

PSYCHOLOGICAL FACTORS DETERMINING HUMAN BEHAVIOUR ¹

The separation of psychology from the basic assumptions of biology is purely artificial, because the human psyche lives in indissoluble union with the body. And since these biological assumptions hold good not only for man but for the whole world of living things, the scientific foundation on which they rest obtains a validity far exceeding that of a psychological judgment, which is valid only in the realm of consciousness. It is therefore no matter for surprise if the psychologist is often inclined to fall back on the security of the biological standpoint and to borrow freely from physiology and the theory of instinct. Nor is it astonishing to find a widely accepted point of view which regards psychology as merely a chapter in physiology. Although psychology rightly claims autonomy in its own special field of research, it must recognize a far-reaching correspondence between its facts and the data of biology.

Among the psychological factors determining human behaviour, the instincts are the chief motivating forces of psychic events, In view of the controversy which has raged around the nature of the instincts, I should like to establish clearly what seems to me to be the relation between instincts and the psyche, and why I call instincts psychological factors. If we started with the hypothesis that the psyche is absolutely identical with the state of being alive, then we should have to accept the existence of a psychic function even in unicellular organisms. In that case, instinct would be a kind of psychic organ, and the hormone-producing activity of the glands would have a psychic causation.

But if we look upon the appearance of the psyche as a relatively recent

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event in evolutionary history, and assume that the psychic function is a phenomenon accompanying a nervous system which in some way or other has become centralized, then it would be difficult to believe that the instincts were originally psychic in nature. And since the connection of the psyche with the brain is a more probable conjecture than the psychic nature of life in general, I regard the characteristic *compulsiveness* of instinct as an ectopsychic factor. None the less, it is psychologically important because it leads to the formation of structures or patterns which may be regarded as determinants of human behaviour. Under these circumstances the immediate determining factor is not the ectopsychic instinct but the structure resulting from the interaction of instinct and the psychic situation of the moment. The determining factor would thus be a modified instinct. The change undergone by the instinct is as significant as the difference between the colour we see and the objective wave-length producing it. Instinct as an ectopsychic factor would play the role of a stimulus merely, while instinct as a psychic phenomenon would be an assimilation of this stimulus to a pre-existent psychic pattern. A name is needed for this process. I should term it *psychization*. Thus, what we call instinct offhand would be a datum already psychized, but of ectopsychic origin.

1. General Phenomenology

The view outlined above makes it possible for us to understand the variability of instinct within the framework of its general phenomenology. The psychized instinct forfeits its uniqueness to a certain extent, at times actually losing its most essential characteristic—compulsiveness. It is no longer an ectopsychic, unequivocal fact, but has become instead a modification conditioned by its encounter with a psychic datum. As a determining factor, instinct is variable and therefore lends itself to different applications. Whatever the nature of the psyche may be, it is endowed with an extraordinary capacity for variation and transformation.

For example, no matter how unequivocal the physical state of excitation called hunger may be, the psychic consequences resulting from it can be manifold. Not only can the reactions to ordinary hunger vary widely, but the hunger itself can be "denatured," and can even appear as something

metaphorical. It is not only that we use the word hunger in different senses, but in combination with other factors hunger can assume the most varied forms. The originally simple and unequivocal determinant can appear transformed into pure greed, or into many aspects of boundless desire or insatiability, as for instance the lust for gain or inordinate ambition.

Hunger, as a characteristic expression of the instinct of self-preservation, is without doubt one of the primary and most powerful factors influencing behaviour; in fact, the lives of primitives are more strongly affected by it than by sexuality. At this level, hunger is the alpha and omega—existence itself.

The importance of the instinct for preservation of the species is obvious. However, the growth of culture having brought with it so many restrictions of a moral and a social nature, sexuality has been lent, temporarily at least, an excess value comparable to that of water in a desert. Because of the premium of intense sensuous enjoyment which nature has set upon the business of reproduction, the urge for sexual satisfaction appears in man—no longer conditioned by a mating season—almost as a separate instinct. The sexual instinct enters into combination with many different feelings, emotions, affects, with spiritual and material interests, to such a degree that, as is well known, the attempt has even been made to trace the whole of culture to these combinations.

