Brit. J. Psychiat. (1963), **109**, 4-11

The Languages of Psychiatry

By

LORD BRAIN

The linguistic philosophers have tended to maintain that philosophy is reducible to the ways in which language is used. Without going all the way with them I believe that they have made a valuable contribution to thought, and that it is often illuminating to look at current problems in that way. In attempting to do this for psychiatry my object is to draw attention to the existence in psychiatric thought of what may be called a number of different languages, to consider briefly the rules which apply to each and those which govern the attempt to translate one language into another, and also to look at the relations between psychiatric languages and certain other types of language.

I need hardly add that I come to this subject as a sympathetic onlooker who, though he may not see most of the game, has spent a good many years now trying to deduce from watching the game what the rules are.

The subject is a vast and complex one, and because psychiatry occupies the bridge between the mind and the brain it cannot escape the philosophical, or if you like linguistic, problems posed by that position. Time does not allow me to do more than sketch in outline some topics any one of which alone might well have occupied the whole lecture.

The Languages of the Mind

At the outset we encounter a question which, though it looks fundamental, is perhaps of more theoretical than practical importance. Are we to adopt a behaviouristic view of psychology? I think we can do that without implying a behaviouristic view of mind in the philosophical sense, and here I propose to follow McDougall (1916) who defined psychology as "the positive science of conduct or behaviour". He certainly included states of mind in "behaviour", and it would be difficult to improve on his description of "a comparative and physiological psychology relying largely on objective methods, the observation and behaviour of men and of animals of all varieties under all possible conditions of health and disease. It must take the largest possible view of its scope and functions, and must be an evolutionary natural history of mind. Above all, it must aim at providing a full and accurate account of those most fundamental elements of our constitution, the innate tendencies to thought and action that constitute the native basis of the mind."

McDougall's "innate tendencies to thought and action" include instincts and drives, of which I shall have little to say, but also those inherent differences between individuals which have led to the recognition of various psychological types.

The Language of Typology. The language of typology has a very ancient history. It is based upon an attempt to classify human beings in terms of psychological traits, and to use this classification to help to explain their behaviour. The older of the more recent psychological typologies, for example, those of Jung (1923) and Kretschmer (1925), were intuitive in the sense that the classifier made his own selection of the traits in terms of which individuals were grouped. Eysenck (1947), a modern typologist, bases his classification upon the reactions of the individual to specific tests: he investigates correlations from which he derives his dimensions of personality. Theories of psychological types, of course, do not imply rigidity of classification, but rather a range or dimensional scale along which the position of the individual can be

https://doi.org/10.1192/bjp.109.458.4 Published online by Cambridge University Press

plotted. To a varying extent psychological typology is applied to the interpretation of mental abnormality. Kretschmer's (1952) classification of the temperaments is an outstanding example of this. "The principal groups of the constitutional endogenous psychoses", he writes, "can serve as guides through the entanglements of the constitutional psychology of the individual. Manic-depressive psychosis or cyclophrenia corresponds in psychopathology to the cyclothymic temperament in normal psychology; and we regard the schizophrenic psychoses or dementia praecox as a psychopathological caricature of the normal varieties of schizothymic temperaments." Moreover some correlations between psychological and physical types have also been very generally recognized.

The Language of Psychopathology. The language of psychopathology should perhaps be regarded as a group of languages, which have roots in common, but individual variations. Broadly it may be said that the principles of psychopathology involve the belief that the patient's present symptoms can be interpreted in terms of a psychological aetiology, that is to say, they are reactions to his past experiences or present problems, or both, and often influenced by psychological factors of which he is himself unconscious. The way in which such symptoms arise, however, and the patient's mode of reaction to his past experiences, are not purely individual, but are to be interpreted in terms of general principles. These, which constitute the theoretical basis of a psychopathology, are derived inductively from the clinical experience of the founders of the various theories of psychopathology and their successors. We shall have later to consider the language of disease in psychiatry, but we may note at this point that just as some typologists admit no distinction of kind between the normal, the mildly abnormal and the grossly abnormal, so many psychopathologists portray the normal as merging into the abnormal, and use psychopathological principles to explain not only the neuroses, but also the major psychoses.

