

PROPOSITIONAL ATTITUDES

propositional attitudes Our everyday conception of mentality bristles with notions like BELIEF, DESIRE, INTENTION, hope, fear, wish. Philosophers group these together and call them 'propositional attitudes'. What links these attitudes is the fact that they are identified by their propositional contents: a belief that snow is white is identified by the proposition that snow is white. Since propositional contents are attributed in English by 'that'-clauses, two people's beliefs, say, are counted as different if they are correctly identified by non-equivalent 'that'-clauses.

Propositional attitudes are woven into almost all aspects of ordinary life. Legal, social, political and economic practices would be unthinkable without the attitudes (see Baker, 1987). For example, nothing would be a contract if the parties to it lacked attitudes – such as belief that they were incurring certain obligations. No one could be held responsible for anything in the absence of attitudes about, among other things, what one is doing. In general, we make sense of behaviour in terms of attitudes: Smith turned up at 4 o'clock, because she thought that the meeting had been scheduled for that time. Reasons for action are intimately tied to attitudes (see ACTION). Indeed, some philosophers (such as Donald Davidson) take the attitudes to be definitive of the mental.

On the one hand, propositional attitudes are pervasive in our descriptive, explanatory, and justificatory practices. On the other hand, as mental states, they seem problematic to contemporary philosophers seeking insurance against DUALISM. Such philosophers, perhaps a majority, think that propositional attitudes stand in need of 'vindication' either by materialistic metaphysics or by science. In pursuit of such vindication, they have raised a number of questions about propositional attitudes, of which I shall discuss three that remain unresolved after intense investigation. (1) How are attitudes identified by content related to presumably less problematic physical states? (2) Given that brain states cause bodily movements, can propositional atti-

tudes also have a causal role in behaviour? (3) In what way, if at all, will propositional attitudes figure in a comprehensive scientific psychology?

THE NATURALIZATION PROJECT

The first question – How are attitudes identified by content related to physical states? – has given rise to efforts to provide conditions, in naturalistic terms, for an internal state to have propositional content. Roughly, to require that the conditions be given in naturalistic terms is to require that they be statable without the use of 'that'-clauses and without the use of semantic terms like 'denotes', 'refers to', or 'means that'. Those engaged in naturalization are investigating a special case of the general question: how can one physical state represent another? Under what physical conditions does a state have a certain content? How can a state be 'directed upon' a state of affairs – one that may not even obtain? (See CONTENT; INTENTIONALITY.)

Not only are contents intentional-with-a-'t' (i.e. directed upon a state of affairs that may or may not obtain), but also attributions of contents are intensional-with-an-'s': substitution of co-referring terms may change the truth value of the attribution. For example, from the attribution to Smith of a belief that the robber fled the scene, and the fact that the robber is the mayor, we cannot infer that Smith believes that the mayor fled the scene. If Smith is unaware that the robber is the mayor, she may have the first belief, but lack the second. Contents (and hence beliefs) are thus sensitive to the way things are described.

The naturalizer ties propositional attitudes to types or tokens of internal states. (A type is a kind of state; a token is a particular spatiotemporal instance of a kind of state.) (See IDENTITY THEORIES; SUPERVENIENCE.) The idea is that people token internal states that have certain 'shapes' or other non-semantic properties, and these states have content in virtue of correlations of one sort or another between their tokenings and external conditions. The naturalization

project is to spell out the kind of correlation that confers content. There are several versions, of which I shall describe three. Each traces content back to what causes tokens of a certain type (aetiological theories) and/or to what is the function of tokens of a certain type (teleological theories).

On Ruth Millikan's (1984) 'teleofunctional' evolutionary account, contents of attitudes derive from the functions of mechanisms designed by natural selection to make and to use abstract 'maps' or 'diagrams' or 'mental sentence' pictures of the world in order to produce actions appropriate to that world. These mechanisms have biologically normal ways of accomplishing the abstract map-making and map-using tasks, but may also fail quite often, just as the mouse-tracking abilities of the house-cat may fail in particular cases. Then maps are produced that are 'wrong', given how the system is designed to use them. A question for this approach is whether the psychological mechanisms of concept- and belief-formation in humans, as designed by evolution, are determinate enough, as regards their historical biologically normal ways of functioning, to yield the determinacy we find in belief content. (For a different kind of teleological functionalism, see Lycan, 1988.)

