The Nature of Man: Evidence from Psychology and Psychiatry

A century or more ago a medical enquiry into the nature of man would have been entirely appropriate. At that time the relationship of psychiatry and psychology to philosophy was altogether closer than now, not only in its immediate history, but also in its prevailing attitudes. Kant's influence on nineteenth-century opinion had opened the self or soul to scientific study, and thereby made psychology a logical possibility. His insistence on mathematical measurement, supported later by Herbart, profoundly affected the course of psychology through Wundt to the present day, requiring a rigorous objectivity in the study of an immaterial and nebulous field.

At that period the psychologist and philosopher were not to be clearly differentiated: and both were concerned with the whole man. Darwin's theory was applied not only to the physique of man, but his mental development and eventually by implication to his spiritual nature. Herbert Spencer, typical in this respect of his time, and the interpreter of Darwin, published his Principles of Psychology in 1855, and embarked on his Synthetic Philosophy only a few years later. In such a climate also moved the many-sided genius Francis Galton. His many fruitful psychological investigations arose out of his Darwinian philosophy. He sought to delineate and measure man's psychological characteristics, in order to improve the stock of the race eugenically. More recently, William James, while holding a chair in psychology, wrote increasingly on philosophical subjects, but serving rather to divide than to unite the two fields. Such a cleavage was characterised by Karl Jaspers, who wrote his Allgemeine Psychopathologie in 1913, and worked ever since as a philosopher.

It is from the time that psychology and psychiatry took their leave of philosophy that they began to develop as objective sciences with their own foundations, and to make real progress. Correspondingly their subsequent course has increasingly been concerned with particular problems, and decreasingly with those general concepts of man and his nature, familiar in the early stages of these sciences. However, at all periods of psychological enquiry, conclusions about man's nature from
study of his behaviour have been ill-founded. Although psychology and psychiatry seem to deal more than any other disciplines with man’s essential, immaterial nature, the light they shed is inevitably fragmentary and shifting.

Methods and Limitations

At the outset we must enquire into the sort of information available from these sources and the limitations of the methods. The Introspective method of enquiry was widely used by the philosophers and early psychologists. Basically, much of the evidence underlying the psychoanalytic and related theories is introspective, although in other contexts the method commands little respect. There is also much psychoanalytic evidence that is not fully accessible to the patient’s introspection and this sort of material can be subsumed under the head of the Casuistic method. Here the therapist includes among his observations character and behaviour as well as utterances. He collates them often within a theoretical framework, which he tests by making predictions about subsequent events; inductive generalisations can then be made. Such methods, however, share the weaknesses of those that depend on the study of single cases. Thirdly, the Statistical method has been used, in epidemiology, in the testing of psychological measurements (Hull, Eysenck), and generally in ensuring that observations are not merely chance results. Finally, in certain instances objective techniques are available, as the electroencephalogram, or biochemical and endocrinical techniques. From these four sources, independently or combined, fundamental theories arise. However, it can be seen that the information on which such foundations stand are very variable. Indeed, when compared with the relative reliability of information in physics or chemistry, psychiatry and psychology are built on shifting sands indeed.

The distinction drawn by Dilthey between ‘understanding’ and ‘explanatory’ relationships is also relevant here. The latter, those relationships that are reliably predictable and are not greatly influenced by observer error, are uncommon in psychiatry. Most seem rather to be ‘understanding’ relationships. They cast light, they form a basis for treatment, but they do not share the absolute quality of the explanatory relationship. So far as this distinction holds good in these sciences, so far is it unjustifiable to reach wider conclusions such as those that concern the underlying nature of man.
Finally it is necessary to bear in mind that the whole body of psychological knowledge and theory has grown up as the result of asking certain questions. These may indeed be the most obvious questions, but it is possible to conceive a different set of problems occupying workers' attention. To some extent Russian psychology, which has developed in relative isolation from the west, displays such a contrast.

For all these reasons, the nature of man is little spoken of in the psychological field, and such statements as are made must be received with caution. Nevertheless, behind much work and theory various implicit views of man's nature may be traced.

1. The Biological View

Here we are concerned with the consequences of Darwin's work in the psychological field emphasising the aspects of his nature that man shares with the animal kingdom. The view implies that the controversy in the body-mind problem is settled in favour of discoverable physiological functions lying at the bottom of all human behaviour, and that these functions are more or less identical with those found in animals.

Darwin's biological work in *The Origin of Species* (1859) was quickly extended to imply a continuity of mind between animals. In his *Expression of the Emotions in Man and Animals* (1872), he drew upon evidence from (e.g.) the friendly or savage attitudes of animals and equated these with analogous behaviour in man. This work had two main consequences. Firstly, the development of Darwin's own theme by writers such as Romanes (*Animal Intelligence, 1882: Mental Evolution in Animals, 1883; Mental Evolution in Man, 1887*).

