SOCIOLOGICAL APPLICATION OF THE PSYCHOLOGY OF HERD INSTINCT.

In the July number of the SOCIOLOGICAL REVIEW I attempted to describe some of the more obvious psychological consequences of the fact that man is essentially a gregarious animal. It was shown that the gregarious mental character is evident in man's behaviour not only in crowds and other circumstances of actual association, but also in his behaviour as an individual, however isolated. The conclusions were arrived at that man's suggestibility is not the abnormal casual phenomenon it is often supposed to be, but a normal instinct, present in every individual, and that the apparent inconstancy of its action is due to the common failure to recognise the extent of the field over which suggestion acts; that the only medium in which man's mind can function satisfactorily is the herd, which therefore is not only the source of his opinions, his credulities, his disbeliefs, and his weaknesses, but of his altruism, his charity, his enthusiasms, and his power.

The subject of the psychological effects of herd instinct is so wide that the discussion of it in the former article, in spite of some prolixity, covered only a comparatively small part of the field, and that in a very cursory way. Such as it was, however, it cannot be further amplified here, where an attempt will rather be made to review some of the practical corollaries of such generalisations as were sketched there.

In the first place, it must be stated with the strongest possible emphasis that deductive speculation of this sort finds its principal value in opening up new possibilities for the application of a more exact method. Science is measurement, but the deductive method may indicate those things which can be most profitably measured.

When the overwhelming importance of the suggestibility of man is recognised our first effort should be to obtain exact numerical expressions of it. This is not the place to attempt any exposition of the directions in which experiment should proceed, but it may be stated that what we want to know is, how much suggestion can do in the way of inducing belief, and it may be guessed that we shall ultimately be able to express the force of suggestion in terms of the number of undifferentiated units of the herd it represents. In the work that has already been done, chiefly

by Binet and by Sidis, the suggestive force experimented with was relatively feeble, and the effects consequently were rendered liable to great disturbance from the spontaneous action of other forces of suggestion already in the mind. Sidis, for example, found that his subjects often yielded to his suggestions out of "politeness"; this source of difficulty was obviously due to his use of pure individual suggestion, a variety which theory shows to be weak or even directly resisted.

The next feature of practical interest is connected with the hypothesis, which we attempted in the former article to demonstrate, that irrational belief forms a large bulk of the furniture of the mind, and is indistinguishable by the subject from rational verifiable knowledge. It is obviously of cardinal importance to be able to effect this distinction, for it is the failure to do so which, while it is not the cause of the slowness of advance in knowledge, is the mechanism by which this delay is brought about. Is there, then, we may ask, any discoverable touchstone by which non-rational opinion may be distinguished from rational? Non-rational judgments, being the product of suggestion, will have the quality of instinctive opinion, or, as we may call it, of belief in the strict sense. The essence of this quality is obviousness; the truth held in this way is one of James's "*a priori* syntheses of the most perfect sort;" to question it is to the believer to carry scepticism to an insane degree, and will be met by contempt, disapproval or condemnation, according to the nature of the belief in question. When, therefore, we find ourselves entertaining an opinion about the basis of which there is a quality of feeling which tells us that to enquire into it would be absurd, obviously unnecessary, unprofitable, undesirable, bad form or wicked, we may know that that opinion is a non-rational one, and probably, therefore, founded upon inadequate evidence, that it is, therefore, a belief which may prove injurious to that capacity to foretell which is science.

Opinions, on the other hand, which are acquired as the result of experience alone do not possess this quality of primary certitude. They are true in the sense of being verifiable, but they are unaccompanied by that profound feeling of truth which belief possesses, and, therefore, we have no sense of reluctance in admitting enquiry into them. That heavy bodies tend to fall to the earth and that fire burns fingers are truths verifiable and verified every day, but we do not hold them with impassioned certitude, and we do not resent or resist enquiry into their basis; whereas in such a question as that of the survival of death by human personality we

hold the favourable or the adverse view with a quality of feeling entirely different, and of such a kind that enquiry into the matter is looked upon as disreputable by orthodox science and as wicked by orthodox religion. In relation to this subject, it may be remarked, we often see it very interestingly shown that the holders of two diametrically opposed opinions, one of which is certainly right, may both show by their attitude that the belief is held instinctively and non-rationally, as, for example, when an atheist and a Christian unite in repudiating enquiry into the existence of the soul.