A second approach to naturalizing the attitudes looks to lawful covariation of tokenings of certain states and certain external conditions. Certain states are natural indicators of other states: for example, the number of tree rings indicates the age of the tree. There is a general causal dependency of the indicator on what it indicates. Another way to put the point is to say that the number of tree rings carries information about the age of the tree: under optimal or ideal conditions, the number of tree rings covaries with the age in years of the tree. DRETSKE and others have used the notions of carrying information and of indicating something (Dretske, 1988) to show how physical states could have content or meaning.

A difficulty for this approach to naturalization is to account for the possibility of

error. Suppose that tokens of a certain type have regularly been caused by the presence of dogs; but on some occasion, a token of that type is caused by a cat. Then, if the content of a token is determined by what information it carries (i.e. by what caused it), there is no way for the token to misrepresent a dog as a cat. Here are two ways in which 'indicator' theories may try to meet the problem of error. (i) Specify ideal conditions. Identify the content of a token by its cause in ideal conditions; then construe misrepresentation in terms of what causes tokens of the type in non-ideal conditions. (ii) Specify a learning period, during which tokens of a certain type acquire a given content. Identify the content with the causes of the tokens during the learning period; then construe misrepresentation in terms of post-learning-period causes that differ from learning-period causes of tokens of the given type. A central difficulty for the 'indicator' theories is to specify non-circularly either ideal conditions or conditions that define a learning period. Neither non-circular specification has been forthcoming.

The deepest difficulty for the naturalization project is what FODOR has called the 'disjunction problem'. The disjunction problem is a generalization of the problem of error: roughly, if the content of a token is determined by what causes it, then why is not the content of tokens of a certain type a disjunction of the indefinitely many kinds of causes that produce tokens of that type? For example, if tokens of type T are caused at different times by cows, horses and thoughts about cowboys, then why doesn't T have the content cow-or-horse-or-thoughts-about-cowboys?

Fodor's solution – and this is the third approach to naturalizing the attitudes – is to specify content in terms of asymmetric dependence. Fodor (1987, 1990), develops this approach in conjunction with his postulation of a LANGUAGE OF THOUGHT. The general idea is that a symbol in the language of thought – say, 'C' – expresses the property of being a cow if and only if (i) it is a law that cows cause tokens of 'C', (ii) some tokens of 'C' are caused by non-cows

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(horses, say); and (iii) if cows did not cause 'C's, then neither would non-cows; but cows would still cause 'C's even if non-cows did not cause 'C's.

None of these reductive accounts of the attitudes has found full acceptance. Many philosophers simply assume that the attitudes supervene on some physical states or other, whether or not anybody can specify any supervenience base for any propositional attitude, and move on to other issues (see SUPERVENIENCE).

THE PROBLEM OF MENTAL CAUSATION

One of the issues to which philosophers have recently turned is the second of the questions: Given that brain states cause bodily movements, can propositional attitudes also have a causal role in behaviour? The problem of mental causation (Kim, 1988) is to find a causal role for propositional attitudes in the aetiology of behaviour.

One way to see the problem is to consider DAVIDSON'S view of mental events as physical events described in the vocabulary of propositional attitudes. This is a kind of non-reductive materialism, since each mental token is a physical token, but mental types are not identified with physical types. On Davidson's view of causation, propositional attitudes are causes of behaviour, even though (i) all causal transactions are governed by strict laws, and (ii) there are no strict laws between propositional attitudes and the physical events that constitute the behaviour. The strict laws that subsume the mental causes and the physical effects are wholly physical.

This view has suggested to some a problem of mental causation. For, on this view, propositional attitudes (mental events) have effects in virtue of their physical properties but not in virtue of their having content or of their being propositional attitudes. The fact that neural events are describable as propositional attitudes is irrelevant to what they cause, or to the fact that they cause anything at all; for the physical properties of a mental event pre-empt or 'screen off' the mental properties.

Mental events, so the charge goes, are causally impotent.

This line of argument has elicited the following response. First, one may appeal to non-strict, or hedged, laws (laws with open-ended *ceteris paribus* clauses), and take properties mentioned in the antecedents of such laws to be causally relevant to producing instances of properties mentioned in the consequents. Hedged laws are common throughout the special sciences (Fodor, 1987). The existence of laws of the form 'If S believes that doing A will bring it about that p, and S wants to bring it about that p, and . . . , then, *ceteris paribus*, S will do A' would suffice to secure a causal role for propositional attitudes, on this Fodorean view. Those worried about mental causation will point out that even if propositional attitudes are causes, citing '*ceteris paribus*' laws does not show that they bring about their effects in virtue of having their contents. (See REASON AND CAUSES.)