Further evidence on animal behaviour came from Lloyd Morgan and Thorndike, investigating learning in rats, and from Yerkes, working with primates. In the twenties, John Watson applied a similar approach to man. From his 'naïve behaviourism' consciousness was excluded as the field of study. Behaviour could be explained and understood by the study of behaviour alone. Although supported by the complementary work of Tolman and Karl Lashley, Behaviourism in this form has no adherents. It survives vigorously, however, in the school of Pavlov, who discovered in the conditioned response a useful tool for the study of behaviour. The fact that such responses could be facilitated, inhibited or extinguished with varying ease or difficulty in
different individuals accounted for differing personalities and behaviour on a basis of physiological principles. Pavlov’s justification of this wholly physiological attitude towards man lay in his results. When he adopted the current psychological viewpoint, using concepts such as ‘desire’, ‘expectation’, ‘disappointment’, he made no progress with his work; using his physiological concepts, the system developed and gained in coherence.

The second sequence initiated by Darwin was that of genetic studies. It was argued that if the continuity between animals and man were complete, objective measurement of man’s mental characteristics was the prelude to selective breeding and improvement of the race. This was the viewpoint of Francis Galton, whose pioneer work in psychological measurement initiated active eugenic work.

This biological view of man finds topical expression in the work of the ethologists—the students of animal behaviour. From the work of Tinbergen and Lorenz such important principles have emerged as ‘imprinting’. Here, an animal’s behaviour can be shown to be affected permanently by a specific stimulus experienced at a critical but transient stage in its early development. Psychoanalytic writers have suggested that the permanent effect of early psychological trauma in man is due to this process.

It can be seen, therefore, that the biological approach throws light on those aspects of man’s nature that are shared with animals. In behaviouristic study the same techniques are applied both to animals and man. Underlying this field of psychology is the assumption that man ‘is’ ultimately no more than animal, and that his behaviour and experience can ultimately be understood in those terms that serve for animals. Such a conclusion is in many respects self-evident; man’s nature is often nothing but ‘biological’. But it is the assumption that this approach provides a total understanding of man and his nature that makes the critic uneasy. No view of psychiatry can yet make claims of omniscience.

2. The Atomistic View

The second implicit view of man’s nature is that which springs from a large number of restricted disciplines. Psychology has advanced only since it abandoned speculative generalisations, and concerned itself with particular functions: it has proved the value of studying a restricted segment of behaviour. Taking these segments together
however, man’s nature appears as a mere mosaic of functions, each fragment being illuminated to a greater or lesser extent. Here the unity of man’s nature, or the totality of his functioning, is beyond the range of study, or ignored. Such an approach has been traditional where psychiatry has gained most from neurology and neuropathology. Man’s ‘nature’ has there been viewed as the outcome of a complex series of cerebral processes, sometimes distorted by the presence of specific lesions. It was Freud’s distinction that, having been trained in this school by Meynert and Wernicke, in his own contribution he again emphasised the individual nature of man, and his function as a whole.

3. The Deterministic View

Determinism assumes that man’s thought and behaviour is never entirely a matter for free individual choice. Free-will is a fiction and in fact is the resultant of a multitude of factors from the past and present. Ultimately, the extreme view asserts, all such factors must be discoverable. This view of man is stated in a variety of ways. Slater, for example, writes: ‘The free-will, on which both law and religion are based, proves a heuristically sterile idea’; meaning, however, not that free-will does not exist but that ‘it cannot be used scientifically’. More dogmatically Maddison asserts that ‘this type of thinking challenges the traditional . . . in its complete rejection of the doctrine of free-will as a useful, necessary or desirable explanation of human behaviour’.

Man with free-will is too complex an individual for scientific study, by the methods available. To use such methods, therefore, we must exclude certain fields or concepts. But as the application of these methods bears increasing fruit, and the field of knowledge extends, it becomes increasingly reasonable to suppose that the factors in man’s behaviour can be wholly accounted for by such means. Thus Maddison claims that ‘The argument against it (free-will), in brief, is that extensive clinical experience clearly shows that where circumstances appear to offer us several alternative modes of procedure, the path which we in fact take is unswervingly determined by our personality structure’.

What then is the evidence supporting this deterministic view of man?

(i) Social Determinism

It is a familiar principle, but one much exploited by Adolf Meyer, that much of man’s behaviour, normal or abnormal, springs from his
relationship with the environment. The extreme of this view was held by Karl Marx, that man is wholly the creature of his social and economic environment, which determines his consciousness and existence.

The mechanisms by which the environment may be so effective have been indicated by Pavlov. Conditioned responses may easily be established both in animals and man under artificial conditions. It is not far-fetched to postulate that similar responses, established naturally, may account not only for much behaviour, but also for much of man's mental life. In addition, Pavlov extended his findings to form the basis of classifying human personality.

However the process actually works, the relationship of social factors and human personality has been shown in a variety of ways. Social anthropologists like Malinowsky, Margaret Mead or Ruth Benedict have shown how practices of child-rearing and various cultural attitudes appear to account for the 'typical' personality produced by each society. In Samoa, for example, the lax, easy-going attitudes towards sexual behaviour appear to account for the apparent absence of sexual problems in Samoans, or, indeed, serious conflicts on this topic.