A third practical corollary of a recognition of the true gregariousness of man is the very obvious one that it is not by any means necessary that suggestion should always act on the side of unreason. The despair of the reformer has always been the irrationality of man, and latterly some have come to regard the future as hopeless until we can breed a rational species. Now the trouble is not irrationality, not a definite preference for unreason, but suggestibility, that is, a capacity for accepting reason or unreason if it comes from the proper source.

This quality we have seen to be a direct consequence of the social habit, of a single definite instinct, that of gregariousness; the same instinct which makes social life at all possible and altruism a reality.

It does not seem to have been fully understood that if you attack suggestibility by selection, and that is what you do if you breed for rationality, you are attacking gregariousness, for there is at present no adequate evidence that the gregarious instinct is other than a simple character and one which cannot be split up by the breeder. If, then, such an effort in breeding were successful we should exchange the manageable unreason of man for the inhuman rationality of the tiger.

The solution would seem rather to lie in seeing to it that suggestion always acts on the side of reason; if rationality were once to become really respectable, if we feared the entertaining of an unverifiable opinion with the warmth with which we fear using the wrong implement at the dinner table, if the thought of holding a prejudice disgusted us as does a foul disease, then the dangers of man's suggestibility would be turned into advantages. We have seen that suggestion already has begun to act on the side of reason in some small part of the life of the student of science, and it is possible that a highly sanguine prophetic imagination might detect here a germ of future changes.

Again a fourth corollary of gregariousness in man is the fact expounded many years ago by Pearson that human altruism is a natural instinctive product. The obvious dependence of the evolution of altruism upon increase in knowledge and inter-communication has led to its being regarded as a late and a conscious development—as something in the nature of a judgment by the individual that it pays him to be unselfish. This is an interesting rationalisation of the facts because in the sense in which 'pay' is meant it is so obviously false. Clearly altruism does not at present, and cannot, pay the individual in anything but feeling, as theory declares it must. It is clear, of course, that as long as altruism is regarded as in the nature of a judgment, the fact is overlooked that necessarily its only reward can be in feeling. Man is altruistic because he must be, not because reason recommends it, for herd suggestion opposes any advance in altruism, and when it can the herd executes the altruist, not of course as such, but as an innovator. This is a remarkable instance of the protean character of the gregarious instinct and the complexity it introduces into human affairs, for we see one instinct producing manifestations directly hostile to each other—prompting to ever advancing developments of altruism, while it necessarily leads to any new product of advance being attacked. It shows, moreover, as will be pointed out again later that a gregarious species rapidly developing a complex society can only be saved from inextricable confusion by the appearance of reason and the application of it to life.

When we remember the fearful repressing force which society has always exercised on altruism and how constantly the dungeon, the scaffold and the cross have been the reward of the altruist, we are able to get some conception of the force of the instinctive impulse which has triumphantly defied these terrors, and to appreciate in some slight degree how irresistible an enthusiasm it might become if it were encouraged by the unanimous voice of the herd.

In conclusion, we have to deal with one more consequence of the social habit in man, a consequence the discussion of which involves some speculation of a necessarily quite tentative kind.

If we look in a broad general way at the four instincts which bulk largely in man's life, namely, those of self-preservation, nutrition, sex and the herd, we shall see at once that there is a striking difference between the mode of action of the first three and that of the last. The first three, which we may, for convenience

and without prejudice, call the primitive instincts, have in common the characteristic of attaining their maximal activities only over short periods and in special sets of circumstances, and of being fundamentally pleasant to yield to. They do not remain in action concurrently, but when the circumstances are appropriate for the yielding to one, the others automatically fall into the background, and the governing impulse is absolute master. Thus these instincts cannot be supposed at all frequently to conflict amongst themselves and the animal possessing them alone, however highly developed his consciousness might be, would lead a life emotionally quite simple, for at any given moment he would necessarily be doing what he most wanted to do. We may, therefore, imagine him to be endowed with the feelings of free-will and reality to a superb degree, wholly unperplexed by doubt and wholly secure in his unity of purpose.

