

Culture and Psychology: A Realist View

Unfortunately, the topic raises fundamental questions about the nature of psychology and its relations to both the biological sciences, especially neuroscience, and the social sciences. Just to give a hint of this, we can notice two fairly obvious ways to go.

One might argue in classic behaviorist fashion that psychology is the science of behavior, is autonomous, and that principles of learning theory, e.g., the law of effect, hold universally; hence, there is absolutely nothing problematic about culture and the task of psychology.

Or might argue with Dick Shweder that general psychology has *nothing* useful to say, that it needs to be replaced by 'cultural psychology'--'the study of the way cultural traditions and social practices regulate, express, and transform the human psyche, resulting less in a psychic unity for mankind than in ethnic divergences in mind, self, and emotion' (p. 73).

I think that both of these postures are fundamentally mistaken, but to even begin to say why I think so, I am forced to go back to some fundamentals. My argument develops through four stages, each of which is a large topic.

I Realist Philosophy of Science

Since there is no way to do science without assumptions about science, either implicit or explicit, I begin with the key feature of a realist account of the practices of the mature sciences. Realist philosophy of science contrasts with empiricist (positivist, neo-positivist) characterizations of science in two main dimensions.

First, the realist accepts a post-positivist (Kuhnian, hermeneutic, non-foundationalist) account of the epistemology of science. The rejection of positivism in the past decade or so has concentrated almost exclusively on this. Unless you insist, I shall say nothing about this today. Second, it offers radically different notions of causality and explanation and, thus, of the goals of science.

For the positivist, laws are regularities of the form, 'Whenever c, then e' or 'With a probability p, c, then e.' It is the aim of science to discover these, often termed simply 'generalizations.' An explanation of events is (ideally) a deduction, the major premise is the regularity, the minor premise is 'c,' and the conclusion, 'e,' is the event to be explained. On this view, explanation and prediction are symmetrical. If you have the relevant laws and conditions which instantiate them, then you can predict. This world is Pascal's: a huge closed system in which any failure to predict or to give a complete explanation is a function of our ignorance of either the relevant laws or boundary conditions. When a prediction fails, then we identify heretofore unrecognized 'variables,' we enlarge the pertinent system, we revise our 'law-like hypotheses.'

For the realist, laws are invariants about the causal powers of theoretical 'things', e.g., molecules, magnetic fields, organs, four dimensional space-time. Thus, 'By virtue of the molecular structures of NaCl and H₂O, NaCl necessarily dissolves in H₂O' or 'By virtue of the biochemistry of enzymes, they have the capacity to' Of course, ordinary table salt is not merely sodium chloride and water is not only H₂O. For this reason--and a host of other possible reasons--you might put salt in your iced tea and it may not dissolve.

On this view, the distinct task of science is *not* the discovery of empirical regularities, but the development of theories about the causal mechanisms which willy nilly operate in the world. Explanation,

accordingly, does not take the covering law form and explanation and prediction are not symmetrical. The point is that everything that happens is complexly caused, a function of the causal powers of the 'things' of the world and their continuously changing relations and configurations. The theoretical powers of 'things' are never operating in a closed system. Accordingly, there no invariant regularities, since other 'causes' operating produce outcomes of which some (at least) are in principle unpredictable. These include even the locations of the fragments of a splintering rock as it rolls down a rocky slope. Indeed, stellar mechanics is the worst possible model for a science exactly because the solar system is, at least, relatively closed.

Moreover, as outcomes of conjoint, multiple causes, at least some of the properties of complexes are not predictable. The properties of salt are not reducible to the properties of sodium and chloride and were, in principle, unpredictable. Life and mind, similarly, are emergent properties. I pursue this below.

For the realist, the universe is contingent changing concatenation of complexly related necessities, hence all explanation of events is historical.

Finally, it is critical to notice that realist theory rejects the idea that there are fundamental epistemological, methodological or ontological differences which bifurcate the natural and the social or cultural sciences. On the realist view, 'social objects' can be studied in essentially the same way as 'natural' ones. Indeed, for the realist, this bifurcation depends upon a false view of science, shared by empiricists and their cultural science opposition.

In the paper which Paul Secord and I published in American Psychologist (1984), we argued that the implications of this view as regards scientific psychology were enormous.