Sexuality, like hunger, undergoes a radical psychization which makes it possible for the originally purely instinctive energy to be diverted from its biological application and turned into other channels. The fact that the energy can be deployed in various fields indicates the existence of still other drives strong enough to change the direction of the sexual instinct and to deflect it, at least in part, from its immediate goal.

I should like, then, to differentiate as a third group of instincts the *drive to activity*. This urge starts functioning when the other urges are satisfied; indeed, it is perhaps only called into being after this has occurred. Under this heading would come the urge to travel, love of change, restlessness, and the play-instinct.

There is another instinct, different from the drive to activity and so far as we know specifically human, which might be called the *reflective instinct*, Ordinarily we do not think of "reflection" as ever having been instinctive, but associate it with a conscious state of mind. *Reflexio* means 'bending back' and, used psychologically, would denote the fact that the reflex which carries the stimulus over into its instinctive discharge is interfered with by psychization. Owing to this interference, the psychic processes exert an attraction on the impulse to act excited by the stimulus. Therefore, before having discharged itself into the external world, the impulse is deflected into an endopsychic activity. *Reflexio* is a turning inwards, with the result that, instead of an instinctive action, there ensues a succession of derivative contents or states which may be termed reflection or deliberation. Thus in place of the compulsive act there appears a certain degree of freedom, and in place of predictability a relative unpredictability as to the effect of the impulse.

The richness of the human psyche and its essential character are probably determined by this reflective instinct. Reflection re-enacts the process of excitation and carries the stimulus over into a series of images which, if the impetus is strong enough, are reproduced in some form of expression. This may take place directly, for instance in speech, or may appear in the form of abstract thought, dramatic representation. or ethical conduct; or again, in a scientific achievement or a work of art.

Through the reflective instinct, the stimulus is more or less wholly transformed into a psychic content, that is, it becomes an experience: a natural process is transformed into a conscious content. Reflection is the cultural instinct *par excellence*, and its strength is shown in the power of culture to maintain itself in the face of untamed nature.

Instincts are not creative in themselves; they have become stably organized and are therefore largely automatic. The reflective instinct is no exception to this rule, for the production of consciousness is not of itself a creative act but may under certain conditions be a merely automatic process. It is a fact of great importance that this compulsiveness of instinct, so feared by civilized man, also produces that characteristic fear of becoming conscious, best

observed in neurotic persons, but not in them alone.

Although, in general, instinct is a system of stably organized tracts and consequently tends towards unlimited repetition, man nevertheless has the distinctive power of creating something new in the real sense of the word, just as nature, in the course of long periods of time, succeeds in creating new forms. Though we cannot classify it with a high degree of accuracy, the *creative instinct* is something that deserves special mention. I do not know if "instinct" is the correct word. We use the term 'creative instinct' because this factor behaves at least dynamically, like an instinct. Like instinct it is compulsive, but it is not common, and it is not a fixed and invariably inherited organization. Therefore I prefer to designate the creative impulse as a psychic factor similar in nature to instinct, having indeed a very close connection with the instincts, but without being identical with any one of them. Its connections with sexuality are a much discussed problem and, furthermore, it has much in common with the drive to activity and the reflective instinct. But it can also suppress them, or make them serve it to the point of the self-destruction of the individual. Creation is as much destruction as construction.

To recapitulate, I would like to emphasize that from the psychological standpoint five main groups of instinctive factors can be distinguished; hunger, sexuality, activity, reflection, and creativity. In the last analysis, instincts are ectopsychic determinants.

A discussion of the dynamic factors determining human behaviour is obviously incomplete without mention of the *will*. The part that will plays, however, is a matter for dispute, and the whole problem is bound up with philosophical considerations, which in turn depend on the view one takes of the world. If the will is posited as free, then it is not tied to causality and there is nothing more to be said about it. But if it is regarded as predetermined and causally dependent upon the instincts, it is an epiphenomenon of secondary importance.