The Languages of Conditioned Reflexes and Learning. We may perhaps consider together the languages of conditioned reflexes (Franks, 1960) and of learning (Jones, 1960) as being at any rate closely related to one another. Though from the psychological standpoint a good many of Pavlov's conclusions were perhaps somewhat naïve, and sometimes confused, his work on conditioned reflexes, and his ideas of the role of excitation and inhibition, actually led him to produce states of "neurosis" experimentally in animals, and the idea of "conditioning" has been used in psychiatry to explain the development of such symptoms as phobic anxiety and fetishism, for example; and attempts have been made by a process of deconditioning to establish an aversion in an individual to a mode of behaviour to which he is in a broad sense of the word addicted. Of more general interest and importance are the attempts to discover what psychological factors, and even what neurophysiological factors, determine the susceptibility, or insusceptibility, of the individual to conditioning. Similarly, since learning plays a fundamental part in the development of the mental life from its very beginning, an increased knowledge of the nature of learning, and individual differences in respect of it, may well throw some light on the development of some psychological abnormalities.

The Language of Disease

When we consider the language of disease in psychiatry, it will, I think, be generally admitted that our ignorance of the pathogenesis of many psychiatric disorders creates an initial difficulty. As far as the major psychoses are concerned we are still at the stage of describing diseases in terms of symptom-complexes, and the shortcomings of this are only too familiar. Psychiatrists may differ as to whether an individual patient is or is not suffering from schizophrenia, whether schizophrenia is one disease or many, or whether endogenous and reactive depression are the same or different disorders. But these are difficulties of a kind which we may expect to yield to greater knowledge. There are other difficulties about the use of the concepts of disease or abnormality which seem inherent in the nature of the mind, the very subject-

https://doi.org/10.1192/bjp.109.458.4 Published online by Cambridge University Press

matter of psychiatry. The individual personality is the product of a number of factors,—genetic factors, which may well largely determine his intelligence and his psychological type, and environmental factors of great variability and complexity. When we take into account the great plasticity, i.e. learning capacity, of the mind, it becomes obvious that, leaving on one side for the moment disease of mind which is the result of disease of body, there is a wide range of mental states and behaviour to which the concepts of normal and abnormal, or normal and diseased, do not apply in the way to which we are accustomed in morbid anatomy and clinical medicine. For example, there can be no doubt that mitral stenosis, carcinoma of the breast and cerebral haemorrhage are abnormal, because we know what the normal looks like and can make direct comparisons: but no such test can be applied to the variations of human behaviour. Indeed that is so complex that it must often be difficult to decide what should be regarded as statistically normal; and it does not by any means follow that what is statistically abnormal is pathological. Here perhaps the important question is, for what purpose we wish to define abnormality. This is familiar in law, where mental abnormality is variously defined for different purposes. Patients who come to the psychiatrist are selected by the fact that their states of mind cause, or are likely to cause, distress to themselves or concern to society. This is a practical distinction, but it does not distinguish them scientifically from many others whom the psychiatrist never sees. In many circumstances it is helpful to recognize what may be termed the principle of the relativity of abnormality in psychiatry.

The Language of the Brain

The Language of Anatomy, with its important subdivision of morbid anatomy, is imposed on psychiatry by the brain. Since lesions in particular anatomical areas of the brain, describable therefore in terms of the languages of anatomy and pathology, are correlated with the disturbances which are describable in psychological terms, there has developed a kind of phrenological correlation between localized anatomical lesions and specific psychological functions—what in connection with aphasia I have called the psycho-anatomical interpretation, but this is being replaced, incidentally much more obviously in psychiatry than in aphasiology, by the development of the language of physiology.

The Language of Physiology. Physiology, of course, employs anatomical terms: it speaks of nuclei, nerve pathways, nerve cells, and synapses, but it does so in dynamic instead of static terms. It seeks to describe what is happening, which means introducing time into the account. Since physiology includes anatomy, it has to deal also with morbid anatomy, which means that there is a pathophysiology which seeks to interpret the effects of lesions, or disorders of function, in physiological terms. Nowadays physiology includes a sub-language of pharmacology.