II Emergent Realist Functional Theory of Mind

One implication is an emergent, realist, functionalist theory of mind which is entirely consistent with the rest of science. I summarize this with four propositions:

1. A given system has physical properties, includes such and such components, is structured in such and such a way (for example, the atomic structure of molecules.)
2. Its activities ('powers, 'functions') may not be describable solely in terms of 1. (For example, complete information about the atomic position an unknown protein may occupy does not enable us to infer even that that protein is an enzyme, still less what its causal properties are.)
3. It has what 'functions' (causal properties) it has **by virtue of** (at least) 1.
4. At the level of functioning as a system, system properties may affect the structure and functioning of the system's component parts.

Item 3 rejects the ontic dualism of many familiar functionalist theories of mind. It does *not* say (as e.g., AI theorists say), that the activities of which the system is capable need *some* incarnation, but that the specific incarnation is psychologically irrelevant. It does not allow psychological inquiry to proceed independently of biology. Rather, on the present view, the properties are the causal products of the physical processes which incarnate them. Indeed, for the emergent realist, the scientific problem is to *explain* these properties in terms of the complexity of the 'mechanisms' which produce them. Since these are just those of an intact organism, we need to grasp how *it* does what it does--not, say, how some simulation does something *like* what the organism can do.

III Stratification and the Explanation of Behavior

A further consequence of the realist theory of science of enormous importance is the fact that it is illusory to suppose that a scientific psychology has as its aim the explanation of behavior. Two observations should make this clear.

Consider first the person: If we look at a person from the point of view of biology, we can speak of an organism which is an ordered complex of orderly complex systems in which both activities at higher levels have effects on lower-level structures and activities and activities at lower levels have effects as regards properties at higher levels. Some of these, indeed, are indeed critical to its having *any* animate or minded properties. The person, however, is not merely an organism, but is minded, a property best conceived as emergent in exactly the sense that persons are organisms whose realized capacities (causal powers, properties)--for example, linguistic abilities--causally require a social environment. An ability to speak English (or Pidgin or Swahili) is the causal product of the development of a human genotype in a social environment.

But given that no human genotypes the same, that no two 'environments' are the same and that from the moment of conception the developmental process is epigenetic-- a complex transaction of processes within and between biological and environmental mechanisms--including here social mechanisms--individual personality (the relatively stable dispositions and habits of persons) and the behavior from which it flows will be complexly determined, contingent, and highly idiosyncratic. Given this, it is even clear what would count as a scientific 'psychological' explanation of behavior. (As I have also argued elsewhere the idea that one can employ multiple regression or other quantitative techniques to discriminate 'causal' variables is fundamentally misconceived.)

To be sure, we do very well with 'folk' psychological explanations of behavior, explanations in terms of motives, desires, reasons, purposes. If we did not, then, social life would be quite impossible. Indeed, for the reasons already noted, I have no difficulty in believing that it is extremely unlikely that a scientific psychology could improve on this.

Second, not only are we in the deepest possible sense social beings--there is no human being who is not humanized in some social environment--but our acts are always inbedded in and in response to a continually changing social environment. It is this, of course, which leads sociologists to believe that while their colleagues in psychology must fail, they will succeed. Unfortunately for them, however, while social structures can explain the *patterns* of activities of persons, because individuals are unique, they do not 'determine' individual behavior, belief or experience--and hence, cannot explain it.

IV The Many Rooms in the Mansion of Psychology

If a scientific psychology cannot explain behavior (or at least improve on our folk-psychological explanations of behavior) what can it do? Despite my friend Arthur Staats, the answer depends not on unification but in separation. I suggest first that we distinguish between psychology as neuropsychology and psychology as a part of the human sciences.

In my view, psychology can be an autonomous science only insofar as it is conceived as the effort to generate a theoretic understanding of the human competences, the powers and capacities that persons have *irrespective of their concrete cultural realizations*. That is, we must sharply distinguish competences and performances, process and product, questions of the mechanism implicated in experience and behavior from questions of experience and behavior.

