a matter of private and personal taste, varying with the individual or the age. Last

year's fashions are this year's vulgarities. The would-be Gothic churches, built with so much fervour during the reign of Ruskin and Victoria, are eyesores to some of us today. Our parents, brought up to feel at ease on sham Jacobean chairs and to dine at old oak tables, are horrified when the up-to-date young man invites them to perch on a seat of plated steel and to eat from a large round sheet of glass. Aesthetic crazes come and go; and in art, it is argued, all is relative: "there is nothing either good or bad but thinking makes it so."

Suppose, however, that we could brush aside these irrelevant associations—the fashions, the fancies, and the fads that so obscure our sense of beauty: suppose we could completely detach ourselves from personal emotion and from private interest, and sweep away the practical preoccupations and the intellectual questionings that the biological or business needs of daily life render so importunate: would there be any solid ground of preference left? Is there anything which everyone would find beautiful in and for itself? Is there anything which everyone would find ugly, no matter whether he was civilized or savage, an adult or a child, an ancient Athenian or a post-war Londoner?

I believe there may be, on experimental as well as on theoretical grounds. Some years ago, in order to test the artistic preferences among different types of people, I collected a sample set of fifty picture postcards. They included reproductions

from classical masters, second-rate pictures by second-rate painters, every variety and type down to the crudest and the most flashy birthday-card that I could find at a paper-shop in the slums. The test consisted in arranging the fifty cards in order of preference. My object, first of all, was to get a standard for comparison by showing the series to competent artists and art-critics. Nearly all of them began by protesting that such a standard was impossible. The Royal Academician declared that the modernist would completely reverse his order; and both were quite sure that any approach to agreement was wholly out of the question. To my amazement, their actual orders were much the same throughout. The average correlation was nearly .9. All that happened was that the Royal Academician would put a landscape by Leader rather near the top, whereas the modernist might put it tenth or fifteenth—but well above the commercial horrors of the stationer's shop. Some put Raphael first, and the primitives fourth or fifth; others put the primitives first, yet Raphael was never far down. It became clear that the differences in their taste and judgment were far smaller than their warm disputes and discussions would lead one to suppose. The conclusion, in short, was irresistible that there was something fundamental guiding their general choice, although their special theories or private points of view might produce a few minor divergences.

This, indeed, conflicts with the assumption of most modern critics. Yet several high authorities could be quoted to the same effect. Let me cite but a single passage from Burke—a striking conclusion, strikingly put, from his inquiry into *The Sublime and Beautiful*. Readily admitting that the experts' judgments on beauty may differ as much as they would on questions of philosophy or virtue, he nevertheless insists that "on the whole, we may observe that there is rather *less* difference upon matters of taste among mankind than upon those which depend upon the naked reason: and men are far better agreed on the excellence of a description in Virgil than on the truth or falsehood of a theory of Aristotle."

When I turned from the expert adult to the young and the untrained, and tried my pictures with them, I found the influence of irrelevant factors far more obvious. The subject of the picture began to play a supremely important part. Boys of ten, for example, would put the horse-guard, the battle scene, or the railway engine very near the top; while girls would single out the kitten or the rosebuds. Nevertheless, the subjects I had chosen were so varied that with a set of fifty postcards their special influences more or less counterbalanced each other. Hence, by correlating the order furnished by the individual to be tested with the average order furnished by the art-critics and taken as a standard, I could obtain a coefficient which might be accepted as a

measure or 'mark' for that individual's taste. In the main the average coefficient increased steadily with the child's age. Adults, however, except those with prolonged artistic training or with a peculiar gift of artistic sensibility and detachment, still fell far short of the true standard—so far as any standard could be designated true.

Two results, in the experiments on children, appeared especially significant. First of all, the coefficients were almost invariably positive: thus there seemed to be some one, general, underlying factor influencing the artistic judgments of all. Secondly, some of the youngest children—those below the age of eight—came very near to the order of the artist and art-critic. As we grow up, it would seem, our artistic vision declines. We become increasingly short-sighted: we lose the native innocence of the eye. Growing more and more sophisticated, concerned more and more with efficient action, we come to look beyond the mere visible appearances to the practical meanings they convey.

Have you ever gazed at a distant prospect upside down with your head bent low between your knees? If so, you must have been astonished to find a rich variety of colour to which your ordinary upright view is altogether blind. As you stand upright, you recognize at once which is smoke and which are the hills; and you know (or think you know) that smoke is really black, and so miss the delicate purple; you know (or think you know)

that those rocky peaks are really grey, and so miss the tender blue which the distant haze spreads over them. Look at the sea through the porthole of your cabin and you will be surprised at the deep blue-green: from the deck it may look (as one passenger put it) "just like water, and dirty water at that." Thus knowledge and experience lead to a more prosaic apprehension: we see what we know to be there, not what is there to be seen. We are forced to think of fields and flowers and forests, not as containing a possible value in and for themselves, but as being biologically useful, useful for our limited and earthly needs. We are like the Kaffir lad who picked up pebbles to pelt a comrade, and failed to notice they were diamonds.

This unromantic outlook grows on us as the years pass by. Nearly every schoolboy leaves school weaker in his artistic sensitivity than when he went there, and what little remains is knocked out of him by the first few years of hard-headed business. Every one of us is born an embryonic artist. It is only that our practical needs—the requirements, the preoccupations, the memories of everyday life—tend to cloud our early and more direct vision.

What happens to the schoolboy as he enters industry or commerce seems to have overtaken the British nation on entering its industrial and commercial phase. The result has largely defeated its own purpose: British goods are now so ugly

that, abroad at any rate, they are failing to sell.¹ At home the manufacturer blames the bad taste of the consumer; and the consumer the bad taste of the manufacturer: while the aesthete declares that the British as a nation must be wholly destitute of artistic sense. No psychologist, however, could possibly agree that a national taste which was flourishing in the seventeenth and eighteenth centuries could really have been stamped out during the nineteenth. The capacity, the sensitivity, must still be there, latent and innate: it simply fails to be sustained or to develop.

If, then, the sense of beauty is more or less universal, if, apart from obscuring factors, it operates to much the same effect in all, it would follow that beauty itself is not wholly dependent upon personal interest or whim. Indeed, the modern philosopher seems now to be returning to the earlier view—that beauty is objective, or at any rate that judgments of beauty may rightly claim to be universally valid. With this, I think, the psychologist must ultimately agree. We see beauty, because it is there to be seen. It is not something we invent or imagine for ourselves; it is something we feel and find. In short, it resides in the object.