The appearance of the fourth instinct, however, introduces a profound change, for this instinct has the characteristic that it exercises a controlling power upon the individual from without. In the case of the solitary animal yielding to instinct the act itself is pleasant, and the whole creature, as it were body and soul, pours itself out in one smooth concurrence of reaction. With the social animal controlled by herd instinct it is not the actual deed which is instinctively done, but the order to do it which is instinctively obeyed. The deed, being ordained from without, may actually be unpleasant, and so be resisted from the individual side and yet be forced instinctively into execution. The instinctive act seems to have been too much associated in current thought with the idea of yielding to an impulse irresistibly pleasant to the body, yet it is very obvious that herd instinct at once introduces a mechanism by which the sanctions of instinct are conferred upon acts by no means necessarily acceptable to the body or mind. This, of course, involves an enormous increase of the range through which instinct can be made use of. Its appearance marks the beginning of the multifarious activities of man and of his stupendous success as a species, but a spectator watching the process at its outset, had he been interested in the destiny of the race, might have felt a pang of apprehension when he realised how momentous was the divorce which had been accomplished between instinct and individual desire. Instinctive acts are still done because they are based on "a *priori* syntheses of the most perfect sort," but they are no longer necessarily pleasant. Duty has first appeared in the world, and with it the age-long conflict which is described in the memorable

words of Paul: "I delight in the law of God after the inward man; but I see another law in my members warring against the law of my mind and bringing me into captivity to the law of sin which is in my members."

Into the features and consequences of this conflict it is now necessary for us to probe a little further.

The element of conflict in the normal life of all inhabitants of a civilised state is so familiar that no formal demonstration of its existence is necessary. Even in childhood the process has begun. The child receives from the herd the doctrines, let us say, that truthfulness is the most valuable of all the virtues, that honesty is the best policy, that to the religious man death has no terrors, and that there is in store a future life of perfect happiness and delight. And yet experience tells him with persistence that truthfulness as often as not brings him punishment, that his dishonest playfellow has as good, if not a better, time than he, that the religious man shrinks from death with as great a terror as the unbeliever, is as broken-hearted by bereavement, and as determined to continue his hold upon this imperfect life rather than trust himself to what he declares to be the certainty of future bliss. To the child, of course, experience has but little suggestive force, and he is easily consoled by the perfunctory rationalisations offered him as explanations by his elders. Yet who of us is there who cannot remember the vague feeling of dissatisfaction, the obscure and elusive sense of something being wrong which is left by these and similar conflicts.

When the world begins to open out before us and experience to flow in with rapidly increasing volume, the state of affairs necessarily becomes more serious. The mental unrest which we, with a certain cynicism, regard as normal to adolescence is evidence of the heavy handicap we lay upon the developing mind in forcing it to attempt to assimilate with experience the dicta of herd suggestion. Moreover, let us remember, to the adolescent experience is no longer the shadowy and easily manipulable series of dreams which it usually is to the child. It has become touched with the warmth and reality of instinctive feeling. The primitive instincts are now awake and finding themselves balked at every turn by herd suggestion; indeed even products of the latter are in conflict among themselves. Not only sex, self-preservation and nutrition are at war with the pronouncements of the herd, but altruism, the ideal of rationality, the desire for power, the yearning

for protection and other feelings which have acquired instinctive force from group suggestion.

The sufferings entailed by this condition are commonplace knowledge, and there is scarcely a novelist who has not dealt with them—usually with the complacent sentimentalism so common with those who have been through the same struggle and learnt nothing from it. It is, of course, around matters of sex and of religion that the conflict is most severe, and while it is no part of our purpose to make any detailed survey of the condition, it may be of interest to point out some of the more obvious significances of this localisation.

Religion has always been to man an intensely serious matter, and when we realise its biological significance we can see that this is due to a deeply ingrained need of his mind. The individual of a gregarious species can never be truly independent and self-sufficient. Natural selection has ensured that as an individual he must have an abiding sense of incompleteness, which, as thought develops in complexity, will come to be more and more abstractly expressed. This is the psychological germ which expresses itself in the religious feelings, in the desire for completion, for mystical union, for incorporation with the infinite, which are all provided for in Christianity and in all the successful sub-varieties of Christianity which modern times have seen develop. This need seems with the increasing complexity of society to become more and more imperious, or rather to be satisfiable only by more and more elaborately rationalised expressions. The following is a representative passage from a recent very popular book of mystical religion:—"The great central fact in human life, in your life and in mine, is the coming into a conscious vital realisation of our oneness with the Infinite Life and the opening of ourselves fully to this divine inflow." It is very interestingly shown here to what lengths of rationalisation may be forced the consequences of that yearning in us which is identical with the mechanism that binds the wolf to the pack, the sheep to the flock, and to the dog makes the company of his master like walking with God in the cool of the evening.