As I have suggested in connection with aphasia (Brain, 1961), it is to physiology that we must look for the development of a language which can bridge the gulf between the brain and the mind, that is a language which can be used to describe direct correlations between physiological and psychological functions. I will return to this point later when I speak of the translation of one language into another. Meanwhile let us note the great progress which has been made during recent years in those parts of physiology which are of special concern to psychiatry (Brain, 1962). We may begin with animal behaviour and observe the effects of experimental lesions, particularly those involving the connections between the frontal lobe and the diencephalon. But there are also gross behaviour disorders produced in animals by both temporal lobe and parietal lobe lesions. Emotional behaviour can now be studied experimentally, and there is the new knowledge concerning the ascending reticular alerting formation and its role in the regulation of consciousness and attention, and the important part played by descending inhibitory pathways upon attention. And here must be sought the physiological basis of the psychological effects of sensory deprivation. Both in man and in animals there is new evidence as to the role of the hippocampal region in the regulation of

https://doi.org/10.1192/bjp.109.458.4 Published online by Cambridge University Press

memory, though the ultimate physiological basis of memory still eludes us; and the study of memory disturbances brings in again perceptual attention, and is related to the time-ordering of experience, about which we know very little, but in which the cingulate gyrus seems to play some part. All this in turn may be expected to throw more light on the precise role of the frontal lobes in the integration of the personality. These correlations between physiology and psychology, however, are still concerned with fairly gross structures. A new field is being opened up in the study of the finer physiological basis of perception in the retina and visual cortex, for example, and it is at this level that we may expect to discover the basis of perceptual discrimination and the recognition of patterns, which is fundamental to the psychophysiology of both perception and speech.

The Language of Pharmacology. The discovery of so many new drugs which have a profound effect upon the mind has led to a vast amount of research in the attempt to discover how they work both in biochemical and physiological terms. Here physiology and pharmacology can reinforce each other, and as well as using physiology to interpret pharmacology we are learning new facts about physiological functions from pharmacological studies. The language of pharmacology speaks in terms of the activity of synapses and the metabolism of nerve cells, their selective responses to biochemical substances normally produced by the body, or artificially introduced into it, and the effects of these in terms of excitation or inhibition of pathways, the functions of which it is hoped to express in terms of behaviour, and, in the case of man, of mental states.

And pharmacology is also concerned with the hallucinogenic drugs, the actions of which it seeks to explain. Here, again, we enter the realm of perception, normal and abnormal, dreams, hallucinations, memory, time sense, emotion and that fundamental distinction between the subjective and the objective, the "real" and the "unreal". And the hallucinogens, both in theory and practice, have important implications for treatment.

The Language of Causation

We have now reached a point at which we can consider some of the special problems which arise from the use of the language of causation in psychiatry. Physical causation gives rise to no difficulty. Alzheimer's disease causes dementia. Here there is a direct correlation between the physical and the psychological, and there is no other relationship beyond this correlation. Physical causes, whatever they are, are always unlike the effects they produce when these effects are mental. But psychological abnormalities may have like, i.e. psychological, causes which may be expressed in one or other of the languages of psychopathology. It is often said that, whatever may be the relationship between the mind and brain, brain-states are irrelevant in relation to the causation of psychogenic symptoms. With certain qualifications I think that is true, and the reason takes us back to what I said earlier about the use of the language of disease in psychiatry. When psychogenic symptoms are to be regarded as a product of earlier experiences it is literally meaningless to regard them as the product of a disordered function of the brain, for no means exist, nor in my view are ever likely to exist, whereby it would be possible to distinguish the functioning of the brain of an individual who has acquired a neurotic symptom in this way from that of one who has not.

I said, however, that this statement must be qualified. If the typologists are right, and it is, or becomes, possible to classify people in terms of their susceptibility to excitation or inhibition, conditioning, suggestion, etc., and particularly if these differences prove to be inherited, we must conclude that they depend upon physiological differences in their nervous systems. Similarly whatever may have been the value, empirically in the past and more scientifically in future, of drugs and other physical methods of treatment of psychogenic disorders, the existence of these therapies shows that psychogenesis does not exclude physiogenesis.