This is by no means the accepted view among

¹ This, of course, is doubtless but one factor: see, however, the *Report on Art and Industry* by the Committee recently appointed by the Board of Trade under the Chairmanship of Lord Gorell.

critics and earlier philosophers who have written about beauty. Until recently the trend of modern opinion was in the opposite direction: beauty, it was argued, is not a quality of external things, whether trees or flowers, poems or pictures.¹ It is the fleeting effect of a state of mind. 'Beautiful,' like 'lovable,' is used to describe a quality which we have naively projected into the object; actually it only states the object's effect upon ourselves. A knife is not painful until it hurts; and similarly a sunset is not beautiful until someone feels an aesthetic joy in looking at it. And that, it is added, is why taste varies: where I see beauty, you may see deformity, because, while I feel attracted, you feel repelled.

As a matter of fact, however, all the arguments which prove that beauty is a state of mind and nothing else could be used, and have been used, to prove that the whole external world—all physical objects and their material qualities—colour, sound, taste, and touch—are states of mind and nothing else: and further that truth itself—the validity of a logical deduction or of the tables of multiplication—is just a subjective consequence of our own human modes of thinking. This line of reasoning, therefore, proves too much, for it proves its own invalidity: the subjectivist is really sawing off the bough on which

¹ The interested reader should consult I. A. Richards' discussion of this point in his *Practical Criticism* (especially pp. 358 *et seq.*), and should study the influential views of Croce and the more recent criticisms of them.

he sits. As regards truth and the material qualities of objects, psychology now has a fairly convincing retort. As regards beauty and aesthetic qualities much the same reply could serve. It is perhaps too technical to enter into here;¹ but it could, I think, be easily adapted to demonstrate their actual independence of the mind, or at any rate to show that there is no longer any a priori compulsion for us to accept an extreme subjective view.

Let us assume, then, that beauty is in fact objective. In what does it consist? What precisely is the quality which the sense of beauty enables us to perceive?

¹ Briefly the reply is this. The subjectivist contends that I can only know the existence of an object—the table, for example—by perceiving it. Hence the table is really nothing but one of my own perceptions. The hardness that I feel is not the hardness of the wood, but of my touch sensations. The reply consists in distinguishing *what* I perceive from the *act* of perceiving it—‘perception’ in the sense of a percept from ‘perception’ in the sense of the process of perceiving. The table is something perceived, and must not be confused with the temporary means whereby I come to perceive it. Perceiving, and, indeed, all forms of knowing, must be viewed as a relation, a relation between my mind and an independent object, a unique and transient relation, which neither creates nor necessarily alters the object itself. The cognitive relation is like the relation of matrimony. If I marry A.B., that makes her my wife, but it does not make her the woman she is: if I divorce her, she will still continue to exist. So, too, if I perceive or see A.B., that makes her an object of my knowledge; but she was there before I saw her, and will continue to exist after I have closed my eyes. In the same way the table and its hardness, and (I should add) the landscape and its beauty, go on existing even when there is no one present to perceive them.

How can we place it or classify it among other objects of our mind?

To begin with, one thing is clear: though we speak of a 'sense' of beauty, beauty is not strictly a sensation. It is not perceived through some particular sense-organ, set apart and specialized for that purpose, as the eye is for colours or the ear for sounds. Equally, it might be argued, beauty is not an image, or a thought, or a mere tangle of associations. To call it a feeling is to obscure the issue with a vague ambiguous word. Let us, therefore, ask on what occasions we actually perceive it.

A sense of beauty arises only when we look at an object that is more or less complex. A simple sensation can never yield it. Gaze at a white sheet of paper or a meadow smoothly coated with the January snow: the mere whiteness, however pure, can never be beautiful. It may yield pleasure; so does the smell of plum pudding or the taste of a mince pie. But a flutter of pleasure is not a sense of beauty.

Take the piece of paper, however, and snip it into squares and oblongs: you will see at once that certain shapes have beauty, and some have more beauty than others. Collect all the envelopes, sheets of notepaper, book pages, visiting cards, that you can discover; and you will find it quite easy to decide which shapes are the most elegant and which look clumsy or awkward. This was an experiment first carried out over a hundred years ago by Fechner—a German philosopher who is sometimes called

the father of experimental psychology. Rectangles of all dimensions were shown to the examinees; and those preferred were carefully measured.

It appeared that the difference in beauty depends in some way on the proportion—the proportion between the length and the breadth. There was one proportion that was almost invariably pleasing: it was given by what is known as the ‘golden cut.’ In this the short side stands in the same ratio to the long side as the long side does to the two sides taken together. A half-sheet of foolscap (8 by 13

inches) illustrates it almost exactly, for $\frac{8}{13} = \frac{13}{8 + 13}$

very nearly. In the conventional form of the cross, it will be found that the upright is usually divided in much the same proportion. The beauty of the shape, therefore, depends upon a relation—the relation between the two sides or the two sections which makes the shape what it is.

Of course, when your eye singles out a delicate shape or curve, it does not make an arithmetical calculation or measure the precise proportions. Indeed, I doubt whether the proportions are or should be arithmetically exact. All that I maintain is that there is some sort of proportion, some kind of relation. In many instances, if not in all, a strict numerical relation, true to some obvious formula, looks lifeless and mechanical. Contrast the segment of a perfect circle, such as you might draw with a pair of compasses, with the delicately modulated

changes of the springing branch of a pine: the one is dead, the other exquisitely vital. What mathematical curve, plotted out to measurement by the geometrician, could equal the rapid sweeping lines flung off with a bold freehand movement by the skilled and sensitive artist? Such a line undoubtedly has proportions; but they are so delicate as to elude us. It has rhythm; but its rhythm is the swing of free unconscious gesture, and could be expressed by no known system of algebraic analysis.