Did an opportunity offer, it would be interesting to enquire into the relation of the same instinctive impulse to the genesis of philosophy. Such an attempt would, however, involve too great a digression from the argument of this essay.

That sex should be a chief field for the conflicts we are discussing is comprehensible not only from the immense strength of the impulse and the fact that it is a mode of man's activity which herd

suggestion has always tried to regulate, but also because there is reason to believe that the sex impulse becomes secondarily associated with another instinctive feeling of great strength, namely, altruism. We have seen already that altruism is largely antagonised by herd tradition, and it is plausible to suppose that the overwhelming rush of this feeling which is so usually associated with sex feelings is not primarily sexual in quality, but secondarily associated therewith as being the only outlet through which it is allowed by the herd to indulge manifestations of really passionate intensity. If this were so it would clearly be of great practical importance should the rational method ever come to be applied to the solution of the problems for the sociologist and statesman which surround the relations of the sexes.

The conflicts which we have been discussing are of course by no means limited to the period of adolescence, but are frequently carried over into adult life. To estimate the extent to which this occurs and to understand how the apparent calm of normal adult life is attained, it is necessary to consider the effects upon the mind of these processes of contention.

Let us consider the case of a person caught in one of those dilemmas which society presents so abundantly to its members—a man seized with a passion for some individual forbidden to him by the herd, or a man whose eyes have been opened to the vision of the cruelty which everywhere lies close below the surface of life, and yet has deeply ingrained in him the doctrine of the herd that things, on the whole, are fundamentally right, that at bottom the universe is congruous with his moral feelings, that the seeming cruelty is mercy and the apparent savage indifference divine long suffering. Now, what are the possible developments in such a tormented soul?

It is clear that four outcomes are possible. The conflict may end through the subsidence of either antagonist. Years, other instincts or grosser passions may moderate the intensity of ungratified love or take away the intolerable sharpness from the sight of unmerited and unmeaning pain. Again, scepticism may detect the nature of the herd suggestion and deprive it of its compelling force.

Thirdly, the problem may be shirked by the easy mechanism of rationalisation. The man may take his forbidden pleasure and endow a chapel, persuading himself that his is a special case, that at any rate he is not as bad as X, or Y, or Z, who committed such and such enormities, that after all there is divine mercy, and he

never beat his wife, and was always regular with his subscriptions to missions and the hospitals. Or, if his difficulty is the ethical one, he will come to see how right the herd view really is; that it is a very narrow mind which cannot see the intrinsic excellence of suffering; that the sheep and cattle we breed for eating, the calf we bleed to death that its meat may be white, the one baby out of four we kill in the first year of life, that cancer, consumption and insanity and the growing river of blood which bathes the feet of advancing mankind, all have their part in the Increasing Purpose which is leading the race ever upwards and onwards to a divine consummation of joy. Thus the conflict ceases, and he is contented to watch the blood and the Purpose go on increasing together and to put on flesh unperplexed by the shallow and querulous scruples of his youth.

Of these three solutions that of scepticism is unquestionably the least common, though the impression that this is not the case is created by the frequency of apparent scepticism, which, in fact, merely masks the continuation of conflict in the deeper strata of the mind. A man the subject of such submerged conflict, though he may appear to others, and, of course, to himself, to have reached a secure and uncontested basis of stability may, after a period of apparently frictionless mental life, betray by unmistakable evidence the fact that conflict has continued disastrously below the surface.

The solutions by indifference and by rationalisation or by a mixture of these two processes are unquestionably the methods by which is established the great class of normal, sensible, reliable middle age with its definite views, its resiliency to the depressing influence of facts and its gift for forming the backbone of the State. This triumph of herd suggestion over experience and over altruism has clearly the advantage of establishing existing society with great firmness, but it has also the consequence of entrusting the conduct of the State and the attitude of it towards life to a class which their very stability shows to possess a certain relative incapacity to take experience seriously, a certain relative insensibility to the value of feeling and to suffering and a decided preference for herd tradition over all other sources of conduct.