It is sometimes said that multiple causation is distinctive of psychiatry, but surely that is not the case, for it is often important in the aetiology of physical disorders; but in psy-

https://doi.org/10.1192/bjp.109.458.4 Published online by Cambridge University Press

chiatry it is peculiarly complex. The role of heredity illustrates this particularly well. In the child-parent relationship, for example, it may be extremely difficult to assess how much a child's reactions are environmentally induced and how much they are a product of a hereditary tendency which it shares with the parent. The parent's behaviour, again, may be jointly the product of the genes which it shares with its child and its reactions to its own parents. Thus the entail of maladjustments is by no means simple.

Psychiatry and the Language of the Body

To paraphrase Pascal, the body has its reasons of which the reason knows nothing; and it has a language which is not expressed in words. Psychosomatic medicine is usually rather narrowly regarded as concerned with bodily disorders attributed to psychological states. This difficult field, the province of both the psychiatrist and the physician, calls in the first instance for statistical study, perhaps on the lines of Eysenck's personality analysis, which however does not exclude the psychological interpretation of any correlations which may be found. But there is another aspect which is of greater practical importance and yet is less familiar to the physician—I mean the masking of the psychological disorder by the presentation of symptoms which are described in bodily terms, and may appear to be organic in origin. Bodily symptoms masking a depression are particularly important. When they are vague it may not be difficult to discover that they are not organic: when they are specific, such as psychogenic regional pain, the whole gamut of diagnostic and somatotherapeutic procedures may be run. Here physicians often need to learn the psychiatric language of the body, and especially to recognize that "psychogenic" is not in itself a diagnosis, but only the preliminary to one.

The Language of Psychiatry and the Language of the Law

The law has its own language, and difficulties not uncommonly arise from the attempt to translate the language of psychiatry into the language of the law, or vice versa. Consider the legal principles of diminished responsibility. The M'Naghten rules were long rightly said to be out of date, in other words to speak a language which no longer expressed psychiatric concepts, and the introduction of the principle of diminished responsibility was therefore welcomed as being more in accordance with what we now know about the mind. But its implications are perhaps more fundamental than is realized. May I read you the relevant section of the Homicide Act, 1957? "Where a person kills or is a party to the killing of another, he shall not be convicted of murder if he was suffering from such abnormality of mind or retarded development of mind or any inherent causes or induced by disease or injury as substantially impaired his mental responsibility for his acts and omissions in doing or being a party to the killing." If we compare the Homicide Act with the M'Naghten rules we find that although the Homicide Act is often regarded as merely a modification or modernization of the M'Naghten rules it embodies a profound difference of principle. In order to establish a defence under the M'Naghten rules, it was necessary only to apply tests which, however antiquated, were purely psychological. Whether the prisoner knew the nature and quality of his act, and whether he knew that it was wrong, are questions about the state of his mind which a psychiatrist may properly attempt to answer. But the issue under the Homicide Act involves first the establishment of an abnormality of mind, and then the proof that it "substantially impaired his mental responsibility". Now responsibility is a word which does not occur in the language of psychiatry. Responsible, of course, merely means answerable, and answerable in criminal law means liable to be punished. And liability to punishment is a legal concept based upon certain accepted ideas which have their origins in ethics, philosophy and canon law. Looked at in this way the section of the Homicide Act begins to appear somewhat tautological. A person is not to be punished if by reason of abnormality of mind his mental state in relation to his act is such that he ought not to be punished. It is, of course, really more than that

https://doi.org/10.1192/bjp.109.458.4 Published online by Cambridge University Press

because the idea of responsibility takes for granted an established legal attitude not here further defined.

The issue of diminished responsibility is for the jury to decide, and judges frequently emphasize this; and yet in practice the jury could hardly do this unless, by implication at least, the psychiatrists in their evidence dealt not only with the psychiatric state of the prisoner but with its legal implications regarding responsibility. Common sense and discretion make it possible to translate one language into another although their terms are not always equivalent.