For example, Jaegwon Kim has argued for a principle of explanatory exclusion, according to which there cannot be two or more complete and independent explanations of a single event. If there seem to be two complete and independent explanations of an event (e.g. one physical and one mental), then either at least one is not complete, or they are not independent. On the basis of certain metaphysical assumptions – such as that every physical event has a complete physical cause, and that every event is (or supervenes on) a physical event – Kim argues that every event has a completely sufficient physical cause, and hence a complete explanation in terms exclusively of physical properties. If any 'other' properties (such as propositional attitudes) seem also to explain an event, Kim concludes, they must be identical with, or reducible to, physical properties. If Kim is right, there is no 'logical space' for non-reductive materialism of either the Davidsonian or Fodorean variety.

There are difficult metaphysical issues here about supervenience and reducibility (see REDUCTION). For example, Kim's position seems to have unwanted consequences.

For the grounds that he gives to show that there is a problem of mental causation are equally good grounds to show that there is a problem of macrocausation generally (*see PHYSICALISM (2)*). Suffice it to say that the verdict is not yet in on the problem of mental causation.

THE SCIENTIFIC STATUS OF PROPOSITIONAL ATTITUDES

The third and final question – In what way, if at all, will propositional attitudes figure in a comprehensive scientific psychology? – concerns the scientific status of the propositional attitudes. Many philosophers hold that the fate of the propositional attitudes turns on the outcome of scientific psychology (*see FOLK PSYCHOLOGY*). If the explanatory kinds of scientific psychology turn out to be radically different from the attitudes, such philosophers hold, then the attitudes should go the way of phlogiston and witches.

Although a conclusive answer to the third question must await the outcome of scientific psychology, there has been important philosophical work done already on the issue of individuation. Say that a scheme of individuation is relational or wide if it classifies propositional attitudes in part by reference to the cognizer's environment, so that cognizers in different environments may have different attitudes even if they are molecule-for-molecule duplicates. (*see EXTERNALISM/INTERNALISM; PUTNAM; TWIN EARTH*). Say that a scheme of individuation is non-relational or narrow if it classifies propositional attitudes so that molecule-for-molecule duplicates necessarily have the same attitudes, regardless of differences in their environments.

Are propositional attitudes classified or individuated in a way that would put them at odds with entities countenanced by a scientific psychology? Here are four prominent views on the amenability of attitudes for incorporation into scientific psychology. (i) Propositional attitudes are individuated relationally, and are, therefore, ill-suited for science (Stich, 1983). (ii) Propositional atti-

tudes are individuated relationally, but still are suitable for science (Burge, 1986). (iii) Propositional attitudes are individuated relationally, but they have narrow contents ('in the head') that are suitable for science (Fodor, 1987). (iv) Propositional attitudes are individuated non-relationally and are not, therefore, ill-suited for science (Lewis, 1983). Each of these positions remains controversial.

Consider the 'worst case'. Suppose that we had a comprehensive theory of human behaviour – say, one based on ARTIFICIAL INTELLIGENCE models known as 'parallel distributed processing' (*see CONNECTIONISM*). Suppose further that not only does the scientific theory fail to postulate internal states that have propositional or narrow content, but also that the states that it does postulate do not even loosely correlate with attitudes. Although this is extremely vague, the point is to suppose that 'mature scientific psychology' turns out in such a way that even under the loosest interpretation of 'vindication', we would all agree that mature scientific psychology failed to vindicate the attitudes.

The reason that vindication of the attitudes by science is so desired is that, failing vindication, only two alternatives are envisaged: we must either take propositional attitudes to resist incorporation into the physical world of science, and embrace dualism (widely considered untenable), or we must give up propositional attitudes as fictions, and embrace eliminative materialism.

ELIMINATIVE MATERIALISM AND BEYOND

Eliminative materialists, who deny the reality of propositional attitudes altogether, take a variety of positions. For example, QUINE (1960) takes the language of propositional attitudes to be a 'dramatic idiom'. Churchland (1989) envisages a new kind of everyday language that lacks commitment to propositional attitudes. Typically, eliminative materialists hold the view that the natural sciences are the exclusive arbiter of what there is, and that propositional atti-

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tudes fail to measure up to the standards of science.

An eliminative materialist whose position rests upon the assumed fact that scientific psychology will not show how attitudes 'fit' into the physical world, it would seem, ought to be an eliminativist about properties of middle-sized objects (like pillows and predators) as well. If by 'the physical world' one means the world described by fundamental physics, then we have no idea how predators fit into the physical world either: could a characterization of predators be given in the language of microphysics? If by 'the physical world' one means the world described non-intentionally and non-semantically, then pillows and other artefacts fail to fit into the physical world: there is no physically specifiable fact in virtue of which something is a pillow; what makes something a pillow depends in part on facts about its design and use – facts that we do not know how to specify in a non-intentional vocabulary. But these are not great philosophical discoveries that should motivate eliminativism about pillows or predators.

