

TITLE: *Annals of Theoretical Psychology*. Vol. 3

EDITORS: K.B. Madsen and L.P. Mos

PUBLISHER: Plenum Press, 1985

REVIEWED BY: *K. Danziger*  
*York University*

Psychologists who occasionally like to step back from their own field of specialization in order to reflect on the larger picture will find much of interest in the present volume. It is part of an ongoing series initiated at the Centre for Advanced Study in Theoretical Psychology, University of Alberta, which began to appear in 1984. Each volume contains a relatively small number of primary contributions on some aspect of psychological theory together with invited comments by others and a reply by the original author.

The third volume in the series is devoted to metatheory, so that its contents are not exactly the kind of down-to-earth fare that the average research psychologist is accustomed to. Theory in this context definitely means broad-gauged systematic theory and not the conceptual toys that often substitute for theory in specialized research areas.

In his introduction to the volume the Danish psychologist, K.B. Madsen, distinguishes three levels of what he calls "metascience," that is, three ways of taking science itself as an object of study. The first level is strictly philosophical and prescriptive, J.S. Mill being the classical example. The second level involves a stronger descriptive element and is represented by more recent studies of science like those of Kuhn and Lakatos. A third level would take one into empirical investigation taking actual scientific work as its object, as in historical and sociological studies of science. Unfortunately, the present volume contains very little information from this third level, so that we are left essentially with a number of divergent suggestions about how to think about psychological theory.

There is, however, one major theme which reappears in all the contributions to the volume and which provides a link between them. This is the problem of theoretical pluralism in psychology, a problem that provides the explicit focus of J.R. Royce's concluding chapter. If we are to avoid what R.F. Kitchener, one of Royce's commentators, refers to as "uncritical global eclecticism," we need to give some thought to the kind of metatheoretical framework that might be useful in analysing the relationship between theories.

Historically, there have been two major sources that have provided the models on which subsequent suggestions for such a framework have been based. The first source lies in nineteenth-century French and British positivism, which advocated a hierarchical or pyramidal framework for ordering the sciences, with physics forming the base of a pyramid whose upper levels were represented by the social sciences. For psychology this model meant an ordering of its branches in terms of their relative proximity to the physical sciences; the closer a part of psychology

was to physics, the more "basic" it was considered to be. Implicit in this framework was a uniform concept of science for which physics provided the model. A very different framework had its source in German idealist philosophy. It was a framework that was based on a fundamental distinction between two kinds of disciplines, the natural and the human sciences. This led to a dichotomous rather than a hierarchical model for the relationship among the branches of science and a refusal to identify "science" with "natural science." For psychology this meant a non-reductionist relationship among those aspects that formed part of the natural sciences and those that belonged to the human sciences.

What makes the volume under review especially interesting is the fact that, almost uniquely, it combines contributions from both traditions. The hierarchical model is well represented by H.J. Eysenck and by the philosopher Mario Bunge. For Eysenck the issue is one of finding the means by which psychology could "join the ranks of the properly accredited sciences," meaning of course the established natural sciences. Bunge presents a brief for neuropsychology as "the only fully scientific one," that is, closest to physical science. But the psychologist takes a much more tolerant stance than the philosopher. Eysenck's version of the traditional hierarchy takes the form of a scale, from "strong" to "weak," on which psychological theories can be placed, the criteria of "strength" being of course provided by physical science, or more precisely, Eysenck's interpretation of the practice of physical science. Nevertheless, he makes a strong plea for "weak" theories in psychology, and the details of his argument provide many points of interest to the practising researcher. By contrast, Bunge, the philosopher, can afford to take a more Olympian stance on the virtues of neuropsychology, in spite of what P.C. Dodwell, one of his commentators, refers to as "our still quite primitive understanding of most brain functions."

The other two contributions to the volume are much closer to the Central European tradition of metascience and are therefore less immediately accessible to the North American reader. This is particularly true of the chapter contributed by Carl Lesche, a Swedish psychoanalyst, whose discussion of the scientific status of psychoanalysis assumes some knowledge of a large non-English literature. But for this very reason it deserves attention from those with an interest in an issue whose implications are of course not limited to psychoanalysis.

A carefully thought out and comprehensive chapter by two Dutch psychologists, C. Sanders and H.V. Rappard, is noteworthy because of the novel way in which it combines aspects of both traditions in ordering the sciences. It is based on the broad European definition of science which encompasses qualitative studies of meaningful structures as well as quantitative and experimental investigations. From this point of view "psychology denotes a cluster of sciences," but the relationship between the components is regarded as hierarchical. However, this hierarchy does not express a reductionist perspective. It expresses the authors' belief that different psychological sciences can be ordered in terms of the degree of

“meaning invariance” which they exhibit. This means that different methodologies and techniques of verification must be used for objects with different degrees of meaning invariance, but it also means that findings at different levels of investigation may be relevant to each other. The approach offered here provides a potentially useful way of linking data from diverse areas of psychological research.

For anyone seriously interested in thinking about psychology as a whole this volume certainly provides a broad mixture of suggestive material.