

at our disposal. Finally, we acknowledge the active collaboration of Dr. Denis M. Freeman in the clinical supervision of the children.

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ACCEPTANCE OF PSYCHIATRY BY THE MEDICAL STUDENT*

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The attitudes which students acquire during their childhood, their school, and their preclinical training determine to a considerable extent their acceptance or rejection of psychiatry. But these attitudes are liable to reinforcement by their experience of clinical medicine and by their first contacts with psychiatry itself. It is difficult for the student to approach this subject with the same objectivity which he can give to other subjects. He is in danger of uncritical acceptance or of uncompromising rejection, and either attitude is equally undesirable. Many explanations have been offered for this. Among them is the fact that in most schools psychology and sociology are not taught adequately in the preclinical period and the place of psychiatry in the curriculum is relatively small.

Moreover, when psychology has been taught, it is not infrequently of the dry-as-dust academic variety, which the student cannot relate to the personal problems he meets in his patients and in everyday life. There is then the alleged hostility to psychiatry of clinical teachers in other fields of medicine and the undoubted tendency of the young student to identify himself with the attitudes of those whom he admires and respects. An excessive emphasis on psychopathology and on psychological determinism has also been blamed; for this is foreign to his thinking, and the impact, if it is felt at all, arouses anxiety in the student himself. More significant perhaps is the fact that there is as yet no body relevant to aetiology and treatment which is generally acceptable and accepted. Psychiatry is still cloven by the false antitheses of the psychosocial and organic approaches to the subject.

Teleological Aspect of Behaviour

No doubt all these and many other reasons play their part in shaping the student's attitudes. It is suggested, however, that the basic reasons lie deeper and are related to the explanatory hypotheses which each of

us must hold about the nature of man and about his behaviour. For 150 years biological science, and hence medicine, has tried to reach understanding of living phenomena in terms of physics and chemistry. A strict aetiology has implied a search for physical causation for all forms of disease and behaviour. The great successes of the anatomico-pathological concept of disease has abolished teleological explanations for biological events. Every event in nature is viewed retrospectively in terms of a chain or net of causative factors which determined it. Every endeavour has been made to narrow the concept of biology as science to the causal-mechanical methods of physics. It is indeed only reasonable and profitable to think about the functions and dysfunctions of a tissue, an organ, or an organ-system in terms of aetiological causation, but it has never been possible to think of human behaviour at its most integrated level in these terms. Indeed, it is only possible to do so when the concept of purpose or teleology is invoked.

We cannot avoid this forward-looking teleological aspect of behaviour, and this, which has been so unpopular and almost heretical among scientists, has raised the cry that psychiatry is "not scientific." Yet in the development of science teleological explanation probably always precedes and provides the ground for the discovery of causal mechanisms. It is a necessary stage in the development of science, and it is not intrinsically "unscientific." Indeed, science is every logical connexion of facts in thought whether it is aetiological or teleological.

The modern medical student, in contrast to his predecessors in other centuries, is little burdened by philosophy. He has escaped from preoccupation with mediaeval dualism—the mind-body problem—but he shares the prejudices of his cultural setting and he dislikes doubt and uncertainty. He is offered an immense array of technical knowledge, but he needs above all a satisfactory *explanatory hypothesis* about human behaviour with which he can work and into which he may fit, as best he can, all the data of human disease and disorder which he will meet. The great successes of aetiological medicine in the present century, based on the explanatory hypothesis of biology, are plain to all and are accepted without question. The failure of this hypothesis to cover all the facts of human behaviour and particularly those of psychological illness is, however, the threat which the student meets as soon as he encounters his first patients.

Determinism

The chief explanatory hypothesis of medicine rests upon physical determinism, the logic of which is that all physical events in the universe, and in the case of medicine human diseases, are determined by a necessary antecedent chain of physical causation. Physical determinism, however, while it is an entirely satisfactory explanatory hypothesis for biology, for macrophysics, and for much of medicine, is not so when it is applied to either normal or abnormal human behaviour. Strictly speaking, physical determinism is mechanism, and logically means that every event, including human behaviour, is completely explicable in terms of its antecedents. Thus, given complete knowledge of conditions, one would have complete knowledge of precisely how a person will, indeed *must*, act. The

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implications of this for religion and for the notion of free-will are obvious.