Different from the dynamic factors are the *modalities* of psychic functioning which influence human behaviour in other ways. Among these I would

mention especially the sex, age, and hereditary disposition of the individual. These three factors are understood primarily as physiological data, but they are also psychological inasmuch as, like the instincts, they are subject to psychization. Anatomical masculinity, for instance, is far from being proof of the psychic masculinity of the individual. Similarly, physiological age does not always correspond with the psychological age. As regards the hereditary disposition, the determining factor of race or family may be overlaid by a psychological superstructure. Much that is interpreted as heredity in the narrow sense is rather a sort of psychic contagion, which consists in an adaptation of the child psyche to the unconscious of the parents.

To these three semi-physiological modalities I should like to add three that are psychological. Among these I wish to stress the conscious and the unconscious. It makes a great deal of difference to the behaviour of the individual whether his psyche is functioning mainly consciously or unconsciously. Naturally it is only a question of a greater or lesser degree of consciousness, because total consciousness is empirically impossible. An extreme state of unconsciousness is characterized by the predominance of compulsive instinctual processes, the result of which is either uncontrolled inhibition or a lack of inhibition through-out. The happenings within the psyche are then contradictory and proceed in terms of alternating, non-logical antitheses. In such a case the level of consciousness is essentially that of a dream-state. A high degree of consciousness, on the other hand, is characterized by a heightened awareness, a preponderance of will, directed, rational behaviour, and an almost total absence of instinctual determinants. The unconscious is then found to be at a definitely animal level. The first state is lacking in intellectual and ethical achievement, the second lacks naturalness.

The second modality is extraversion and introversion. It determines the direction of psychic activity, that is, it decides whether the conscious contents refer to external objects or to the subject. Therefore, it also decides whether the value stressed lies outside or inside the individual. This modality operates so persistently that it builds up habitual attitudes, that is, types with recognizable outward traits.

The third modality points. to use a metaphor, upward and downward, because it has to do with spirit and matter. It is true that matter is in general the subject of physics, but it is also a psychic category, as the history of religion and philosophy clearly shows. And just as matter is ultimately to be conceived of merely as a working hypothesis of physics, so also spirit, the subject of religion and philosophy, is a hypothetical category in constant need of reinterpretation. The so-called reality of matter is attested primarily by our sense-perceptions, while belief in the existence of spirit is supported by psychic experience. Psychologically, we cannot establish anything more final with respect to either matter or spirit than the presence of certain conscious contents, some of which are labelled as having a material, and others a spiritual, origin. In the consciousness of civilized peoples, it is true, there seems to exist a sharp division between the two categories, but on the primitive level the boundaries become so blurred that matter often seems endowed with "soul" while spirit appears to be material. However, from the existence of these two categories ethical, aesthetic, intellectual, social, and religious systems of value arise which in the end determine how the dynamic factors in the psyche are to be used. Perhaps it would not be too much to say that the most crucial problems of the individual and of society turn upon the way the psyche functions in regard to spirit and matter.

2. Special Phenomenology

Let us now turn to the special phenomenology. In the first section we distinguished five principal groups of instincts and six modalities. The concepts described, however, have only an academic value as general categories, In reality the psyche is a complicated interplay of all these factors. Moreover, in conformity with its peculiar structure, it shows endless individual variation on the one hand, and on the other an equally great capacity for change and differentiation. The variability is due to the fact that the psyche is not a homogeneous structure but apparently consists of hereditary units only loosely bound together, and therefore it shows a very marked tendency to split into parts. The tendency to change is conditioned by influences coming both from within and from without. Functionally speaking, these tendencies are closely related to one another.

