THE AUTONOMY OF PSYCHOLOGY

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Psychology has been considered to have an autonomy from the other sciences (especially physical science) in at least two ways: in its subject-matter and in its methods. To say that the subject-matter of psychology is autonomous is to say that psychology deals with entities—properties, relations, states—which are not dealt with or not wholly explicable in terms of physical (or any other) science. Contrasted with this is the idea that psychology employs a characteristic method of explanation, which is not shared by the other sciences. I shall label the two senses of autonomy 'metaphysical autonomy' and 'explanatory autonomy'.

The question of whether psychology as a science is autonomous in either sense is one of the philosophical questions surrounding the (somewhat vague) doctrine of 'naturalism': questions concerning the extent to which the human mind can be brought under the aegis of natural science. In their contemporary form, these questions had their origin in the 'new science' of the 17th century. Early materialists like Hobbes (1651) and La Mettrie (1748) rejected both explanatory and metaphysical autonomy: mind is matter in motion, and the mind can be studied by the mathematical methods of the new science just as any matter can. But while materialism (and therefore the denial of metaphysical autonomy) had to wait until the 19th century before starting to become widely accepted, the denial of explanatory autonomy remained a strong force in empiricist philosophy. Hume described his *Treatise of Human Nature* (1739-40) as an 'attempt to introduce the experimental method of reasoning into moral subjects'—where 'moral' signifies 'human'. And subsequent criticism of Hume's views, notably by Kant and Reid, ensured that the question of naturalism—whether there can be a 'science of man'—was one of the central questions of 19th century philosophy, and a question which hovered over the emergence of psychology as an independent discipline (see Reed 1994).

In the 20th century, much of the philosophical discussion of the autonomy of psychology has been inspired by the Logical Positivists' discussions of the UNITY OF

SCIENCE (see Carnap 1932-33, Feigl 1981, Oppenheim and Putnam 1958). For the Positivists, physical science had a special epistemic and ontological authority: the other sciences (including psychology) must have their claims about the world vindicated by being translated into the language of physics. This extreme REDUCTIONISM did not survive long after the decline of the Positivist doctrines which generated it—and it cannot have helped prevent this decline that no Positivist actually succeeded in translating any psychological claims into the language of physics. So although Positivism was a major influence on the rise of post-war PHYSICALISM, later physicalists tended to distinguish their metaphysical doctrines from the more extreme Positivist claims. Thus J.J.C. Smart (1959), for example, asserted that mental and physical properties are identical, but denied that the psychological language which we use to describe these properties can be translated into physical language. This is not yet to concede explanatory autonomy, since the fact that psychology employs a different *language* does not mean that it must employ a different explanatory *method*. And Smart's claim obviously implies the denial of metaphysical autonomy, since it is an identity theory.

However, many philosophers think that the possibility of *multiple realisation* forces us to accept metaphysical autonomy. A property is multiply realised by underlying physical properties when not all of the instances of that property are instances of the same physical property. This is contrasted with property *identity*, where the fact that a brain property is identical with a mental property entails that all and only instances of the one property are instances of the other. Hilary Putnam (1975) argued influentially that there are good reasons for thinking that psychological properties are multiply realised by physical properties, on the grounds that psychological properties are *functional* properties of organisms—properties which are identified by the causal role which they play in the organism's psychological organisation (see FUNCTIONALISM).

This kind of functionalist approach implies a certain degree of metaphysical autonomy: since psychological properties are multiply realised, it seems that they cannot be identical with physical properties of the brain (but contrast Lewis 1995). However, it does not imply a Cartesian dualist account of the mind, since all these properties are

properties of physical objects, and the physical still has a certain ontological priority, sometimes expressed by saying that everything *supervenes* on the physical (see SUPERVENIENCE; THE MIND-BODY PROBLEM). The picture which emerges is that of a 'layered world': the properties of macroscopic objects are multiply realised by more microscopic properties, eventually arriving at the properties which are the subject-matter of fundamental physics (see Fodor 1974; Owens 1989).

With the exception of certain ELIMINATIVE MATERIALISTS, who see the metaphysical autonomy of commonsense (or 'folk') psychological categories as a reason for rejecting the entities such a psychology talks about, the layered world picture is a popular account of the relationship between the subject matters of the various sciences. But what impact does this picture have on the question of the explanatory autonomy of psychology? Here matters become a little complex. The 'layered world' picture does suggest that the theories of the different levels of nature can be relatively independent. There is room for different styles of explanation: for instance, Robert Cummins (1983) argues that psychological explanation does not conform to the 'covering law' pattern of explanation employed in the physical sciences (where to explain a phenomenon is to show it to be an instance of a law of nature). And some influential views of the nature of computational psychology, for instance, treat it as involving three different levels of explanation (see Marr 1982). But in general, nothing in the layered world picture prevents psychology from having a properly scientific status; it is still the *subject-matter* (psychological properties and relations) and not the explanatory *method* of psychology which sets it apart from physics and the other sciences. In short, the layered world conception standardly holds that psychological explanation has its autonomy in the sense that it does not need to be reduced to physical explanation; but nonetheless it is properly scientific explanation.

This view should be distinguished from Davidson's (1970) view that there are features of our everyday psychological explanations which prevent these explanations from ever becoming scientific. Davidson argues that psychological explanations which attribute PROPOSITIONAL ATTITUDES are governed by normative principles: in

ascribing a propositional attitude to a person, we aim to make their thought and action as reasonable as possible (for a related view, see McDowell 1985, Child 1994). In natural science, no comparable normative principles are employed. It is this dependence on the 'constitutive ideal of rationality' which prevents a psychology which purports to deal with the propositional attitudes from ever becoming scientific—in the sense that physics is scientific. According to Davidson, DECISION THEORY is an attempt to systematise ordinary explanations of actions in terms of belief and desire, by employing quantitative measures of degrees of belief and desire. But because (*inter alia*) of the irreducibly normative element involved in propositional attitude explanation, decision theory can never be a natural science (for more on this subject, see Davidson 1995). So where the 'layered world' picture typically combines a defence of metaphysical autonomy with an acceptance of the properly scientific (or potentially scientific) nature of all psychological explanation, Davidson's ANOMALOUS MONISM combines a thesis of strong explanatory autonomy with an identity theory of mental and physical events.

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OTHER ENTRIES

Anomalous monism

Decision theory

Eliminative materialism

Emergentism

Physicalism

Reductionism

Supervenience

Unity of science