Thus many doctors, nurtured throughout their school and undergraduate careers on an aetiological explanatory hypothesis about the nature of disease based on physical determinism, share with their teachers a great reluctance even to think about human behaviour, human feelings, motives, and desires, in the same terms. This difficulty would not be so great if, when the attempt to transfer the explanatory hypotheses of medicine to mental illness was made, it was found that human behaviour, both normal and abnormal, could be "understood" in terms of a respectable chain of physiological and biochemical events. But the phenomena of mind and of mental illness cannot as yet be "explained" within any system of physical determinism. In its place the student is offered, rather late in his training, a variety of other explanatory hypotheses which are foreign to his thinking and to his conceptions of the nature of disease. In the main these are hypotheses based either on psychological determinism or on cultural determinism, and both include teleological ways of thinking.

This is not the place nor the time to defend teleology and its place in science. It is, however, surely prejudice to hold that only causal connexions are the proper objects of science. Yet the evils of exclusive preoccupation with either causal or purposive connexions are easy to see. On the one hand the organic-causal hypothesis of medicine has resulted in a situation where, from its exclusive use, nearly half the ills of man remain outside consideration. On the other hand a preoccupation with psychological determinism has led to psychoanalysis, and that, with cultural determinism, to Marxism. Any explanatory hypothesis, exclusively taught and exclusively believed, leads to a "total ideology," which has the imprint of religious faith. Once a total ideology has been acquired there is little room for manoeuvre or for progress.

Ultimate Object of Study in Medicine

The spectacular success of the application of the physical sciences to the problems of biology and medicine have had, as Woodger (1956) points out, an adverse effect on the psychological and social sciences. This is apparent in the medical curriculum. One function of education is to extend the range of the student's knowledge of reality and of his power to control it. The ultimate object of study in medicine is the patient himself, not a piece of him, such as his kidneys or his respiratory system. It is obvious that physics and chemistry can be taught only in a laboratory and a class-room, and the objects of study must be materials. Anatomy and physiology, which pertain to the living, are also taught in the laboratory, and the materials are the cadaver, the test-tube, and the recording apparatus. It is only late in the third year that the student meets the real object of his studies—the living patient. Even then his attention is constantly directed not to the patient himself but to parts of him. Despite much lip-service in favour of treating the patient as a whole, this is rarely the case—and this is inevitable, since the teachers are themselves specialists in different branches of medicine, and are experts in the physico-chemical mechanisms underlying disease processes in particular organs and systems. The indoctrination in aetiological

processes, exclusively accepted as the only reality of medical science by his teachers, starts in the student's school and is perpetuated throughout his preclinical and clinical training. The search for the biochemical or structural lesion remains the exclusive object of clinical inquiry.

Medical education is not without its pains and its anxieties. The realities of disease and death are themselves painful and often shocking. We have all accepted the traumata of the dissecting-room, the operating theatre, the inevitable deaths, and the necropsy room. But the student's gradual introduction to these painful aspects of medical reality is cushioned for him by his progressive acceptance of the explanatory hypothesis of disease processes and the intrinsic interest in the subject. From this observation of human disease in the framework of the hypothesis, he himself, as well as the patient as an individual, can remain outside. The reality of psychological illness is also painful, and the recognition of the influence of emotional factors in suffering causes anxiety because it is something from which the patient as an individual, and the student as a fellow human being, cannot be excluded. Attempts to do so by ridicule or by denial are commonly seen. Nothing that the student has met during his previous experience of medicine as applied science fits him to meet this stress. Indeed, as this paper has tried to show, the body of knowledge and of concepts which make up his explanatory hypothesis about man have been, it would seem, almost expressly designed to shield him from awareness of the patient as an individual.

There is no easy answer to this. Perhaps the very success of the traditional organic approach to causation will in time draw attention to the large area of ignorance as opposed to what is known. Rearrangement of the medical curriculum and a larger and more extensive representation of psychiatry in it have been advocated by many, and most particularly the introduction of formal teaching of psychology and sociology in the preclinical period. A fundamental change in the climate of opinion must, however, be awaited. Until the limitations of the explanatory hypotheses of a medicine based on causal-mechanistic concepts is more generally recognized, little change can be expected. Such recognition would lead to a reformulation of the roles of causation and teleology in human behaviour, and to the idea that physical determinism, while necessary to all understanding of the mechanisms of bodily functions, does not provide the techniques for elucidating and controlling human behaviour. When this is accepted it is probable that the student will not have to wait three years before he meets the object of his studies—namely, the whole individual. For it can be argued that every science can be taught only through practical experience of the object of that science.

The capacity for making observations on individuals can be acquired only when individuals are available for study. Introduction to the realities of psychological life should therefore start at the beginning of the student's experience, not as a theoretical subject heard about only in lectures, but as a practical exercise in the nursery and school, in the home and factory, in the prison and geriatric unit.

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