Let us see if the principle still holds good in the case of objects more complex. Stroll round London or any large town; ask yourself which are the most beautiful buildings. They are not the houses that are painted in the brightest or daintiest colours. Nor is a load of sumptuous ornament sufficient to make the structure lovely: the curling scrolls and the imposing statues on the Opera House in the Kingsway (most people now know it as the Stoll Picture Palace) do not turn that edifice into a work of art. Continue your walk; and your choice perhaps may fall on the Banqueting Hall in Whitehall, from which Charles I stepped out to die, or even on one of those plain doctors' houses in the neighbourhood of Harley Street. Where does the beauty lie? It comes from the proportions of the breadth to the height, from the relative shapes and sizes of the windows and the doors, and from the way they are placed on the frontage—relations very similar to those we discovered in looking at our sheet of

notepaper and our cross. Now listen to the theory which inspired such architecture: "The beauty of an edifice consists in an exact proportion of the parts within themselves and of each part with the whole: for a fine building ought to appear as an entire and perfect body wherein every member agrees with its fellow and each so well with the whole that it may seem absolutely necessary to the being of the same." That was written in 1750 by Palladio; and his precept might apply to every work of art.

I have taken the more obvious instances. But even in buildings the proportions need not be so simple or so clearly exhibited as they are in classical or renaissance architecture. Salisbury Cathedral, or Magdalen College with its tower, are just as graceful; and here the arrangement seems at first sight more irregular, though perhaps more picturesque. Yet it is the arrangement, as an arrangement, that constitutes the beauty; its unconscious, chance-like character does but surprise and enhance our perception of it: and all arrangement implies the relation of parts to each other and to a dominating whole.

Various terms have been used to denote this fundamental fact on which I am insisting. We speak of balance or of harmony; but the words do not quite explain themselves. The word 'balance' generally suggests a mere symmetry. You know the way in which people arrange the objects on the mantelpiece—the clock in the middle, flanked by

a couple of china vases, one on either side, and two framed photographs near the ends. Here the relations are too flagrant: they are not pleasant but painful. Balance, in this literal sense, is crude and obtrusive. You get the same failure in music, and again in poetry and prose, wherever the structure is mechanical and done to rule. Play the scale upwards from C to C, and then down again: you have a perfect equipoise; but no one will say that you have a perfect tune. In music, therefore, true balance never consists in one half just echoing the other: there must be perpetual novelty, and yet the novel portions must somehow tally with the old. Or turn to the cadences of literature: "It is the landscape, not of dreams or of fancy, but of places far withdrawn, and hours selected from a thousand with a miracle of finesse." There is a subtle rhythmic balance between the two sentences linked by 'and,' and again between the two phrases of which each sentence is composed; but it is the balance of a living tree, of a swallow in its flight, not the dead balance of a see-saw. So, too, in poetry: obey the beats punctiliously, and you will produce nothing but schoolboy's doggerel, tick-tacking monotonously like a noisy clock. Yet obedience to metre is the definition of verse: only the obedience must be free and unconscious, not self-conscious or obtrusive. The reader of a poem should feel that the lines *would* scan if he tried to scan them; but the scansion must not hammer on his ear: he must sense it implicitly, like an undertone, without

definitely attending to it at all. How that can be done, we shall discover in a moment.

Meanwhile, we begin to discern the place of aesthetic perception among the other perceptions of the mind. Psychology, as we saw at the outset of this book, has discovered that besides perceiving sensations, feelings, emotions, and the like, the mind has also the power to perceive relations. And we now learn that our sense of beauty depends essentially on perceiving objects or sensations—shapes, colours, sounds, and even incidents and emotions—in *certain relations*. Sensations that admit of few or no relations—smells and tastes, for example—could scarcely form the basis of aesthetic appreciation or provide the subject-matter of an art.

We further observed that relations can themselves be related; and in works of art that is precisely what we find. Such a tissue of relations, which are themselves related, forms what we might call a pattern or a scheme. And it is the presence of an implicit structural pattern, of a certain orderliness or arrangement, not forced or artificial, but natural and alive like the tendencies determining the growth of a plant, that constitutes the essence of beauty.

The function of the relations, therefore, is to unite the parts and combine them into a whole. Thus, in a building, a painting, or a statue, the leading idea determines first the broad relations of the parts, and these relations in their turn determine

the subordinate relations, and so on to the last chip of the chisel or the final touch of the brush—till the whole is one live, organic unit.

Earlier writers half grasped this point when they spoke of variety and unity as the two indispensable conditions in a beautiful object. The object must form a single whole—that is, some kind of unity must pervade it throughout; yet within that unity there must be a diversity of parts or phases. A ruled straight line by itself can never be beautiful: it has unity, but no variety. A bit of scribble scrawled by a half-witted child is equally devoid of beauty: for though it is varied enough, it shows no unity.

Some further experiments reinforce this cardinal point. It was suggested by earlier psychologists that curves were more beautiful than straight lines with angles, or careless, haphazard scrawls, because curves required an easy movement of the eye for their perception. The lines of composition in a well-constructed picture were said to 'guide the eye'. Now the movements of the eyes have been photographed while looking at lines or pictures; and it has been found that the eye-movements themselves have little or no relation to the curves they are supposed to follow. They zig-zag hither and thither. Further, we are almost entirely unaware of the movements our eyeballs are making.

It is not the movement of the eye, but the movement of the attention that proves to be all-im-

portant. Attention depends essentially upon our power to perceive, or to 'apperceive' (as the psychologist would say), a variety of items as a unified whole. A man likes the kind of picture, story, or melody which is sufficiently intricate and diversified to keep his attention continuously active, and yet shows a sufficient uniformity of plan not to defeat entirely his efforts at attentive comprehension. For this reason the simple mind likes simple rhymes, simple rhythms, simple obvious pictures, and that plain symmetrical way of marshalling the ornaments on the mantelpiece. For the subtler mind the hymn-tune is too easy and the symphony not at all too hard: it prefers the free and intricate rhythms of Shakespeare to the facile lilt of Longfellow; it likes its paintings to have a formal structure, yet that structure must not be obtrusively evident, composed by academic rules instead of by creative sensibility.

The movement of attention, however, is analytical, whereas the presence of real beauty strikes us in a flash. Here is another psychological puzzle. If our judgment of a picture is based on an apprehension of the whole, which the trained eye seizes in a single glance, then surely we have no time to notice the parts, much less to detect their relations.

