THE BRITISH PSYCHOLOGICAL SOCIETY

History and Philosophy of Psychology Section Newsletter No.23 November 1996

Editor: Man Cheung Chung, Ph.D.

University of Wolverhampton, School of Health Sciences,

62-68 Lichfield Street, Wolverhampton, WVl JDJ, U.K.

Book Reviews

David J. Yates

Content

Mental Causation Is No Different From Any Other Kind

Ullin T. Place
Willowtree Cottage, Boltby,
Thirsk, North Yorkshire,
YO7 2DY

Abstract

Mental causation, as the term is used here, is the relation between an individual's beliefs, desires and intentions on the one hand and the behaviour they motivate on the other. Until it was challenged by Donald Davidson (1963/1980), the accepted view amongst philosophers was that mental causation in this sense is not a causal relation ("reasons are not causes"). Now most subscribe to Davidson's view that it is a causal relation, but an anomalous one. I argue that it is a standard causal relationship which differs in no way from other non-mental cases of causation.

In recent philosophical literature the term `mental causation' is used to refer to the relation between an individual's beliefs, desires and intentions on the one hand and the behaviour they motivate on the other. Until it was challenged by Donald Davidson (1963), the accepted view amongst philosophers was that mental causation in this sense is not a causal relation. Reasons, it was argued, are not causes. Now most subscribe to Davidson's view that mental causation is a causal relation, but an anomalous one. In this paper I argue that both these views based number are on a misconceptions about the nature of the causal relation, and that once these misconceptions are dispelled, it appears that mental causation does not differ significantly from other non-mental cases of causation.

My contention is that both these views, the view that mental causation is not a true causal relation and the view that it is anomalous, rest on a mistaken conception of the causal relation. This misconception comprises five false propositions:

- F1. Causation is a relation that holds only between events.
- F2. For each effect there is only one immediate cause.
- F3. All causation involves a constant conjunction between causes and their effects.
- F4. Every causal relation involves a 'strict' causal law which applies to all tokens of a given type.
- F5. The way beliefs and desires interact to motivate behaviour is has no parallel in cases of `physical' causation.
- I shall argue on the contrary that following five propositions are true:
- T1. Causal relations hold not just between events, but between situations which include states of affairs as well as events.
- T2. The causes of the initiation and persistence of a state or process are always multiple.
- T3. Constant conjunction between causes and their effects occurs only when all other relevant causes are held constant.
- T4. The only kind of causal law we need to postulate in order to account for a causal relation is one whose scope is restricted to the behaviour of a single individual, in other words, the dispositional properties of the individuals involved in the interaction.
- T5. The way beliefs and desires combine to determine the way the individual behaves has counterparts in the case of

non-mental systems.

The arguments for these propositions are as follows:

T1. Causal relations hold not just between events, but between situations which include states of affairs as well as events.

Causal relations are relations between what Barwise and Perry (1983) call "situations". Situations are of three kinds:

- (a) extended events (processes) characterised by continuous change over time,
- (b) *instantaneous events* (starts and stops) in which a change occurs at an unextended moment of time, and
- (c) states of affairs whereby the properties of a particular or the relations between two or more particulars remain constant over a period of time.

In the typical case of causation an extended event or process, bounded at either end by an instantaneous event, its *onset* and its *offset*, converts an antecedent state of affairs into a subsequent and consequent state of affairs.

Every extended situation, whether it be a process or a state of affairs, has causes of three kinds:

- (i) its *initiating causes*, the causes of the instantaneous event that brings it into existence,
- (ii) its *maintaining causes*, the causes of its persistence once begun, and

(iii) its *terminating causes*, the cause or causes of the instantaneous event whereby it ceases to exist.