The definition of the psychopath poses a problem for both languages, as we found in the Royal Commission. Again it involves the concept of diminished responsibility, which has to be expressed more adequately in the language of psychiatry before the law can be expected to find terms for it.

A breakdown in translation occurred in a recent case reported in *The Times* on June 7th (*Watmore v. Jenkins*). The issue was a somewhat complicated one, and we need not now concern ourselves with the whole of it. The defendant was a diabetic, who took insulin and was also suffering from infective hepatitis. The magistrates who first tried the case had dismissed charges that he had driven a motor vehicle on a road while under the influence of drugs and of driving in a manner dangerous to the public. On appeal the Divisional Court of five judges, including the Lord Chief Justice, upheld the decision of the justices dismissing the information that the respondent drove a motor vehicle while under the influence of drugs, but remitted to the justices the summons for dangerous driving with a direction to convict. I quote their reasons from the report of the case in *The Times*. "The justices found that the respondent had driven for over five miles, on a road which was not straight, in a state of automatism. It was a question of law what constituted a state of 'automatism' and that expression was no more than a modern catch-phrase which the courts had not accepted as connoting any wider or looser concept than involuntary movement of the body or limbs of a person. The question posed was whether the justices' findings that a state of automatism had supervened when the respondent was first observed driving was supported by any evidence which, as a matter of law, sufficed to raise a reasonable doubt that all his body movements which turned his car and kept it moving at a fairly steady speed were wholly uncontrolled and uninitiated by any function of conscious will. The justices' findings that the respondent continued to perform the function of driving after a fashion tended to negative rather than support a conclusion that the whole of such performance was involuntary or unconscious. The charge of dangerous driving was fully established by the facts." I have not read the medical evidence in this case nor the full judgment, but two important points emerge from *The Times* report. First, there is the statement that "it was a question of law what constituted a state of automatism". I take it that this sentence means primarily that it is for the Court to decide whether a state of automatism existed in the circumstances in question. But this implies that the Court fully understands what a state of automatism is, and for this it depends upon the evidence. Incidentally, far from being "no more than a modern catch-phrase" automatism as a medical term is of the most respectable antiquity, having been used, as I shall show in a moment, with the greatest relevance by Gowers in 1893. But in the case of *Watmore v. Jenkins* the judgment was at variance in principle with accepted medical opinion, for it states that "the justices's finding that the respondent continued to perform the function of driving after a fashion tended to negative rather than support a conclusion that the whole of such performance was involuntary or unconscious". One must conclude that the evidence had not established the error of this view, which springs from a confusion about the nature of consciousness and unconsciousness. It is said that because the respondent continued to perform the function of driving after a fashion one could not conclude that the whole of such performance was involuntary or unconscious. Now Gowers (1893) in his Textbook, writing on automatism after minor epilepsy, described exactly the circumstances of *Watmore v. Jenkins*. "I have known

https://doi.org/10.1192/bjp.109.458.4 Published online by Cambridge University Press

a carman, after an attack, to drive through the most crowded parts of London without any object, but also without any accident." There are, of course, as Hughlings Jackson was fond of saying, many degrees of impairment of consciousness, and the highest levels may be impaired while leaving a person perfectly capable of quite complex series of movements and activities which he may carry out successfully, provided no emergency calling for decision arises, and of which he has no subsequent memory. In *Watmore v. Jenkins* there was a failure to translate the language of psychiatry into the language of the law.

Translation from One Language into Another

If psychiatry has many languages psychiatrists must be polyglots, but I suspect that most have a native language. I don't know if anyone has applied typology to psychiatrists to discover how far temperament may influence a preference for one language over another. I once heard Maurice Nicoll in a lecture give a Freudian analysis of Freud, a Jungian of Jung, and an Adlerian of Adler. How far is it possible to translate one psychiatric language into another? Even in ordinary linguistics languages may differ profoundly, and their differences may reflect differences in the ways in which the people who speak them regard time, personality, classes of objects, and so on. How far in such cases language reflects thought, or thought language, is debatable. Much the same is true of psychiatry. The language of anatomy and physiology is determined almost entirely by the objective phenomena which it is seeking to describe. But when we come to psychology the situation is different. Some psychological languages seek to approximate to the language of anatomy and physiology in that they describe mental factors, the existence of which is inferred from objective and measurable tests, and which are classified accordingly. But other psychological concepts, such as the languages of psychopathology, do not seem to be verifiable in the same way: they are rather to be regarded as unifying hypotheses, which have value because they establish relationships between phenomena. Even so, one may be more adequate than another, as being more comprehensive, for example.