The problem is solved by another unquestionable fact discovered by recent psychology. Strange as it may seem, the mind can, and continually does, take in a complicated whole in a single pulse of

attention. In the laboratory, with the aid of ingenious apparatus, it is possible to measure the time required to grasp some moderately complex pattern—say, a long word like ‘Birmingham,’ and then to recognize something far more simple—say, a single letter like E or O. It is found that the time is about the same, roughly one-fifth of a second in either case. You are at this moment recognizing words and meanings in this swift, synoptic fashion. The old theory was that the child must start with the separate letters and then piece them together in the proper order: ‘f, a—fa; t, h, e, r—ther; father.’ Every teacher now knows that this is not the natural way to learn either reading or speaking: we begin with the complete word-pattern. So, too, with any familiar object: you do not say “I spy brown hair and teeth coming down the road, carried by four legs, with a tail at the far end.” You say: “I see a dog”; and in recognizing the dog your mind does, in some half-unconscious fashion, take in the several parts and the way they are combined to make a dog-like shape.

Our perception of beauty is of the same order. In listening to a tune you cannot stay to study the relations between each note and the next, and yet it is these very relations that create the tune and its beauty. You grasp the relations unconsciously, or (as I should prefer to say) implicitly; and in so doing you recognize the total pattern as a significant well-organized whole.

Here we seem to reach the essential difference between logical thought and aesthetic perception, between reasoning and intuition, between following a scientific argument and catching a glimpse of what is lovely. In both we are dealing with a system of relations, themselves related into a coherent whole. In the former we attend primarily to the relations themselves, taken one by one in consecutive order; in the latter we attend to the total pattern, seized in a single flash. The subject-matter may be the same, though the mode of insight differs. The botanist picks the flower to pieces; the artist shows you the living flower. The anatomist dissects the lifeless corpse down to the articulated bones; the sculptor gives you the palpitating flesh, transformed into animated marble. The psychologist tells you all about a given emotional experience: the poet helps you to *live* that experience—to possess it and make it your own. Science is analytic, art is synthetic; science is explicit, art is implicit; science is abstract, art is concrete.

Now we are rushing headlong into wholesale generalization. Still, let us venture on one further tentative step. Psychology, it would appear, is inclining more and more to the view that relations may be genuinely real. Even when we fail to notice them or to analyse them out, they are still there; they exist objectively, that is, independently of the presence of any person to perceive them. Indeed, relations, abstract and elusive as they seem, are, in the view

of many, the most unquestionable elements that the universe contains—the points about which we can have the least doubt. We may dispute the existence of matter; we may question the durability of colour, light, or sound. It is the relations between these aspects, or between the hidden things they represent, that form the basis of every belief. Take, for example, the more obvious relations that the mind can perceive—the relations of space or of time: we are sure that these go on subsisting whether or not we perceive them. Edinburgh remains North of London while every creature is asleep: Waterloo comes after Hastings, although both battles were over long ago. It is the same with the relations used in logic and science—the ‘because’s and the ‘therefore’s and the ‘wherefore’s.’ The propositions of arithmetic—twice 2 are 4, the cube of 3 is 9—remain valid whether or not I am noticing their validity. And I am tempted to contend that aesthetic relations, like logical relations, have an independent, objective existence: the Venus of Milo would remain more lovely than Queen Victoria’s statue in the Mall, the Taj Mahal than the Albert Memorial, though every man and woman in the world were killed by a passing comet’s gas.

And so we are drawn to a far-reaching conclusion. By means of aesthetic intuitions we seem able to perceive systems of relations, at once so comprehensive and intricate that the power of mere human reason, with its patient and piecemeal analysis,

would never finish dissecting them out. Wordsworth's Sonnet on Westminster Bridge, the finale from *Tristan*, a pile of apples painted by Cézanne, these convey more to us in five minutes than a philosopher could expound in a sixty-minutes' lecture, and even then his exposition would be so technical that few could follow it. If this be so, the popular notion that beauty is to be produced or experienced solely because it gives pleasure, is founded on an entirely false psychology. You might as well argue that Einstein's proof of relativity exists solely for the pleasure it gives to the inventor and the reader. Just as the truth-seeking of the mathematician is a supreme example of that power to seek truth which is the birthright of every human creature, so the artist's search after beauty is not a fad or fancy of an erratic genius, but a special instance of a gift which lies within the reach of all, a gift, indeed, which, far better than logical argument, will enable the young, the dull, the uneducated (and in the face of the universe we are all uneducated and very dull and young), to grasp a fundamental value.

Let me now bring together the chief results of all these various discussions. To begin with, the psychology of art reveals that the perception of artistic beauty is a most mixed and complicated process. First of all, the picture or work of art inevitably arouses a mass of conscious and unconscious associations, and so imparts a meaning. Secondly, the

meaning is seized, not in the cold calm light of intellect nor yet with a view to practical action, but in a state of mild emotion: the artist, in his work, embodies his own emotional experience; we respond, and, so far as we respond, turn artists ourselves. Thirdly, the emotion communicated is a human emotion: so that pictures and even natural objects—a sunset or a mountain peak, so far as they are realized as beautiful—seem dimly to suggest (it may be by mere illusion) a personality behind them. Fourthly, the emotional experience expresses itself through the form imposed upon the sensuous material, through rhythm, through pattern, through a system of relations that unifies the whole. The pattern or design is grasped, not consciously or explicitly—that is the business not of art but of science; it is grasped unconsciously or implicitly, by what is loosely termed intuition. The upshot of the whole process is a glow of pleasure—not the simple incommunicable pleasure of tastes or smells or bodily sensations, but a higher pleasure that can be shared. The pleasure is not unlike the pleasure of a game; for art, both in its origin and in its apparent uselessness, has many affinities with play. Perhaps the pleasure arises because in the work of art we find our own unconscious wishes imaginatively fulfilled; or perhaps it supervenes because through art and artistic experience we seem to discover, by a process swifter than science and surer than philosophy, a permanent, spiritual value in

the universe taken as a whole, or in its parts as they are selected, recreated, and embodied for us by the artist whose work we are contemplating. Which is the truer explanation is a baffling question. The answer must in the last resort depend on grounds other than those which the psychologist, as a psychologist, can legitimately examine or urge.