Consider, for example, perception. It can hardly be doubted that *what* we experience is profoundly affected by learning in a social environment. Accordingly, it is not within the domain of a scientific psychology to explain *what* we experience. But it surely is within its domain to explain *how* we experience anything at all. Accordingly, neuroscience and animal studies are here manifestly pertinent. Similarly, as regards learning. Both behaviorisms and more recent cognitive psychology have tended to assume just what needs explaining: how what becomes 'information' is information. Both have tended to assume that the common-sense socially produced world of ordinary experience is a datum for psychological inquiry, to assume, for example, that the perception of pineapples needs no explanation even if we need to explain how people learn to discriminate them from lauhala. We are, of course, inductive learning machines of **some sort**; but it ought to be the problem of an autonomous psychology to explain just how we do this. Again, neuroscience and animal studies are manifestly critical.

More generally my suggestion is fully in keeping with a proper understanding of the successful sciences. Instead, then, of trying to explain what someone sees, or does, a scientific psychology aims at explaining our powers and abilities (and disabilities) as humans--just as, e.g., molecular chemistry aims not at explaining why some particular substance dissolves in water, but what is about some things that they are water-soluble.

On the other hand, all the rest of what is usually called psychology is best conceived as part of the human sciences. In addition, then, to sociology, cultural anthropology and history, the human sciences include not only a variety of very different inquiries titled 'social psychology,' but on the present view, developmental psychology, personality theory and all the applied subdisciplines of psychology. In all of these, as Shweder rightly sees, culture is deeply involved in shaping outcomes.

In my mind, what is most striking, even in these disciplines which wholesomely acknowledge the pertinence of the social, is the persistent tendency to 'psychologize,' that is, to treat what are manifestly social phenomena as reducible to acts of group-neutrally socialized individuals. But there is no such thing as a neutrally humanized or a-socialized human, and second, all action is enabled and constrained by pre-existing social forms. Within sociology, examples of the failure to appreciate this include the work of George Homans and with greater sophistication, the work of James Coleman (the current President of the ASA). But I would include here, as well, much of the work of that social psychology which follows Allport in believing that we can put aside complexities regarding culture and explain behavior in terms of the interactions of psychologically autonomous individuals.

Within individual (or "general") psychology, the tendency to overlook culture--to assume that there is a group-neutral definition of mind--usually results in cultural imperialism: the assumption that what have learned about 'us' is true of 'them'--and if it is not, then there is something wrong with them! There is such a thing as a human nature, but because the human being 'has to learn everything,' groups, in transaction with specific local environments and sharing a history, created not a human world, but human worlds, concrete realizations of our shared human potentialities.

Finally, there are those psychologizing clinicians who have impoverished views of the situationally embedded character of the behaviors of their clients or worse, who do damage by virtue of willingness to impose on their clients theories which do not meet the standards of scientific theory.

In my view, the human sciences share in having the problem that none of them can be autonomous

sciences. Physics, chemistry and biology have succeeded in abstracting strata of the world that can be usefully theorized. Each of these disciplines has, accordingly, been able to offer us very powerful explanatory theories of these distinguishable strata and, often, of their relations. Sometimes this has called for bridging disciplines, e.g., biochemistry. I have argued that by trimming its ambitions, psychology can also be an autonomous science. Indeed, in the past decade or so, it is fair to say that neuropsychology has made enormous strides in improving our understanding of psychological mechanisms and processes.

But once we get into the concrete social world, if we are to understand what is going on, we must inevitably draw on work produced in all the 'disciplines' and branches of the human sciences. This is, I think, a direct consequence of the nature of the person as a social and historical being. It is true and important to say that everything that happens happens because individuals act; but it is as true and important to notice that such individuals are always concretely humanized in come particular historical culture and that their acts are always embedded in pre-existing social forms.

Finally, if they are intervene appropriately (however this is to be defined!), practitioners in the applied branches of psychology will need to understand *why* what is amiss is amiss, and, thus, they will need to be informed--and critical--as regards relevant insights in neuropsychology and the human sciences. One may either optimistic or pessimistic in this regard. Either way, I hope that it is clear that the diagnostic and therapeutic sciences, like medicine, require knowledge both of the concrete individual (and his or her biography) and of the relevant causal mechanisms, neurophysical, psychological and social which are implicated in his or her behavior and situation.

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