DENNETT used to be an 'instrumentalist', who appreciated the usefulness of belief-attributions while denying the reality of beliefs and desires. Such a position has seemed to many to be unstable, and Dennett himself has backed away from it (Dennett, 1991). Now he grants to the attitudes a kind of reality – the reality that patterns of dots may have – and we may look forward to further elaborations of his views in the future.

On the reigning pretheoretical conception of the propositional attitudes, there are beliefs only if there are internal states that satisfy the open sentences of the form 'x is a belief that p'. Putting aside Cartesian dualism, the idea is that if an attribution of an attitude is true, there is some particular neural state (at least partly) in virtue of which it is true. This conception, call it 'the standard view', is held by those who take attitudes (if there are any) to covary in a systematic way with neural states of believers. Eliminative materialists endorse the

standard view when they infer that there are no attitudes from the supposed fact that the best scientific theories do not postulate internal states that correspond to attributions of attitudes.

The standard view is responsible, I believe, not only for eliminative materialism but also for the three intractable questions that I have discussed – questions that would lose their urgency in the absence of the standard view. The standard view, however, is neither metaphysically innocent, nor is it embedded in our ordinary attributions of attitudes. Perhaps it is time for philosophers to attend to the standard view itself, and to rethink what we are doing when we attribute to each other propositional attitudes. Shifting focus to the explanatory (and other) uses to which we put attributions of propositional attitudes may circumvent the metaphysical conundrums just surveyed.

See also *An Essay on Mind* section 2.1; FUNCTIONALISM; THOUGHTS.

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psychoanalytic explanation The task of analysing psychoanalytic explanation is complicated initially in several ways. One concerns the relation of theory to practice. There are various perspectives on the relation of psychoanalysis, the therapeutic practice, to the theoretical apparatus built around it, and these lead to different views of psychoanalysis' claim to cognitive status. The second concerns psychoanalysis' legitimation. The way that psychoanalytic explanation is understood has immediate implications for one's view of its truth or acceptability, and this is of course a notoriously controversial matter. The third is exegetical. Any philosophical account of psychoanalysis must of course start with Freud himself, but it will inevitably privilege some strands in his thought at the expense of others, and in so doing favour particular post-Freudian developments over others.

A plausible view of these issues is as follows. Freud clearly regarded psychoanalysis as engaged principally in the task of explanation, and held fast to his claims for its truth in the course of alterations in his view of the efficacy of psychoanalytic treatment. Some of psychoanalysis' advocates have, under pressure, retreated to the view that psychoanalytic theory has merely instrumental value, as facilitating psychoanalytic therapy; but this is not the natural view, which is that explanation is the autonomous goal of psychoanalysis, and that its propositions are truth-evaluable.

Accordingly, it seems that preference should be given to whatever reconstruction of psychoanalytic theory does most to advance its claim to truth; within, of course, exegetical constraints (what a reconstruction offers must be visibly present in Freud's writings).

PSYCHOANALYTIC EXPLANANDA

The explananda of psychoanalysis require some comment. They may be divided, first, into primary and secondary explananda. The latter include art, morality, religion and other cultural phenomena for which Freud offered explanations. They are secondary because psychoanalytic explanation in these areas depends for its plausibility on the theory's success in dealing with the psychological phenomena of individuals which are psychoanalysis' primary explananda.

Ultimately, the object of psychoanalytic explanation is nothing less than the entire shape of a person's life (*see* Wollheim, 1984), but the theory is formulated initially in its application to the phenomena that Freud described as 'gaps' in CONSCIOUSNESS. By this phrase Freud meant to indicate those psychological phenomena that present ordinary psychology with puzzles of explanation – actions and experiences with an irrational, or at least non-rational character.

This last distinction is important. Dreams and parapraxes (slips of the tongue, bungled actions such as accidentally dropping an object, exceptional lapses of memory) are phenomena about whose explanation ordinary psychology has nothing very helpful to say, and which provide essential material for the formulation of psychoanalytic theory. But such phenomena do not strictly evince irrationality on the part of the subject, for they do not stand out in commonsense psychology as violating norms of rationality (*see* FOLK PSYCHOLOGY). In this respect they are merely non-rational, and may be compared with such phenomena as individual character or change of mood, which commonsense psychology also tends to recognize without endeavouring to explain.