THE PSYCHOLOGY OF RELIGION

PSYCHOLOGY must include a survey of every form or aspect the human consciousness can take: the religious consciousness, therefore, falls definitely within its purview. The psychologist, however, examines religion, not to discover whether it is true or false, but simply because he is interested in his fellow-creatures and the workings of their minds. As a man himself or as a philosopher, he may, of course, possess a religion or a metaphysic of his own. But this must not prejudice him in studying the practices of other sects or the creeds of other races. To him the blindness of the heathen bowing down to sticks and stones may be as significant as Dante's lofty visions of Hell and Purgatory and Paradise. His data are gleaned from every age and country. The Boston spiritualist with her rappings from the astral plane, the Australian bushman howling round the totem of the white cockatoo, the Roman senator worshipping a whole mythology of goddesses and gods, the Jew, the Mohammedan, the Christian, worshipping one God alone—the whole panorama of belief and observance comes before him as a series of facts to be noted and compared.

His first problem is to ask how religion originates, and how it develops and grows. He tries, therefore,

to pierce back to the very beginnings of religion; and there, in the behaviour of the primitive savage and in the fancies of the tiny child, he finds something that seems to foreshadow the higher devotions of the civilized adult. And in these two suggestive fields both anthropology and psycho-analysis have lately come to his aid.

For long it was generally supposed that the first religious notions of the savage grew out of a belief in spirits, one or more of whom might be revered as divinities or gods. To E. B. Tylor we owe the term 'animism' and the plausible view that it expresses—the theory that a belief in *animae*, in spirits or souls, provides a 'minimum definition of religion.' At certain stages these animistic notions seem almost universal; but it is a little perplexing to decide how they first arose. Perhaps they sprang largely from the fact that savages, like children and clairvoyants, are vivid visualizers. With Hamlet, they see strange pictures 'in their mind's eye'; and, having no apt psychological word to describe such mental images, they talk of them as actual appearances. In the forest or graveyard, when it grows too dark to discern anything else, the native sees in his imagination those who are absent or dead. At night his friends seem to visit him in sleep; and so, it is argued, when he comes to reflect on these strange visions, he begins to people the world with a number of phantoms or ghosts—thin, frail, and semi-transparent, as mental images usually are,

and really a projection of the fictitious beings that he beholds in his dreams and daydreams.

Further study, however, shows that a clear belief in personal powers or agencies is a relatively late development. Accepting Tylor's view of religion in the narrower sense, Sir James Frazer has sharply distinguished between religion and magic. "Everywhere," he says, "the age of magic has preceded the age of religion." Magic he regards as a kind of primitive science. Working according to a traditional formula, the magician seeks to raise the wind by whistling, or to bring down rain by brandishing a palm-branch steeped in running water. As yet there is no appeal to any higher Power who might intervene on man's behalf; there is nothing but an unsophisticated trust in direct mechanical causation. The mistake of the magician is that he selects the wrong cause: he prefers to assume that like produces like rather than to search out, by a patient study of the facts, the hidden laws of nature.

But here again Frazer, like Tylor, treats the whole procedure of the savage mind as nothing but cold and calculated reasoning—obviously a psychological error. The savage is neither a young scientist nor yet a budding theologian: he is an eager, excitable ignoramus rather than a clear and logical thinker. His religion, as Dr. Marett puts it, "is something not so much thought out as danced out." With him, as with the rest of us, explicit beliefs come nearly always as after-thoughts. Con-

sciousness includes feeling and action as well as observation and inference; and usually the feelings and the actions rush forward first of all. The beliefs arise later to justify and explain them.

The earliest form of religion, therefore, is to be sought in religious feeling rather than in religious doctrines. Religion seems to owe its birth to certain vague but universal instincts shared by all mankind—the instincts of fear, wonder, humility, admiration—in a word, what we may term Awe. This sense of the Awful overtakes us long before we hammer out any clear-cut view about the superhuman or the supernatural. When a tempest approaches a Kaffir village, the inhabitants rush out and yell at it; and their yells seem little more than cries of terrified annoyance: the Fuegians, on the other hand, would tell you that the hurricane is “made by Big Man who lives in woods”; and, if you kill the sacred duck, “Big Man will get angry and send bad storm”; and then “rain come down, hail come down, wind blow, him very much blow”: the only way to stop it is to shout at it and pelt it with stones. Here you see how the savage first feels startled at something that strikes him as dangerous or unusual, and then his alarm leads him later on to make up a theory about what has frightened him. His account treats the bad weather as the work of a being like himself; so he tries to scare off, or to propitiate, the Big Man who is threatening him. And gradually the magic spell gives place to prayer.

There are plenty of things that seem to play on our emotions in this inexplicable fashion: thunder and lightning, corpses and blood—these, too, are awful. Since the very sight and thought of them appal him so much, the savage fancies that they must be endowed with some kind of uncanny power. To designate this power, as it appears to his simple mind, some technical word is needed. A convenient term is *Mana*, an expression in common use among the islanders of the Pacific. It suggests, not physical power, but psychic power—the quality of exciting deep emotions: it comprises strength, vitality, prestige, a magic force and a venerable sanctity, all that is ominous and eerie; it may belong equally to a live lion or a dead body, to a thunderstorm, a tribal chief, a wizard, a weapon, or a wine. It is at once mysterious and miraculous, holy and unholy, *sacer*, *sacré*, ‘sacred’—in the double sense of that ancient word, hallowed and tabooed.

Believing in this power, the savage may seek warily to acquire it for himself. He may drink the blood of the buffalo, or eat his enemy’s flesh, in the hope that he may get some of their *mana* inside him, and so overawe his fellows or his foes—just as many people nowadays believe that swallowing extract of beef will put into them the vigour of the bull. For example, when Sir Charles McCarthy was killed by the Ashantees, the chiefs of the cannibal army cut out his heart, and solemnly ate it in accordance with the tribal custom. Rites and ceremonies like

these—sacrificing and sometimes eating a victim, drinking ‘the water of life,’ ‘quaffing the cup of mightiness’—play a large part in primitive religions; and ultimately the rite turns into a ritual—a kind of symbolic sacrament. At length, to interpret the ritual, various creeds grow up.

At first sight it is astonishing to find, persisting in the higher religions of modern days, certain customs and beliefs that are manifestly survivals from savage or even prehistoric times. The explanation is that our inherited emotions have not changed one whit since first we emerged from barbarism: the same objects and events—blood, sickness, guilt, the crises and catastrophes of life, birth, marriage, sudden death, and the inscrutable powers that seem at work in all that overtakes us—these still inspire us with a kind of awe.