Early in history the bulk of mankind must have been of this type, because experience being still relatively simple would have but little suggestive force, and would therefore readily be suppressed by herd suggestion. There would be little or no mental conflict, and such as there was would be readily stilled by comparatively simple rationalisations. The average man would then be happy,

active and possessed of an inexhaustible fund of motive and energy; capable of intense patriotism and even of self-immolation for the herd. The nation consequently, in an appropriate environment, would be an expanding one and rendered ruthless and formidable by its intense unshakeable conviction of its divine mission. Its blindness towards the new in experience would keep its patriots narrow and fierce, its priests bigoted and bloodthirsty, its rulers arrogant, reactionary and over-confident. Should chance ordain that there arose no great environmental change rendering necessary great modifications, such a nation would have a brilliant career of conquest as has been so often demonstrated by history.

Amongst the first-class powers to-day the mentally stable are still the directing class, and their characteristic tone is discernible in national attitudes towards experience, in national ideals and religions and in national morality. It is this possession of the power of directing national opinion by a class which is in essence relatively insensitive towards new combinations of experience; this persistence of a mental type which may have been adequate in the simpler past, into a world where environments are with amazing rapidity daily becoming more complex; it is this survival, so to say, of the waggoner upon the footplate of the express engine, which has made the modern history of nations a series of such breathless adventures and hairbreadth escapes. To those who are able to view national affairs from an objective standpoint it is obvious that each of these escapes might very easily have been a disaster, and that sooner or later one of them must be such.

Thus far we have seen that the conflict between herd suggestion and experience is associated with the appearance of the great mental type which is commonly called normal. Whether or not it is in fact to be regarded as such is comparatively unimportant and obviously a question of statistics; what is however of an importance impossible to exaggerate is the fact that in this type of mind personal satisfactoriness or adequacy, or, as we may call it, mental comfort, is attained at the cost of an attitude towards experience which greatly affects the value to the species of the activities of minds of this type. This mental stability then is to be regarded as, in certain important directions, a loss; and the nature of the loss resides in a limitation of outlook, a relative intolerance of the new in thought and a consequent narrowing of the range of facts over which satisfactory intellectual activity is possible. We may, therefore, for convenience, refer to this type as the resistive, a name which serves as a reminder of the exceedingly important fact

that, however "normal" the type may be, it is one which falls far short of the possibilities of the human mind.

If we now turn to a consideration of the mental characteristics of the constituents of society other than those of the resistive type, we shall find a common quality traceable, and another great type capable of broad definition. We must at once, however, guard ourselves against being misled by the name normal as applied to the resistant into the supposition that this type is in a numerical majority in society. Intellectually unquestionably of inferior value, there is good reason to suppose that in mere numbers it has already passed its zenith, as may be gathered from the note of panic which what is called the increase of degeneracy is beginning to excite.

Outside the comfortable and probably diminishing ranks of the "normal," society is everywhere penetrated by a steadily increasing degree of what we may call in the broadest possible way mental instability. All observers of society, even the most optimistic, are agreed that the prevalence of this mental quality is increasing in an alarming way, while those who are competent to trace its less obtrusive manifestations find it enormously more widespread still.

The subject is so vast and difficult that further consideration of it will be easier if we enter first upon the mechanism by which mental instability seems to be produced and illustrate its prevalence incidentally.

When the twenty years just past come to be looked back upon from the distant future, it is probable that their chief claim to interest will be that they saw the birth of the science of abnormal psychology. That science, inconspicuous as has been its development, has already given us a few generalisations of the very first rank in wideness of validity and importance of application. Amongst such, perhaps the most valuable is that which has taught us that certain mental and physical manifestations which have usually been regarded as disease in the ordinary sense are due to the effects upon the mind of the failure to assimilate the experience presented to it into a harmonious unitary personality. We have seen that the stable-minded deal with an unsatisfactory piece of experience by rejecting its significance, by the process, that is to say, of exclusion. In the minds we are now considering such exclusion cannot occur, and the unwelcome experience persists as an irritant, so to say, and ultimately produces more or less of that "mental disintegration" of which mental instability is a consequence. In other words abnormal psychology has been able to

show that mental disintegration is the consequence of mental conflict. Now we have already seen that a gregarious animal, unless his society is perfectly organised, must be subject to lasting and fierce conflict between experience and herd suggestion. It is clear, therefore, that abnormal psychology has disclosed the fact that the manifestations of mental disintegration are not diseases of the individual in the ordinary sense at all, but inevitable consequences of man's biological history and exact measures of the stage now reached of his assimilation into the gregarious life. The manifestations of mental disintegration were at first supposed to be of comparatively rare occurrence and limited to certain well-known "diseases," but they are coming to be recognised over a larger and larger field, and in a great variety of phenomena, which, although undesirable and often disastrous, are usually still regarded as normal, or at any rate inevitable.

