Philosophy of Psychology as Philosophy of Science

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The spirit of the papers that follow, reflecting the title of the original symposium, is to treat the philosophy of psychology as a branch of the philosophy of science. As such, philosophy of psychology is to be conceived on a parallel with philosophy of physics and philosophy of biology, as an instance of the "philosophy of the special sciences." The philosophy of the special sciences treats each of the sciences as potentially having its own explanatory structures, conceptual problems, and evidentiary relations, which may be more or less similar to those once discussed under "general philosophy of science," with its typical reliance on examples from physics. In this connection, work in the philosophy of psychology over the past two decades has analyzed the structure of psychological explanations (Cummins 1983; Hardcastle 1992; Haugeland 1978), has examined the conceptual issues attending such notions as that of representation (Dretske 1981; Hatfield 1988b; Lloyd 1989; Shapiro 1993) or qualitative experiential content (Dennett 1991; Hardin 1988), and has examined the theoretical structure and explanatory possibilities of the new connectionism (Horgan and Tienson 1991; Ramsey et al. 1991). Such work in philosophy of psychology takes seriously the concepts, theories, and practices of the experimental psychology pursued by working scientific psychologists.

If the truth be told, though, much of what goes under the title of "philosophy of psychology" has only a tenuous relation, if any, to actual scientific psychology. In some cases this arises innocently and understandably from the equivocal use this label permits: some philosophers use the title "philosophy of psychology" as a catch-all for problems in philosophy of mind. In other cases, philosophers have appealed to results in scientific psychology to speak to questions in metaphysics, epistemology, philosophy of mind, and even philosophy of science, without making psychology an object of analysis in its own right: Goldman (1986, 1993) uses psychology in his work on epistemology, Thagard (1988) and Solomon (1992) use psychology to explain scientific cognition, recent work on color marshals psychological findings to support claims about color ontology (Hilbert 1987), and many discussions in the Putnam/Fodor functionalist literature aimed to elucidate the mind-body problem, rather than the concepts, theories, or practices of scientific psychology (Kim 1972; Putnam 1967). These are all legitimate instances of drawing on recent science to advance work on a traditional philosophical problem, much as a philosopher interested in causation might turn to physics or chemistry for instances of causal laws.

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Unfortunately, though, a great part of the literature in philosophy of psychology from the past fifteen years falls into another category, that of pretending to be about "scientific psychology" without actually being so. In the literature I have in mind, philosophers make a pretense of adjudicating the actuality or possibility of a scientific psychology, but without engaging the extant scientific psychology in any serious manner. Perhaps the most striking example of such abuse has been the raging controversy over folk psychology, in which bold claims were made about the possibility, or, more usually, the impossibility, of scientific psychology (Churchland 1986; Stich 1983). These claims have usually pivoted on the question of whether so-called "folk psychology"—the allegedly "everyday" psychology that seeks to explain behavior via attributions of beliefs and desires—can meet the rigorous standards of natural science. Almost never were any actual psychological results discussed or even mentioned, as one was invited to speculate on the capacities of "Mrs. T" (Stich 1983, Chap. 4), or to judge whether folk psychology was such a bad "theory" that the research program of mentalistic psychology was destined to go the way of vitalist biology (Churchland 1986, Chaps. 7, 9). On the same battlefield raged the contest over "wide" and "narrow" content, presented as a question about whether psychology could be "scientific" only if it eschewed genuine distal content and stuck to states defined by their causal role within a system, the classic "functionalist" mental states of Putnam/Fodor functionalism (Fodor 1980). Again, grand claims were made about the possibility or impossibility of theories of representational content, but these claims were based on ethereal, otherworldly twin examples (Fodor 1987), with, at best, citation of extant psychological theory in an appeal to authority (Burge 1986), unaccompanied by philosophical analysis of the cited theory. And yet this literature had the patina of philosophy of science, because it invoked criteria such as explanatory generality or causal explanatory efficacy. It was truly philosophy of science without the science, or what my former and now late colleague David Sachs used to call "philosophy of science fiction."

The conclusions found in this literature regarding the impossibility of scientific psychology are limited in their force because the arguments backing them neglect actual scientific psychology. Thus, the eliminative materialist arguments presented in Churchland (1986) were aimed at the folk psychology of other philosophers, but did not at all engage extant perceptual and cognitive psychology (Hatfield 1988a). More seriously, the entire project of evaluating folk psychology is based on an unexamined assumption about the subject matter and object of explanation of psychology: the assumption, apparently left over from the heyday of behaviorism past, that the aim of psychology is to explain and predict behavior, updated to include attributions of beliefs and desires in the explanans (Davidson 1973). A question worthy of attention now in philosophy of psychology is that of the very subject matter and object of explanation of the science. Does psychology try to explain behavior, or does it rather use behavior as a form of evidence for studying the psychological capacities of organisms and the mechanisms that underlie them? If it were seeking to explain individual behaviors, it would be undertaking a project similar to that of a fictional discipline of physics that sought to predict and explain the behavior of individual physical objects, such as a leaf falling from a tree of anyone's choosing. But even when psychology was considered the science of behavior, the effective aim was to discover behavioral laws, not to explain free-standing individual behavior. In any event, analysis of actual work in contemporary perceptual and cognitive psychology suggests that in these central areas of experimental psychology the aim is to analyze perceptual and cognitive capacities rather than to formulate behavioral laws (Hatfield, 1991; von Eckardt, 1984). Moreover, those laws found in experimental psychology need not be behavioral. Consider Emmert's Law relating perceived size to visual angle and perceived distance (Goldstein 1989, 250-251). It pertains to the phenomenal content of perception, not to behavior; it is an empirical generalization describing lawful relations among percepts. As such, it is a candidate for explanation by appeal to the functional organization of the psychological processes underlying size and distance perception.

The agenda reflected in the papers that follow is not to replace philosophy of mind with philosophy of psychology or to imply criticism of philosophers who apply results from psychology to epistemology or another area. Rather, it is to provide examples of philosophy of psychology treated as a branch of the philosophy of science. This sort of philosophy of psychology attends to questions that arise from scientific practice, engages in the analysis of actual scientific concepts, dissects living scientific theories considered in relation to the data that support them and in relation to genuine (i.e., actually existing or able to exist) theoretical alternatives. Examples of the sorts of topics it might treat are given in the following "table of contents" of an imaginary anthology in philosophy of psychology as philosophy of science.

Table of contents for imaginary anthology in philosophy of psychology

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Philosophy of Psychology
(as a branch of the philosophy of science)

I. The subject matter and object of explanation of psychology

1. Is psychology a science of behavior?
2. The study of cognitive capacities and mental mechanisms
3. Developmental and social psychology: Behavior or cognitive structure?

II. Theories and theoretical concepts in psychology

4. Mental images and experiential content
5. Representation and narrative in theories of memory
6. How do the theoretical concepts of psychology relate to those of neuroscience?

III. Explanation in psychology

7. Explanation: Covering law model vs. systematic explanations
8. Are mentalistic concepts ineliminable from psychological explanation?
9. Mental mechanisms as explanations of cognitive capacities

IV. Theory and evidence

10. Behavior: object of explanation or form of evidence?
11. Does neurophysiological data place firmer constraints on psychological theorizing than behavioral observation?
12. Experimental design and the structure of psychological explanation

V. Social and cultural factors in psychology

13. Natural scientific psychology and the mind as a cultural product
14. The cultural background to thought and problem solving
15. Social perception and social knowledge

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