When we turn from the savage to the child we find much the same emotions constantly arising. The tiny child feels a similar awe for his father and mother; and, as the psycho-analyst has pointed out, the attitude of the child towards his parents is very like that of the grown-up man towards his God: thus the savage often pictures the ‘Big Man’ whom he worships as a kind of ‘Big Father.’ Further, in studying the moral life of the child, we find that he is specially engrossed with a trinity of persons—namely, his two parents and himself; and it seems significant that many if not most of the earlier religions and mythologies are concerned with just such

a three-fold group of persons, usually appearing as a Father, a Mother, and a Son—for example, Ouranos or Heaven, Gaia or Earth, and their son Cronos in early Greek mythology, Osiris, Isis, and Horus in Egyptian mythology, Adum, Okoba, and Eberebo in the legends of the Nigerian tribes.¹ To father or mother the child instinctively turns for safety, comfort, and protection. To one or to both he tends to ascribe perfect knowledge, perfect goodness, power to create and power to control—the very attributes which the believer assigns to his high divinities. Herbert Spencer, indeed, maintained that most of the theories and practices of religion had evolved from a primitive ancestor-worship—the members of the tribe worshipping the deified patriarch from whom they were all descended.

Now those who first perceived these various parallels have sometimes leaped to a conclusion to which they were scarcely entitled. Assuming that religion is a relic of an infantile or savage mode of thinking, they have gone on to infer that all religion is but a superstitious survival unworthy of the enlightened grown-up. We have already met this fallacy—I am tempted to term it ‘the evolutionists’

¹ Mr. Gladstone's explanation was that the Homeric and other religions were corruptions of the true religion, which maintained the existence of a Triune Deity and was at first universally accepted. This view, it is interesting to note, was put forward in the same year as that in which Darwin published his work on evolution—a work which ultimately has had so profound an influence on the science of religions.

fallacy'—in discussing the origin of art. Because the psychologist has discovered how the religious consciousness has developed, it does not follow that he has therefore discredited or disposed of religion, and explained it all away. Even if the religious attitude is a childish attitude, it is still quite possible that this is the best attitude, perhaps indeed the only attitude, for us to adopt when face to face with the unknown mysteries of the Universe.

The scientist is too prone to treat both magic and religion as though each was another and a poorer brand of science. To the savage, no doubt, religion often took the place of science. He knew little of scientific agriculture; so he had recourse to sacrifices and to spells. To make the crops grow, he would burn over a slow altar-fire an anointed youth. The fire had to be gentle, because the more tears the victim shed, the more abundantly the rain would fall. To be effective the sacrifice had to be made at a particular season—about Easter, the beginning of spring; otherwise the crops would not respond: and often part of the priestly duties consisted in calculating for these purposes the exact time of the year from the height of the sun. Here some may discern the beginnings of scientific thinking and of scientific observation.

For the mediaeval thinker, religion often turned into a systematic science of the whole Universe. And this standpoint is still generally adopted by the professed theologian. But for the mass of mankind

religion as such is not primarily a system of intellectual dogmas. A religion which is purely intellectual quickly ceases to be a religion: it has changed into a branch of metaphysics. Yet neither science nor metaphysics in their present form can give us a final or a satisfactory picture of the Universe and its relation to the human individual; and accordingly most men, however wise or well-informed, still feel the need of something—it may be something quite provisional—which will reassure their feelings and fortify their wills.

How, then, can they win this refreshing confidence? Do they sit down and think out the puzzle from the very start, as Robinson Crusoe might have done, had he been marooned in infancy on his desert island, and left to elaborate his own religious views? Strangely enough, they often speak as though they did. They will defend their beliefs, or their refusal to believe, as though it were all a matter of private reasoning. But—let me insist on the point once again—religion is never a mere cold-blooded deduction; and few scientific conclusions are invented or established by each man for himself. Actually we take over our religion from the society in which we move; we imbibe it from our parents, from our teachers, from the churches we frequent in early youth, from the books or magazines we casually pick up, from the convictions and conventions that surround us ready-made—in a word, we get it chiefly from tradition. We accept it, much as we

accept our country's costume or our native tongue, without much thought and without any clearly formulated motive: our doubts assail us later; and our proofs and arguments are nearly always rationalizations, reasons for views already adopted, tacked on to those views long after their acceptance, like a very belated postscript.

But tradition is constantly changing. In spite of wars, crusades, and persecutions, and the most determined efforts at maintaining an orthodox creed by force, beliefs will only survive in the long run because they are more or less congenial to the temper of those who profess them. They become tacitly moulded and reshaped so as to fit, not only the increasing knowledge of the day, but also the deeper hopes and aspirations, the tastes, the sympathies, the moral ideals, of the age and the community.

At every turn, therefore, we discover that religion, like politics or art, is dependent upon factors of which we are half unconscious. And the recent study of the unconscious mind has thrown a flood of light on these obscurer influences, and on much that was previously unexplained in religious life and experience. Let me take one or two outstanding problems by way of illustration.

In the modern world perhaps the most striking is that of conversion. By conversion I understand the abrupt turning of a man's personal life into a new religious direction: it is usually marked by a

dramatic upheaval of the mind—an outburst of emotional excitement, of intense moral enthusiasm, and of strong theological convictions. In the town of Basingstoke there was once a man so blasphemous and profane that he went by the name of Swearing Tom. A new preacher came to the town; and, drawn by curiosity, Tom, who had never stepped inside a church for seventeen years, came to listen. The preacher closed his sermon with these words: "If the most wicked villain in this church would go on his knees and pray to God, God would change his heart." Tom said to himself: "I am the most wicked villain here." So he fell on his knees to pray. He got up a convert and an altered man, and was known to the day of his death as 'Praying Tom.' If you are tempted to smile at poor Tom, read the stories of Bunyan, Fox, and Wesley; turn to the biographies of the New England Methodists; or listen to Carlyle, as he stands up against the 'Everlasting No': "While I thought, there rushed, as it were, a stream of fire over my soul; and from that hour I began to be a man." Most of us have attended a revivalist meeting and have seen young men and women burst into sobs of penitence, or suddenly laugh and shout with joy. Drunkards will sign the pledge; rich men will empty coins from their pockets; women will tear off their jewellery and fling it into the plate. Often a whole crowd of worshippers will start singing, or dancing, or gabbling in an unknown

tongue: and then dash off to proselytize the rest of the town. Outbreaks such as these crop up from time to time in nearly every country and in nearly every faith.