This field includes a part of insanity, how much we cannot even guess, but certainly a very large part; it includes the group of conditions described as functional diseases of the nervous system, and, finally, it includes that vast group of the mentally unstable which, while difficult to define without detailed consideration, is sufficiently precise in the knowledge of all to be recognisable as extremely large.

It would be totally impossible here to attempt any review of this vast medley of states of disintegration, but it will be obvious, even to those least familiar with the facts, that such states are common enough to cause a thrill of apprehension in the most optimistic. A few words of comment, however, must be added. To the layman insanity seems to appear as a compact and definable disease, whereas in fact it is an inextricably confused congeries of states of which the only common characteristic is that the victims of it speak or act in ways different to a variable extent from the average of the herd. Within its boundaries therefore is abundant room for conditions such as we are discussing. In the second group is included the condition daily becoming more and more familiar to the layman as nervous exhaustion or nervous breakdown; even in the severer grades this state is probably as common as any disease whatever. It inflicts upon its victims, as is well known, practically no direct danger to life, but it converts what should be gaiety and confidence and strength into an insupportable nightmare, and in so doing as surely deprives the state of its best treasure—a working citizen—as if it had eaten away his flesh with the comparative humanity of its dreadful rivals consumption and cancer. In

addition moreover there are many slighter grades of the same condition which are greatly more frequent still, and while they are scarcely recognised as abnormal, do not the less certainly take away from life that gusto which is the only possible basis for useful work. Furthermore, conditions which at first sight give rise to no suspicion of being acquired injuries to the mind, when they are looked at in the light of the facts we have been considering, reveal themselves as being scars inflicted by conflict as certainly as are some forms of insanity. Characteristics which pass as vices, eccentricities, defects of temper, peculiarities of disposition, come when critically examined to be explicable as minor grades of mental disintegration, although on account of their great frequency, they have been looked upon as normal, or at any rate in the natural order of things.

Few examples could be found to illustrate better such conditions than alcoholism. Almost universally regarded as either, on the one hand, a sin or vice, or on the other hand, as a disease, there can be little doubt that in fact it is essentially a response to a psychological necessity. In the tragic conflict between what he has been taught to desire and what he is allowed to get, man has found in alcohol, as he has found in certain other drugs, a sinister but effective peacemaker, a means of securing for however short a time, some way out of the prison house of reality back to the Golden Age. There can be equally little doubt that it is but a comparatively small proportion of the victims of conflict who find a solace in alcohol, and the prevalence of alcoholism and the punishments entailed by the use of that dreadful remedy cannot fail to impress upon us how great must be the number of those whose need was just as great, but who were too ignorant, too cowardly, or perhaps too brave to find a release there.

We have seen that mental instability must be regarded as a condition extremely common, and produced by the mental conflict forced upon man by his sensitiveness to herd suggestion on the one hand, and to experience on the other. It remains for us to estimate in some rough way the characteristics of the unstable, in order that we may be able to judge of their value or otherwise to the state and the species. Such an estimate must necessarily be exaggerated, over-sharp in its outlines, omitting much, and therefore in many respects false. The most prominent characteristic in which the mentally unstable contrast with the "normal" is what we may vaguely call motive. They tend to be weak in energy, and especially in persistence of energy. Such weakness may translate

itself into a vague scepticism as to the value of things in general, or into a definite defect of what is popularly called will power, or into many other forms, but it is always of the same fundamental significance, for it is always the result of the thwarting of the primary impulses to action resident in herd suggestion by the influence of an experience which cannot be disregarded. Such minds cannot be stimulated for long by objects adequate to normal ambition; they are apt to be sceptical in such matters as patriotism, religion, politics, social success, but the scepticism is incomplete, so that they are readily won to new causes, new religions, new quacks, and as readily fall away therefrom.