In a case where a process transforms one state of affairs into another, the initiating causes of the process are also the terminating causes of the state of affairs that preceded it, while its terminating causes are also the initiating causes of the state of affairs that succeeds it. However, the causes of an instantaneous event which terminates a state of affairs and initiates a process differ from those of an instantaneous event which terminates a process and initiates a state of affairs. The initiation of a process requires two kinds of cause:

- (1) a set of *standing conditions*, states of affairs which are both *positive* in the sense of things that must be *present* if the effect is to occur and *negative* in the sense of things that must be *absent*, which, as part of the state of affairs that precedes the onset of the process, have been in position for some period of time before it starts, and which in most cases coincide with the causes that maintain the process once it starts,
- (2) a *triggering event*, an instantaneous event distinct from that which it triggers which completes the set of conditions which are jointly *sufficient* for the onset of the process.

The termination of a process, in so far as it does not require a separate process of winding down, requires only the exhaustion or removal of one (any one) of its maintaining causes.

Applying this analysis to the case of

mental causation, we see that whereas the behaviour they cause is a process, beliefs desires and intentions are neither processes nor instantaneous events. They are states of affairs, specifically dispositional states of the behaving agent. As such, they do not and could not play the role of triggering instantaneous event with respect to the initiation of the behaviour they cause. Their causal role is to act

- (a) as *standing conditions* which combine with a triggering event to initiate the behaviour when the appropriate conditions arise, and
- (b) as *maintaining causes* once the behavioural process has started.

In this respect beliefs, desires and intentions play the same role in causation as other dispositional states such as does the brittleness of a pane of glass in the initiation and persistence of the process of shattering when it is struck by a stone (triggering event).

T2 The causes of the initiation and persistence of a state or process are always multiple.

There are only two exceptions to the rule that the immediate causes of an effect are invariably multiple. The two exceptions are:

- (1) Among the initiating causes of a process, there is only one triggering event which completes the set of conditions jointly sufficient for the coming about of the effect, and
- (2) The terminating cause which ends a process consists either in the

disappearance of one, but only one, of its positive maintaining causes or in the appearance of one, but only one, of the situations whose absence constitutes its negative maintaining causes.

Since, as we have seen, beliefs, desires and intentions are dispositional states rather than events and cannot, therefore, function as the single triggering event which completes the set of conditions jointly sufficient for the initiation of a course of action, they constitute the sole cause of a behavioural effect only when their onset or offset acts as the terminating cause which brings a course of action to a premature end.

T3 Constant conjunction between causes and their effects occurs only when all other relevant causes are held constant.

Hume's constant conjunction between causes and effects applies

- (a) to cases where the same set of standing conditions combines with the same type of triggering event to initiate a process,
- (b) to the persistence of a particular extended situation, whether state or process, so long as its maintaining causes persist,
- (c) to cases where the same type of terminating cause results either in the abrupt termination of the same kind of extended situation or the beginning of a gradual winding down of the same kind of on-going process, and
- (d) to a sequence or chain in which the same set of initiating and maintaining causes produces the same type of effect over and over again, but only in so far as all other factors are held constant, as in a controlled experiment or a machine.

Since the same belief can combine with a different desire and the same desire with a different belief to motivate guite different behaviour, and since beliefs and desires are evanescent, beliefs, unless accompanied by the same desire, and desires, unless accompanied by the same belief, are seldom conjoined with the same behaviour. But since constant conjunction in causal relations is found only when all other factors are held constant and since that kind of control is hardly feasible in the case of the kind of behaviour that is caused by beliefs and desires, this does not count against beliefs and desires being dispositional causes of behaviour.

T4 The only kind of causal law we need to postulate in order to account for a causal relation is one whose scope is restricted to the behaviour of a single individual, in other words, the dispositional properties of the individuals involved in the interaction.

Since it was first pointed out by Hume (1739-40/1978, p.170), it has been accepted that to say that A causes B entails, if it is not equivalent to, a causal law statement of the form

"if at any time a situation of the A type were to exist, a situation of the B type would exist",

It has also been widely accepted following Hume (1777/1902, p.76) that to say that A caused B on a particular occasion entails, if it is not equivalent to, a causal law statement of the form

"if A had not existed, B would not have

existed."

In Fact, Fiction and Forecast, Nelson Goodman (1955/1965, pp. 17-25) brings these two observations together when he points out that causal counterfactual conditionals are inferred from causal law statements when combined with a premiss asserting the spatio-temporal conjunction of A and B on that occasion. In his terminology the causal law statement is said to "sustain" the counterfactual which an accidental generalization such as

"All coins in my pocket are silver"

does not. Since we can never observe what would have happened or been the case, if things had been different from the way they were, were it not for this, the counterfactual would lack all evidential support.