How are they to be explained? The first psychologists to study them in detail noted a curious point. From careful surveys carried out in various districts, and made for the most part in America, they concluded that conversion occurs mainly during early adolescence. To women it comes most commonly between thirteen and sixteen; to men between fifteen and eighteen. Now this is the time at which the sex instinct suddenly matures (or so the psychologists argued). Further, the change which most resembles religious conversion is that of 'falling in love,' particularly 'love at first sight'; and this is pre-eminently an adolescent experience. From all these facts it was inferred that religious conversion is at once an outcome of, and a reaction against, the new emotions of sexual love that now for the first time confront the young man or woman.

There can be no question that this is at times an important factor. But there is, I fancy, a further parallel between early sex-infatuations and adolescent conversions. The psycho-analyst has shown how certain emotional tendencies may be unconsciously repressed, and still go on growing below the conscious level of the mind. May not the same thing happen with religious inclinations? Perhaps the seeds were there all along, germinating or

vegetating beneath the skin of consciousness. After all, falling in love is seldom so instantaneous as it seems: in lonely moods, in forgotten reveries, in romantic flights of fancy, the youth has been unwittingly shaping his own ideal of perfection; and, when at last he loses his heart it is because someone has just walked into his life who seems to embody his daydream, to fit his ideal much as a stranger's key will sometimes slip into an old unopened lock and suddenly turn it.

Conversion, in the same way, seems nearly always to be preceded by a long and cumulative phase of silent incubation. Reopen the histories of the great religious converts. You will find that, even in their unregenerate days, they were already engrossed with religion. Usually they were fighting against it. St. Paul persecuted the Christians. 'Praying Tom' was blasphemous Tom. Bunyan tells us that even in his childhood he used to scoff and curse, and was visited in nightmares by the devil. In almost every case a close scrutiny will reveal that the convert, before his conversion, was not so indifferent to religion as he seemed: as a rule, he was acutely aware of it. Now, if we regard a religious conviction as reached solely by intellectual thinking, then its abruptness would be puzzling; but if we regard it as the sudden emergence of an emotional complex that has been gathering strength below the surface for many months or years, then it becomes at once intelligible.

But adolescent conversion, common as it is, forms by no means the most important type. Some of the greatest of religious leaders—St. Paul, St. Augustine, Tolstoy—have been converted, not early, but comparatively late in life; and the effects of the earlier conversions are often brief and transitory. There is a far more interesting form, which sometimes overtakes a man who is already a religious believer, and turns him into what, for lack of a better word, I shall call a mystic. The special feature of the mystic is that he develops or discovers what appears at first sight to be a special religious experience, an experience which happens not once but continually throughout his life. This is a peculiar mental state in which he does not merely think about God, but seems definitely to feel or perceive Him. It is a strange and singular phenomenon, met with in many different religions all down the ages. The descriptions of it evince a curious similarity. Religious writers themselves generally refer to these states as states of prayer; and so perhaps we may use them to illustrate a second and a kindred problem—the psychology of prayer.

Prayer is a word that religious writers use in a wide and technical sense. It does not mean a mere verbal supplication or a mere expression of praise. These are but limited instances of the more general mental state. The real characteristic is a rapturous feeling of spiritual illumination. I suppose nearly everybody, at one time or another, has experienced

something of this nature—perhaps when, all alone, he first saw the sunrise over some snowclad peak, or, it may be, when he joined in some cathedral service for a departed king. To many it comes in an intensely personal form. God or some disembodied Spirit seems to reveal Himself directly. The worshipper communicates with Him at first hand. He feels united with Him, with an ineffable sense of reconciliation.

The psychologist has noted that similar waves of ecstasy are often reported by persons under the influence of anaesthetics. Devotees have deliberately sought to provoke these transports by taking drugs like hashish, alcohol, or opium. The experiences are then described as ‘anaesthetic revelations.’ The queer thing is that, to the eye of recovered reason, the revelation generally amounts to nothing at all. William James tried the experiment with nitrous oxide—the dentist’s ‘gas’; and dictated what seemed to him at the time to be ideas of a marvellous reunion. Here are some of them:—

Good and evil reconciled in a laugh
 What’s mistake but a kind of take?
 What’s nausea but a kind of ausea? . . .
 Sober, drunk—all the same! . . .
 It fades for ever and for ever as we move.

Perhaps the best known instance of all is that recorded by John Addington Symonds, the famous poet and critic of last century. “Only think of it,” he says,

"to have felt for that long, dateless, ecstasy of vision, the very God, in all truth and absolute love; and then to find that I had, after all, had no revelation, but had been tricked by the abnormal excitement of my brain."

Similar states occur in nervous crises—during trances or fits which are sometimes said to be hysterical or epileptic. You may remember how Dostoievsky, in his tale of *The Idiot*, describes the impressions of the epileptic prince: Dostoievsky was an epileptic himself, and no doubt is giving an account of his own personal feelings. He speaks of "an instant of deepest sensation overflowing with rapture and devotion . . . one of harmony and beauty in the highest degree . . . I would give my whole life," he adds, "for this one instant"; and he recalls how Mahomet, who is also supposed to have suffered from epileptiform seizures, averred that, in less time than it takes to empty a pitcher of water, he had visited all the dwellings of Allah.

You will notice that several of these writers—John Addington Symonds for example—are tempted, like many psychologists, to argue that because a vision is excited by a drug or by a disease, it therefore has no value. With the truth or value of the experience the psychologist as such is not concerned. But we must guard against saying that all such apparitions are of necessity misleading hallucinations or delusions. It might be that the brain is fitted to respond to the subtler influences that

surround us only when it is in what, from the standpoint of worldly existence, we should call an abnormal condition. The normal brain has been evolved for the practical uses of an earthly life: it has not been evolved to appreciate music, poetry, painting, or the basic laws of the Universe. As we have remarked in discussing art and the aesthetic experience, the practical man sees only a practical value in the objects around him: he forgets that they may contain deeper, hidden values in and for themselves.