We saw that the resistive gain in motive what they lose in adaptability; we may add that in a sense the unstable gain in adaptability what they lose in motive. Thus we see society cleft by the instinctive qualities of its members into two great classes, each to a great extent possessing what the other lacks, and each falling disastrously below the possibilities of human personality. Which class may be the more dangerous to the race it is not our purpose here to enquire; both unquestionably *are* dangerous, both are preventible, and we may add, there can be no doubt which is increasing. The effect of the gradual increase of the unstable in society can be seen to a certain extent in history. We can watch it through the careers of the Jews and of the Romans. At first, when the bulk of the citizens were of the stable type, the nation was enterprising, energetic, indomitable, but hard, inelastic, and fanatically convinced of its divine mission. The inevitable effect of the expansion of experience which followed success was that development of the unstable and sceptical which ultimately allowed the nation, no longer believing in itself or its gods, to become the almost passive prey of more stable peoples. At the present time Japan is perhaps of all nations the one in fullest possession of mental stability. Fortunately for her, she has been able to adopt and use Western things, without as yet being penetrated by what would be, to her, the poison of Western ideas. Should she realise the enormous advantage she possesses in the mental stability of her citizens, she has before her a career of almost unlimited expansion until the time shall come when she too must travel past zeniths however splendid, along the path to declension and doom.

In regard to the question of the fundamental significance of the two great mental types found in society, a tempting field for speculation at once opens up, and many questions immediately arise for discussion. Is, for example, the stable normal type

naturally in some special degree insensitive to experience, and if so, is such a quality inborn or acquired? Again, may the characteristics of the members of this class be the result of an experience relatively easily dealt with by rationalisation and exclusion? Then again, are the unstable naturally hypersensitive to experience, or have they met with an experience relatively difficult to assimilate? Into the discussion of such questions we shall here make no attempt to enter, but shall limit ourselves to reiterating that these two types divide society between them, and are both full of sinister significance to the future of the race.

GREGARIOUSNESS AND THE FUTURE OF MAN.

Thus far we have attempted to apply biological conceptions to man and society as they actually exist at present. We may now, very shortly, enquire whether or not the same method can yield some hint as to the course which human development will take in the future.

As we have already seen reason to believe, in the course of organic development when the limits of size and efficiency in the unicellular organism were reached, the only possible access of advantage to the competing organism was gained by the appearance of combination. In the scale of the metazoa we see the advantages of combination and division of labour being more and more made use of, until the individual cells lose completely the power of separate existence, and their functions come to be useful only in the most direct way and through the organisms of which the cells are constituents. This complete submergence of the cell in the organism indicates the attainment of the maximum advantages to be obtained from this particular access in complexity, and it indicates to us the direction in which development must proceed within the limits which are produced by that other access of complexity—gregariousness.

The success and extent of such development clearly depend on the relation of two series of activities in the individual which may in the most general way be described as the capacity for varied reaction—the essential characteristic of the unicellular organism and the solitary animal—and the capacity for communication—the essential characteristic of the cells of the multicellular organism and the units of a gregarious species. The process going on in the satisfactorily developing gregarious animal is the moulding of the

varied reactions of the individual into functions beneficial to him only indirectly through the welfare of the new unit—the herd. This moulding process is a consequence of the power of inter-communication amongst the individual constituents of the new unit. Inter-communication is thus seen to be of cardinal importance to the gregarious, just as was the nervous system to the multicellular.

Moreover, in a given gregarious species the existence of a highly-developed power of reaction in the individual with a proportionately less developed capacity for communication will mean that the species is not deriving the advantages it might from the possession of gregariousness, while the full advantages of the type will be attained only when the two sets of activities are correspondingly strong.

Here we may see perhaps the explanation of the astounding success and completeness of gregariousness in bees and ants. Their cycle of development was early complete because the possibilities of reaction of the individual were so small, and consequently the capacity for inter-communication of the individual was relatively soon able to attain a corresponding grade. The individual has become as completely merged in the hive as the single cell in the multicellular animal, and consequently the whole of her activities is available for the uses of the state. It is interesting to notice that considered from this aspect, the wonderful society of the bee, with its perfect organisation and its wonderful adaptability and elasticity, owes its early attainment of success to the smallness of the brain power of the individual.

For the mammals with their vastly greater powers of varied reaction the path to the consummation of their possibilities must be enormously longer, more painful and more dangerous, and this applies in an altogether special degree to man.

The enormous power of varied reaction possessed by man must, it is clear, render necessary for his attainment of the full advantages of the gregarious habit, a power of inter-communication of absolutely unprecedented fineness. It is clear that scarcely a hint of such a power has yet appeared, and it is equally obvious that it is this defect which gives to society the characteristics which are the contempt of the man of science and the disgust of the humanitarian.

