



## Hempel's philosophical behaviourism<sup>1</sup>

Philosophical behaviourism is a family of theories that claim that we *can* analyse mental concepts in terms of concepts that relate to the body, and in particular, the concept of 'behaviour'. While other theories in philosophy of mind often focus on questions of metaphysics, e.g. whether mental properties 'exist' independently of physical properties, philosophical behaviourism focuses on questions of philosophy of language, and what it means to talk about mental properties in the first place. Once we get clear on this, philosophical behaviourism claims, we will see that some of the metaphysical debates about the mind can be avoided. Before we try to do the *metaphysics* of mind, we need to do some *conceptual analysis*.

The term 'behaviourism' (without the adjective 'philosophical') refers to a theory of how psychology should conduct itself to achieve the status of a science. Science, behaviourism claimed, can only investigate what is publicly accessible. Hence psychology can and must aim only at the explanation and prediction of bodily behaviour, as any talk of or appeal to 'inner', inaccessible mental states cannot be scientific. There is no scientific way to establish their existence or nature. This theory, of how psychology should proceed, is *methodological* behaviourism. It makes claims about the methods of science and about *how we can know* about mental states.

By contrast, philosophical behaviourism claims that *what we are talking about* when we are talking about the mind and mental states is behaviour - what people do and how they react. On this view, the mind is not a 'thing'. Rather, we can talk about organisms 'having minds', or better, having mental states, on the basis of how they behave.

There are different kinds of philosophical behaviourism. Although they both agree that we can analyse mental concepts in terms of behaviour, their arguments for philosophical behaviourism, and indeed what they mean by 'behaviour', are very different. In this handout, we look at the form of the theory defended by Carl Hempel.

Hempel calls his resulting theory 'logical behaviourism'. Other philosophers sometimes call it 'analytical' behaviourism, while the AQA A level syllabus calls it 'hard' behaviourism. Confusingly, the term 'logical behaviourism' is sometimes also used to mean 'philosophical behaviourism', the whole family of theories, and not just Hempel's original version. We will use the syllabus terms of 'hard' and 'soft' behaviourism to distinguish Hempel's and Ryle's theories.

<sup>&</sup>lt;sup>1</sup> This handout is based on material from Lacewing, M. (2017) *Philosophy for A Level: Metaphysics of God and Metaphysics of Mind* (London: Routledge), Ch. 3, pp. 237-43

## THE MEANING OF SCIENTIFIC STATEMENTS

Hempel was a member of the 'Vienna Circle', the founders of logical positivism who developed and defended the verification principle. In 'The logical analysis of psychology', Hempel applied the principle to the question of what psychological language means.

He starts with the general question of what the meaning of a scientific statement is. The answer, he claims, is that to know the meaning of a statement is to know the conditions under which we would call it true and those under which we would call it false. So 'the meaning of a statement is established by the conditions of its verification'. The 'conditions of its verification' are simply the observations that we can make to check its truth. For example, the meaning of the statement 'the temperature in the room is  $21^{\circ}$ C' is given by the (many different) ways in which we can establish whether this is true, e.g. by observing whether 'the level of mercury in the thermometer in the room is at the mark "21" on the Celsius scale'.

From this account of meaning, we can draw several conclusions. First, if we can't say what the conditions of verification for a statement are, i.e. if in principle, we cannot empirically check or test the truth of the statement, then it is meaningless.

Second, two statements have the same meaning if they are both true or both false in the same conditions, i.e. if they have the same conditions of verification. If the meaning of the first is given by its conditions of verification, and the meaning of the second is given by its conditions of verification, and the two conditions of verification are the same, then the meaning of the two statements is the same. So 'the temperature in the room is 21°C' means the same as 'the level of mercury in the thermometer in the room is at the mark "21" on the Celsius scale and/or...' where we fill in the dots by all the other ways we can measure temperature. The statement 'the temperature in the room is 21°C' is really just an *abbreviation* of all the statements about its conditions of verification.

Third, this means that we can *translate* a statement into a series of statements that simply describe the conditions of verification. A translation is a statement with the same meaning, but expressed in different words or concepts. We can translate a statement with the concept 'temperature' into a series of statements describing the observations we make to establish whether the first statement is true. These statements don't use the concept 'temperature', but concepts of observation and measurement.

## THE MEANING OF PSYCHOLOGICAL STATEMENTS

Let's apply these results to statements in psychology. First, unless we can say how to check whether a statement like 'Paul has a toothache' is true or false, it will be meaningless. Second, its meaning is given by its conditions of verification. What might these be? That's an empirical matter, thinks Hempel, and the list below could be continued, but the conditions of verification will include claims like these:

1. 'Paul weeps and makes gestures of such and such kinds.' [bodily behaviour]

- 2. 'At the question "What is the matter?", Paul utters the words "I have a toothache".' [linguistic behaviour]
- 3. 'Closer examination reveals a decayed tooth with exposed pulp.' [physical bodily states]
- 4. 'Paul's blood pressure, digestive processes, the speed of his reactions, show such and such changes.' [physiological changes]
- 5. 'Such and such processes occur in Paul's central nervous system.' [brain processes]

What is important about these first two points about the meaning of psychological statements is that psychological statements cannot be about private or inaccessible states of the person. The only way that they could have meaning is if there is some way that we could check whether or not someone has the mental state we say they do. All this means of checking have to be public, so they must relate to physical and behavioural states or changes.

The third implication is that the statement 'Paul has a toothache' *means* these claims. It can be translated without loss of meaning into these claims. These are not only ways of checking the truth of the statement, as though such behaviour is a fallible guide to what is privately going on in Paul's mind. To talk about Paul's mental states is to talk about Paul's behaviour and bodily states.

Fourth, these claims describing the conditions of verification don't use the concept of 'toothache' or 'pain' or any other mental concept. They only use physical concepts, concepts concerning physical, bodily behaviour and processes. We can generalise the point. All psychological statements can be translated, without changing the meaning of what is said, into statements that only use physical concepts of this kind.

## IMPLICATIONS

Central to Hempel's theory is the thought that just as other scientific statements are really abbreviations for statements that describe their conditions of verification, the same is true of psychological statements. This may seem controversial, since we tend to think of psychological and physical concepts as quite distinct. But according to his theory, we can translate statements using psychological concepts into statements using physical concepts. There is no 'essence' to mental states and events (e.g. consciousness or Intentionality) that distinguishes them from what is physical. As a result, there is no genuine question about how mind and body relate to one another or interact with one another. Once we correctly understand the logic of mental concepts, such problems disappear.

This isn't because we have *eliminated* mental states. Hempel's behaviourism doesn't say that mental states don't exist but nor does it say that they do. Instead, the question of their 'existence' isn't a real question. To say that someone is in pain isn't to say that 'pain exists'. It is to say that there are certain observations we can make about the behaviour and physical state of the person. The person exists, their body exists, and they behave in certain ways. There is no further question about whether mental states exist.