Several further factors introduce complexity into the languages of psychology. In psychology the mind is studying itself: it is both subject and object. Moreover, the large part played in mental activity by symbolic representation of all kinds, from words to art and myth, means that the task of reducing human behaviour to one systematized set of concepts is, if not insuperable in itself, at any rate probably beyond the horizon of the present century. If this is so, it should not be surprising to find a variety of languages in psychology, each of which gives a certain unifying account of phenomena, and possesses a certain degree of internal coherence, but which is so different in its structure from the others that complete mutual translation is impossible. Some partial translation, particularly of general concepts, however, may be possible As we have seen, the languages of psychology and physiology meet in such terms as conditioning, inhibition, and attention, and in the study of speech and perception; and there may well turn out to be physiological correlates of psychological types. Then again experimental work on the behaviour of infant mammals, the study of the human infant and the Freudian theory of infantile behaviour may prove mutually illuminating.

But however much more we may learn about the workings of the brain and the mind, and even about the relationship between them, psychiatry will always need to speak both physiological and psychological languages. And the recognition that there are different kinds of language in psychiatry will prevent us from making the mistake of believing that the scientific method of verification, however valuable in its own sphere, is universally applicable. Nor, I would say, does a system of psychopathological theory necessarily stand or fall by the success or failure of its therapeutic applications, nor, again, can these always be measured by the methods of the laboratory.

I am old enough to have watched personally the development of British psychiatry for more than forty years. I can remember the first impact of Freud, the work of Head and Rivers

https://doi.org/10.1192/bjp.109.458.4 Published online by Cambridge University Press

in the first world war, and the development of the school of eclectic psychotherapists based on the treatment of "shell-shock". I went as a student to lectures at the Tavistock Clinic when it was in Tavistock Square, and in one way or another I have been more or less closely involved in a good deal that has happened since. After centuries of therapeutic nihilism treatment has made great strides, but in the physical sphere empiricism has outrun theory: however, as often happens in medicine, therapeutic success has proved a great stimulus to the growth of knowledge. Only those who can look back far enough can fully appreciate the great progress in knowledge, therapeutic capacity, influence and status which psychiatry has achieved in the time, and perhaps one of the most encouraging contrasts between the past and present is the growth, particularly in this country, of the recognition that psychiatry needs many languages, because none of them is sufficient alone.

REFERENCES

BRAIN, R. (1961). *Speech Disorders*. London.

——(1962). *Recent Advances in Neurology and Neuropsychiatry*, 7th Edn., London, Chaps. 1 and 2.

EYSENCK, H. J. (1947). *Dimensions of Personality*. London.

FRANKS, M. (1960). "Conditioning and abnormal behaviour", in *Handbook of Abnormal Psychology*, ed. by H. L. Eysenck. London, p. 457.

GOWERS, W. R. (1893). *A Manual of Diseases of the Nervous System*. London, p. 746.

JONES, H. G. (1960). "Learning and abnormal behaviour", in *Handbook of Abnormal Psychology*, ed. by H. L. Eysenck. London, p. 488.

JUNG, C. G. (1923). *Psychological Types*. London.

KRETSCHMER, E. (1925), *Physique and Character*. London.

——(1952). *A Textbook of Medical Psychology*, trans. by E. B. Strauss. London.

MCDOUGALL, W. (1916). *Social Psychology*, 10th Edn. London.

Lord Brain, M.D., P.P.R C.P., *86 Harley Street, London, W.1*

https://doi.org/10.1192/bjp.109.458.4 Published online by Cambridge University Press