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Taxonomy of Mental Disease

THE categories used by psychiatrists have puzzled scientists in other fields. As frequently occurs in the "natural-history" state of a new field of investigation, our present taxonomy owed its origin to historical accident and has persisted because of failure to devise an adequate substitute for the admittedly inexact terminology and classifications. The clinical observations that led Kraepelin to group mental diseases as he did are still valid. There exist, however, a great number of alternate methods of grouping that have arisen as the result of improved techniques in neighboring fields. Endocrinologists, biochemists, psychologists, sociologists, and workers in other disciplines have proffered such classifications. The psychiatrist has rightfully resisted new groupings which may suit some other discipline, but which would fit our clinical material even less satisfactorily than the present Kraepelinian terminology.

The acceptance of Kraepelin's classification resulted not so much from the pertinence of his categories, as from Bleuler's rationalization for Kraepelin's groupings in his classic monograph. In the light of our current knowledge of scientific theories this rationalization is inadequate, since it lacks both exclusiveness and predictability. Further, the associationist theory and the elementarism of mind on which Bleuler's theory was based are no longer acceptable.

The failure of allied disciplines in making major contributions to the field of mental disease has been most discouraging. This failure may be due to malapropos or phenotypical groupings of patients with mental disease, rather than to biochemistry, neuropathology, endocrinology, etc. A system of classification is needed which will mutually satisfy the psychiatrist and scientists in related disciplines.

D. L. Gerard and I have proposed a new approach to this problem (Taxonomy of Mental Disease. *J. Gen. Psychol.* [in press]). We have offered, not a new taxonomy, but a proposal as to how such a taxonomy should be evolved. The method involves two essential considerations: (1) That the "psychiatry" of an

individual is an end product of processes which themselves are not essentially psychiatric, and an adequate taxonomy should, therefore, be capable of subsuming and incorporating data provided by all related disciplines in terms of which these individuals could be classified. The "abnormal" is thus continuous with all other areas of human behavior and is used to designate certain patterns of attributes. Search for these attributes and determination of their relatedness are functions of research in psychiatry. (2) By the technique of cluster analysis, in which items for the clusters are drawn not only from psychopathological symptoms but from any or all of these related disciplines, it would be possible to differentiate individuals into discriminable types, and to establish the relatedness of an individual to any specific pattern of "abnormality." Observation of many individuals through time, in physical and social space, should lead, by way of conceptual perceptions, to a restructuring of the field into meaningful configurations of operationally demonstrable attribute clusters which would appear as "figures" on the ground of the assertable total attributes of the population.

Previous attempts at establishing psychiatric taxonomy have not included the total field of assertable and pertinent attributes, and have imposed a priori "idealized" categories, instead of allowing experimentally determined attribute clusters and relationships to suggest adequate categories and principles of organization.

Preliminary experimental work carried out cooperatively by Worcester State Hospital, the Worcester Foundation for Experimental Biology, Worcester Memorial Hospital, and Clark University, and supported in part by the Wenner-Gren Foundation, has utilized attributes drawn from biochemistry, neurology, morphology, psychopathology, and physiology. We plan to extend the approach to include sociology, psychology, and histology. Success in this field might well suggest similar application to other biological problems.

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