1. Let us turn first to the question of the psyche's tendency to split. Although this peculiarity is most clearly observable in psychopathology, fundamentally it is a normal phenomenon, which can be recognized with the greatest ease in the projections made by the primitive psyche. The tendency to split means that parts of the psyche detach themselves from consciousness to such an extent that they not only appear foreign but lead an autonomous life of their own. It need not be a question of hysterical multiple personality, or schizophrenic alterations of personality, but merely of so-called "complexes" that come entirely within the scope of the normal. Complexes are psychic fragments which have split off owing to traumatic influences or certain incompatible tendencies. As the association experiments prove, complexes interfere with the intentions of the will and disturb the conscious performance; they produce disturbances of memory and blockages in the flow of associations; they appear and disappear according to their own laws: they can temporarily obsess consciousness, or influence speech and action in an unconscious way. In a word, complexes behave like independent beings, a fact especially evident in abnormal states of mind. In the voices heard by the insane they even take on a personal ego-character like that of the spirits who manifest themselves through automatic writing and similar techniques. An intensification of complexes leads to morbid states, which are extensive multiple dissociations endowed with an indomitable life of their own.

The behaviour of *new* contents that have been constellated in the unconscious but are not yet assimilated to consciousness is similar to that of complexes. These contents may be based on subliminal perceptions, or they may be creative in character. Like complexes, they lead a life of their own so long as they are not made conscious and integrated with the life of the personality. In the realm of artistic and religious phenomena, these contents may likewise appear in personified form, especially as archetypal figures. Mythological research designates them as "motifs," to Lévy-Bruhl they are *représentations collectives*, Hubert and Mauss call them "categories of the imagination." I have employed the concept of the collective unconscious to embrace all these archetypes. They are psychic forms which, like the instincts, are common to all mankind, and their presence can be proved wherever the relevant literary records have been preserved. As factors influencing human behaviour, archetypes play no small role. The total

personality can be affected by them through a process of identification. This effect is best explained by the fact that archetypes probably represent typical situations in life. Abundant proof of identification with archetypes can be found in the psychological and psychopathological case material. The psychology of Nietzsche's *Zarathustra* also furnishes a good example. The difference between archetypes and the dissociated products of schizophrenia is that the former are entities endowed with personality and charged with meaning, whereas the latter are only fragments with vestiges of meaning—in reality, they are products of disintegration. Both, however, possess to a high degree the capacity to in control, and even to suppress the ego-personality, so that a temporary or lasting transformation of personality ensues.

2. As we have seen, the inherent tendency of the psyche to split means on the one hand dissociation into multiple structural units, but on the other hand the possibility of change and differentiation. It allows certain parts of the psychic structure to be singled out so that, by concentration of the will, they can be trained and brought to their maximum development. In this way certain capacities, especially those that promise to be socially useful, can be fostered to the neglect of others. This produces an unbalanced state similar to that caused by a dominant complex—a change of personality. It is true that we do not refer to this as obsession by a complex, but as one-sidedness. Still, the actual state is approximately the same, with this difference, that the one-sidedness is intended by the individual and is fostered by all the means in his power, whereas the complex is felt to be injurious and disturbing. People often fail to see that consciously willed one-sidedness is one of the most important causes of an undesirable complex, and that, conversely, certain complexes cause a one-sided differentiation of doubtful value. Some degree of one-sidedness is unavoidable, and in the same measure, complexes are unavoidable too. Looked at in this light, complexes might be compared to modified instincts. An instinct which has undergone too much psychization can take its revenge in the form of an autonomous complex. This is one of the chief causes of neurosis.

It is well known that very many faculties in man can become differentiated. I do not wish to lose myself in the details of case histories and must limit myself to the normal faculties that are always present in consciousness.

Consciousness is primarily an organ of orientation in a world of outer and inner facts. First and foremost, it establishes the fact that something is there. I call this faculty *sensation*. By this I do not mean the specific activity of any one of the senses, but perception in general. Another faculty interprets what is perceived: this I call *thinking*. By means of this function, the object perceived is assimilated and its transformation into a psychic content proceeds much further than in mere sensation. A third faculty establishes the value of the object. This function of evaluation I call *feeling*. The pain-pleasure reaction of feeling marks the highest degree of subjectivation of the object, Feeling brings subject and object into such a close relationship that the subject must choose between acceptance and rejection.