Personally I should prefer to compare the religious experiences of the mystic, not so much with the hallucinations that occur under opium or gas, but rather with the moods of ecstatic insight that poets and artists so often describe—

that serene and blessed mood,
In which the burthen and the mystery
Of all this unintelligible world
Is lightened, . . .
In which, the breath of this corporeal frame
Almost suspended, we are laid asleep,
And . . . see into the life of things.¹

The Eastern mystics prefer to evoke such moods by closing their eyes to "this vile world and its gay-seeming things," and looking inwards; the mediaeval Christians by mortifying the flesh and fixing their thoughts on some religious symbol. Both often prepare themselves by fasting, adopting special postures,

¹ Wordsworth, *Lines composed a Few Miles above Tintern Abbey*.

performing respiratory exercises, and repeating the words of certain routine formulæ. The later poets of the Western world—Wordsworth, Keats, Shelley, Browning, Rossetti, Richard Jefferies, to mention only the more familiar names—prefer to look outwards rather than inwards, and find a transcendental ecstasy aroused in them by the solitary contemplation of nature or by the experiences of human life and love. One or two have mentioned more curious devices. Tennyson, for example, could throw himself into a swoon by repeating his own name. Then, "all at once," he says, "individuality seemed to dissolve"; and the state that supervened was "not confused, but the clearest of the clearest, the surest of the surest, when death was a laughable impossibility and the loss of personality the only true life." He hints at these visions more than once in his poems:

Moreover, something is or seems,
That touches me with mystic gleams,
Like glimpses of forgotten dreams—
Such as no language may declare.

In any case, between these mystical states of prayer and the states of the drug maniac one practical distinction can be drawn: the former are usually helpful, and the latter usually harmful. "Who rises from his prayer a better man, his prayer is answered." As the devout themselves insist, the chief benefit of prayer is not that the specific petition is miraculously

granted, but rather that the man who prays feels consoled or strengthened by the experience. Prayer, though it accomplish nothing material, may effect a spiritual change.

Here, again, there is a problem for the psychologist—the efficacy of prayer; and generally he is disposed to explain it by what he calls ‘suggestion.’ Suggestion is the name given to the fact that ideas, especially emotional ideas, tend automatically to realize themselves in definite beliefs and actions, apart from all logical proof or persuasion. It occurs most frequently in those borderline states that lie between sleep and waking. By gazing at a point of light or counting mechanically from one to a thousand, you can induce a kind of dreamy trance rather like that comatose condition in which you find yourself before you drop off to sleep. In such a frame of mind you may have noticed that your mental pictures become almost as realistic as your dreams; and it is often found that ideas of cure, and sometimes thoughts of fear and danger, may then be effectively implanted. At these drowsy moments M. Coué would tell his patients to mutter mechanically to themselves: “Day by day in every way I’m getting better and better”; and, to their joyous surprise, they would often wake up restored to health the next morning. Hypnotism—a device known to medicine men of every age—is nothing but a methodical technique for exploiting these human susceptibilities. There is nothing magnetic

about it; and it is, of course, no more occult or magical than the delusive dodges of the advertiser. Now many of the mystical states, as cultivated, for example, both by the Christians of the Middle Ages and by the Yogis of modern India, are closely analogous, alike in their symptoms and in their mode of production, to these semi-hypnotic moods. Hence the psychologist is tempted to account both for the mystical experiences and for the instances of answered prayer in terms of auto-suggestion.

This does not necessarily destroy the validity of such experiences or of the results of prayer; for God might arrange to answer through natural rather than through supernatural means. And, further, it is conceivable (I do not say probable) that in these strange states of transport we may be able to tap some larger reservoir of mental energy to which in ordinary conditions we have no access. That, indeed, was the suggestion of one of the most eminent of all psychologists—William James.

It was a hypothesis of this sort that led him and many other scientific workers to take an interest in psychical research. The results of such research have perhaps been more convincing to physicists than to psychologists. Psychologists, certainly, are now all willing to acknowledge the facts of hypnotism and multiple personality; a few are inclined to accept telepathy; but the majority would seek evidence for the survival of the soul, not so much in the phenomena of spiritualism, but rather, if

they sought it at all, in the actual processes of mental life, as studied in its daily manifestations or as analysed by laboratory experiments. One influential school holds that all such processes will ultimately prove reducible to physiological terms. Most psychologists, however, at any rate in this country, appear to feel that even the facts already established can never be adequately explained by physical, chemical, or physiological action. One at least among the most eminent of our contemporaries has argued that the hypothesis of a soul, or something very like it, affords by far the best solution. Perhaps at the moment the prevailing view is that which declines to separate body and mind in the way to which we have become accustomed since the days of Descartes. Man, they argue, is something more than a carcass loosely coupled with a ghost. Matter is far more spiritual, and spirit perhaps more material, than we commonly surmise.

All this, however, is at present little more than fascinating speculation. The psychology of religion has led, and is likely to lead, to no final conclusion as to what lies behind the physical veil. Nevertheless, a few positive results have undoubtedly emerged. First of all, I think we may say that certain facts, which scientists at one time dogmatically denied, have now been accepted, though not always at their face value. Many of the marvels broadcast over the pages of history—visions, apparitions, miraculous cures, demoniac possession, and the hypnotic trance,

stories formerly dismissed as unworthy of inquiry—are now known to rest on a basis of truth, though the truth was often misinterpreted. The traveller comes back from India or Siberia, with tales of the marvels he has seen: he is astonished to hear that they can be duplicated at any spiritualist *séance* in London or New York. The spiritualist is full of amazement at the phenomena of the *séance*: he is surprised to learn that they have been familiar to medicine-men, conjurors, and priests from pre-historic days. How much of it is illusion, and how much of it rests on unexplained fact, science as yet is unable to tell us. Secondly, we may say that the characteristics of the religious life no longer seem to stand so completely apart from the characteristics of our ordinary mental activity when this is closely scrutinized. If spiritual phenomena have sometimes received a materialistic explanation, the common-places of our everyday existence now seem to demand a spiritual explanation. Thirdly—and this is perhaps the most significant point of all—our study tends to demonstrate the unity of the religious consciousness. In savage and civilized, ancient Greek or modern Christian, Moslem, Buddhist, and Theosophist, similar emotions and similar experiences, whatever their origin, are found continually at work. Theologies and mythologies may be numerous; but religion is one. Like all other products of the conscious mind, it develops and evolves. Its creeds may alter in substance or in certainty, and its practices may

modify their outward form. But its expressions at their best embody man's highest thoughts and feelings about the mysteries around him, and mark his noblest attitude towards the problems of mortality. The psychologist, therefore, whatever view he may hold about detail, must admit that religion, though often allied with retrograde movements, has yet been one of the most permanent of social forces, and one of the most powerful of all agents for elevating the life of the individual and the race.

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