We are now in a position to understand how momentous is the question as to what society does with the raw material of its minds to encourage in them the potential capacity for inter-communication

which they undoubtedly by nature possess. To that question there is but one answer. By providing its members with a herd tradition which is constantly at war with feeling and with experience, society drives them inevitably into resistiveness on the one hand, or into mental instability on the other, conditions which have this in common, that they tend to exaggerate that isolation of the individual which is shown us by the intellect to be unnatural and by the heart to be disastrously cruel.

Another urgent question for the future is provided by the steady increase, relative and absolute, of the mentally unstable. The danger to the state constituted by a large unstable class is already generally recognised, but unfortunately realisation has so far only instigated a yet more desperate blow at the species. It is assumed that instability is a primary quality, and therefore only to be dealt with by breeding it out. With that sinister indifference to the mental side of life which is characteristic of the mentally resistant class, the question as to the real meaning of instability has been begged by the invention of the disastrous word "degenerate." The simplicity of the idea has charmed modern speculation, and the only difficulty in the whole problem has come to be the decision as to the most expeditious way of getting ride of this troublesome flaw in an otherwise satisfactory world.

The conception that the environment must be modified if the body is to survive has long been recognised, while the fact that the mind is incomparably more delicate has scarcely been noticed at all. We assume that the disorderly environment with which we surround the mind has no effect and are ingenuously surprised when mental instability arises apparently from nowhere; but although we know nothing of its origin our temerity in applying the cure is in no sense daunted.

It has already been pointed out how dangerous it would be to breed man for reason, that is, against suggestibility. The idea is a fit companion for the device of breeding against "degeneracy." The "degenerate," that is, the mentally unstable, have demonstrated by the mere fact of instability that they possess the quality of sensitiveness to feeling and to experience, for it is this which has prevented them from applying the remedy of rationalisation or exclusion when they have met with experience conflicting with herd suggestion. There can be no doubt as to the value to the state of such sensitiveness were it developed in a congruous environment. The "degeneracy," therefore, which we see developed as a secondary

quality in these sensitive minds is no evidence against the degenerate, but an indictment of the disorderly environment which has ruined them, just as the complacent catchword associating insanity and genius tells us nothing about genius but a great deal about the situation into which it has had the misfortune to be born.

Sensitiveness to feeling and experience is undoubtedly the necessary antecedent of any high grade of that power of inter-communication which we have seen to be necessary to the satisfactory development of man. Such sensitiveness however, in society as it now is, inevitably leads merely to mental instability. That such sensitiveness increases with civilisation is shown by the close association between civilisation and mental instability. There is no lack, therefore, of the mental quality of all others most necessary to the gregarious animal. The pressing problem which in fact faces man in the immediate future is how to readjust the the mental environment in such a way that sensitiveness may develop and confer on man the enormous advantages which it holds for him, without being transformed from a blessing into the curse and menace of instability. To the biologist it is quite clear that this can only be effected by an extension of the rational method to the whole field of experience, a process of the greatest difficulty, but one which must be the next great variation in man's development if that development is to continue to be an evolution.

Outside this possibility the imagination can see nothing but grounds for the completest pessimism. It needs but little effort of foresight to realise that without some totally revolutionary change in man's attitude towards the mind, even his very tenure of the earth may come to be threatened. Recent developments in the study of disease have shown us how blind and fumbling have been our efforts against the attacks of our immemorial enemies the unicellular organisms. When we remember their capacities for variation and our fixity, we can see that for the race effectually and permanently to guard itself against even this one danger are necessary that fineness and complexity of organisation, that rendering available of the utmost capacity of its members, against which the face of society seems at present to be so steadily set. We see man to-day instead of the frank and courageous recognition of his status, the docile attention to his biological history, the determination to let nothing stand in the way of the security and permanence of his future, which alone can establish the safety and happiness of the race, substituting blind confidence in his destiny, unclouded faith in the essentially respectful attitude of the universe

towards his moral code, and a belief no less firm that his traditions and laws and institutions necessarily contain permanent qualities of reality. Living as he does in a world where outside his race no allowances are made for infirmity, and where figments however beautiful never become facts, it needs but little imagination to see that the probabilities are very great that after all man will prove but one more of nature's failures, ignominiously to be swept from her work-table to make way for another venture of her tireless curiosity and patience.

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