These three functions would be quite sufficient for orientation if the object in question were isolated in space and time. But, in space, every object is in endless connection with a multiplicity of other objects; and, in time, the object represents merely a transition from a former state to a succeeding one. Most of the spatial relationships and temporal changes are unavoidably unconscious at the moment of orientation, and yet, in order to determine the meaning of an object, space-time relationships are necessary. It is the fourth faculty of consciousness, *intuition*, which makes possible, at least approximately, the determination of space-time relationships. This is a function of perception which includes subliminal factors, that is, the possible relationship to objects not appearing in the field of vision, and the possible changes, past and future, about which the object gives no clue. Intuition is an immediate awareness of relationships that could not be established by the other three functions at the moment of orientation.

I mention the orienting functions of consciousness because they can be singled out for empirical observation and are subject to differentiation. At the very outset, nature has established marked differences in their importance for different individuals. As a rule, one of the four functions is especially developed, thus giving the mentality as a whole its characteristic stamp. The predominance of one or the other function gives rise to typical attitudes, which may be designated thinking types, feeling types, and so on. A type of this kind is a bias like a vocation with which a person has identified himself. Anything that has been elevated into a principle or a virtue, whether from

inclination or because of its usefulness, always results in one-sidedness and a compulsion to one-sidedness which excludes all other possibilities, and this applies to men of will and action just as much as to those whose object in life is the constant training of memory. Whatever we persistently exclude from conscious training and adaptation necessarily remains in an untrained, undeveloped, infantile, or archaic condition. ranging from partial to complete unconsciousness. Hence, besides the motives of consciousness and reason, unconscious influences of a primitive character are always normally present in ample measure and disturb the intentions of consciousness. For it is by no means to be assumed that all those forms of activity latent in the psyche, -which are suppressed or neglected by the individual, are thereby robbed of their specific energy. For instance, if a man relied wholly on the data of vision, this would not mean that he would cease to hear, Even if he could be transplanted to a soundless world, he would in all probability soon satisfy his need to hear by indulging in auditory hallucinations.

The fact that the natural functions of the psyche cannot be deprived of their specific energy gives rise to characteristic antitheses, which can best be observed wherever these four orienting functions of consciousness come into play. The chief contrasts are those between thinking and feeling on the one hand, and sensation and intuition on the other. The opposition between the first two is an old story and needs no comment. The opposition between the second pair becomes clearer when it is understood as the opposition between objective fact and mere possibility. Obviously anyone on the look-out for new possibilities does not rest content with the actual situation of the moment, but will pass beyond it as soon as ever he can. These polarities have a markedly irritating nature, and this remains true whether the conflict occurs within the individual psyche or between individuals of opposite temperament.

It is my belief that the problem of opposites, here merely hinted at, should be made the basis for a critical psychology. A critique of this sort would be of the utmost value not only in the narrower field of psychology, but also in the wider field of the cultural sciences in general.

In this paper I have gathered together all those factors which, from the standpoint of a purely empirical psychology, play a leading role in

determining human behaviour. The multiplicity of aspects claiming attention is due to the nature of the psyche, reflecting itself in innumerable facets, and they are a measure of the difficulties confronting the investigator. The tremendous complexity of psychic phenomena is borne in upon us only after we see that all attempts to formulate a comprehensive theory are foredoomed to failure. The premises are always far too simple. The psyche is the starting-point of all human experience, and all the knowledge we have gained eventually leads back to it. The psyche is the beginning and end of all cognition. It is not only the object of its science, but the subject also. This gives psychology a unique place among all the other sciences: on the one hand there is a constant doubt as to the possibility of its being a science at all, while on the other hand psychology acquires the right to state a theoretical problem the solution of which will be one of the most difficult tasks for a future philosophy.

In my survey, far too condensed, I fear, I have left unmentioned many illustrious names. Yet there is one which I should not like to omit. It is that of William James, whose psychological vision and pragmatic philosophy have on more than one occasion been my guides. It was his far-ranging mind which made me realize that the horizons of human psychology widen into the immeasurable.