The importance of social factors in suicide is well shown in Sainsbury's study of London. The great differences in suicide rate between the boroughs could be related to social differences, namely the social isolation of the individual and the lack of cohesiveness of the particular society in which he lived. It is similarly known that the psychoses of old age largely arise from external factors, such as retirement, bereavement or a change in domicile, rather than those constitutional causes so crucial in younger patients.

In the ecological studies of Faris and Dunham in Chicago and Hare in Bristol, it was found that individuals living near the centre of cities suffered an increased risk of schizophrenia, relative to those who lived on the periphery. The evidence, supported by Hollingshead and Redlich, suggested that some pathogenic social effect was at work, related to the social differences, but as yet unidentified.

(ii) Individual Determinism

The importance of the effects of childhood experience in the origins of behaviour and personality have been identified with Freud's teaching and contributions. Some of his earliest work concerned the part played by childhood memories and experience in the genesis of
hysteria. Such experience may mould attitudes, give rise to character traits, and be an important factor in the development of pathological symptoms. The identification of such experiences, and the associated fantasies and their interpretation, is the basis of psychoanalytic therapy.

However, Freud made a greater contribution to the understanding of man than this. He described man in terms of the libidinal force: he saw man as the resultant of fundamental aggressive and sexual drives, and the internal defences against their immediate expression. Man becomes a dynamic balance between the basic forces of the Id, the ‘reality principle’ of the Ego, and the conscience of Superego. Where Freud emphasised the pre-eminence of the sexual, Adler saw man as the victim of a struggle for power, emphasising his repeated alternative of aggressive dominance or submission. Jung, while sharing these views, also drew attention to the fundamental ideas held in common by men, the ‘collective unconscious’, and the mystical side to the nature of man.

In common these schoolmen struck an important new note. Where man had previously been dissected and fragmented, the analysts saw him again resynthesised. He was seen now as a whole, and in the setting of his environment.

Objective evidence in support of analytic theory is slow to accumulate. The importance of the earliest experiences has, however, been confirmed, for example, in the Goldman-Eisler’s studies of breast-feeding. Children who are weaned before three months fall, as adults, into the category of ‘pessimists’, whereas those weaned late, over nine months, emerge as ‘optimistic’ adults. Wootton has criticised much of the work relating broken homes to childhood behaviour disorder, but there remains suggestive evidence that prolonged separation from parents at an early age may be a factor in later disturbance. Similarly, West showed that the absence of a boy’s father may be an important factor in his later homosexuality.

From evidence of this sort man’s nature, and in particular his individual personality, appears as something plastic, malleable to the forces around him.

For evidence concerning the individual constitution, the innate nature on which the environment plays, we must look elsewhere, although it is difficult of access for research. In the field of mental illness its effect is clear, for example in the inheritance of schizophrenia, which can be transmitted in much the same way as certain physical
characters. Studies of twins strikingly confirm the effect of genetic constitution in determining not only illness, but also personality. To some degree the electroencephalogram (E.E.G.) which shows resemblances between twins, confirms the importance of constitution.

Abnormality in the E.E.G. may also be often correlated with abnormality in the personality, being associated with aggressive or immature behaviour. As these character traits diminish, the E.E.G. approaches normal; it therefore seems to reflect the process of 'maturati­on', although its nature and the factors involved are still unknown: presumably they are biochemical in nature. Hints by analogy come from conditions such as phenylketonuria and Hartnup disease, in which inherited enzyme abnormalities so disturb cerebral functioning as to affect intelligence and behaviour.

A further sidelight on the nature of man comes from the relationship between physique and temperament. It has been known since the time of Esquirol (1774-1840) that the tall slender psychiatric patient suffered insidious deteriorating illnesses, whereas the short thick-set individual suffered from acute but recoverable illnesses. These general impressions have many times been confirmed and extended using a variety of techniques. It may now be accepted that there are significant tendencies for specific physique to be associated not only with certain forms of mental illness, but also with certain temperamental characteristics.

Conclusion

In summary, it is clear that the light that psychology and psychiatry can shed on the nature of man is remarkably limited, although they are concerned with his immaterial part, from which the most revealing evidence might be expected. This lack may be because these disciplines are not explicitly concerned with man's nature as such: they are concerned with his behaviour and the underlying motives.

Much of this behaviour appears as the Pavlovians have described it, physiological, or to be understood in exactly the same terms as animals, with whom man shares so much. However the subtler aspects of his nature are evidently of the greatest complexity. Highly individual, the product of his heredity, yet also permanently moulded by his environment; dependent in turn on that environment for his integrity, his unity of body and mind is also apparent.

However, beyond this psychiatry can make few pronouncements. Its picture of man is incomplete, and one that is clouded by initial
assumptions as well as by ignorance. It presents no grounds for stating that man’s nature or his behaviour are completely comprehensible in psychological terms, although such an assumption is useful as a spur to research. But man’s moral and spiritual nature lie largely outside the field of psychology and psychiatry, and therefore beyond their competence to pronounce upon.