Goodman also points out (*op.cit.* pp. 39-40) that the causal law required to sustain a counterfactual does not have to be universally quantified over entities of the kind involved in the interaction. A dispositional statement restricted in its scope to a particular individual will do just as well. To quote his example, if "wis a piece of dry wood during a given brief period of time", the dispositional statement

"wis inflammable"

sustains, subject to an appropriate *ceteris* paribus or other-things-being-equal clause, the counterfactual conditional

"If w had been heated enough, it would have burned."

History and Philosophy of Psychology Newsletter, 23, November 1996

Since beliefs, desires and intentions dispositional properties of the individual believer, wanter or intender, follows that the dispositional statements that ascribe them to their are causal law statements. owner Though restricted in scope to the individual concerned, they are universally quantified over time so long as the disposition applies. As such, they are perfectly able to sustain the kind of negative causal counterfactual which is the hallmark of a causal relation and they do this without requiring any law which statement is universally quantified over the kind of dispositional property bearer. There is no need to invoke, as Davidson does, an identity relation between beliefs and desires on the one hand and some state of the brain microstructure on the other in order to have something to which a causal law statement universally quantified over things of kind, can apply.

T5The way beliefs and desires combine to determine the way the individual behaves has counterparts in the case of non-mental systems.

Since the point was first made by Geach (1957, Chapter 4) it has been known that the behaviour of an agent cannot be predicted from information her beliefs unless about it supplemented by information about her desires and *vice versa*. It has often been claimed that this feature has no counterpart outside the realm of the mental. This is not so. The magnitude of a current flowing along a conductor cannot be predicted from information

about its resistance unless it is supplemented by information about the potential difference between its two ends and *vice versa*.

It may be objected that the way beliefs and desires articulate so as to determine behaviour is quite different from the way resistance and potential difference articulate so as to determine current magnitude. Whereas changing resistance or potential difference changes only the magnitude of the current, the belief that it is going to rain can lead to very different behaviour depending on whether the agent's objective is to avoid getting wet, plant out seedlings, arrange a garden party or, as in Geach's example, do penance like Dr. Johnson in Uttoxeter market place. But this is no different from the case of the human mouth which can be used for eating, drinking, biting, licking stamps, holding cotton while sewing, breathing, talking and singing depending on the needs of the moment.

Conclusion

In arguing that beliefs, desires and intentions are typical dispositional causes of the behaviour they motivate, I am not denying that there are serious objections to the use of such concepts in explaining behaviour for scientific purposes. But the objection is not to the nature of the causal relation, but to the way these dispositional causes, particularly the cognitive ones, are characterized in terms of their typical linguistic manifestations. Not only does this create a scientifically unacceptable fiction when applied to the behaviour of pre-linguistic organisms, it creates a biologically unacceptable gulf

between the dispositional causes of the behaviour of linguistically competent humans and their pre-linguistic counterparts.

References

Barwise, J. & Perry, J. (1983) Situations and Attitudes Cambridge, MA: M.I.T. Press.

Davidson, D. (1963/1980) `Actions, reasons and causes' Journal of Philosophy, LX, pp. 685-700. Reprinted in D. Davidson Essays on Actions and Events Oxford: Clarendon Press) pp. 3-19.

Geach, P.T. (1957) Mental Acts London: Routledge and Kegan Paul.

Goodman, N. (1955/1965), Fact, Fiction and Forecast, 2nd Edition, Indianapolis: Bobbs-Merrill.

Hume, D. (1739-40/1978) A Treatise on Human Nature L.A. Selby-Bigge (Ed.) 2nd Edition, P.H. Nidditch (Ed.) Oxford: Clarendon Press.

Hume, D. (1777/1902) Enquiries concerning the Human Understanding and concerning the Principles of Morals L.A. Selby-Bigge (Ed.) 2nd Edition, Oxford: Clarendon Press.