

Part I

Acts and Actions

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# Action Theory and Ontology

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Any comprehensive theory of action should have something to say about the ontology of actions. It should address such questions as the following. What *are* actions, if indeed they are anything at all? – for we shouldn't just *assume* that actions exist. Are they, for instance, a species of *events*? If so, then what are *events*, and what makes actions special among events? How are actions *individuated* and – if this is a different question – what are their *identity conditions*? Must every action have an *agent* (or agents) and, if so, what sort of thing can be an agent, and in virtue of what features can it be said to perform, or engage in, actions? In this chapter I shall say something about all of these questions.

## What are Actions?

One obvious way to address this question is to look at action *sentences* and examine their apparent ontological implications. A typical action sentence would be 'John opened the door.' Here John is represented as having performed a certain type of action – opening a door – and thus is represented as having been the agent of a token action of that type. (I take it that the type/token distinction is too familiar to need further elaboration here.) By implication, this token action occurred at some specific time in the past. Extrapolating from this kind of example, we may venture to say that token actions are particular occurrences of certain action types, each possessing an agent (or agents) and a particular time of occurrence. In answer to the question 'But do we really need to include token actions in our ontology?' the following line of argument, due originally to Donald Davidson (1967), may be advanced. Action sentences such as 'John opened the door' can be *adverbially modified* in indefinitely many ways. For instance we can expand this sentence into one such as: 'John opened the door at 1.00 p.m. on Monday, slowly and cautiously, by pushing it [...]' When we ask what *logical form* this expanded action sentence has, it is plausible to answer that it involves *existential quantification over token actions*, so that it is logically equivalent to something like this:

( $\exists a$ )( $a$  was a door-opening and John was the agent of  $a$  and  $a$  occurred at 1.00 p.m. on Monday and  $a$  was slow and  $a$  was cautious and  $a$  was done by pushing ...).

Taking this to be the logical form of our expanded action sentence, we can easily explain, for example, why it entails our original action sentence, 'John opened the door': it does so simply because a conjunction entails each of its conjuncts. However, if we then accept, in addition, W. V. Quine's (1969) criterion of ontological commitment – encapsulated in his famous dictum 'to be is to be the value of a variable' – we may conclude that action sentences like these are implicitly committed to the existence of *token actions*, as the items quantified over by such sentences when their underlying logical form is made explicit (see chapter 6).

Of course, Quine's criterion of ontological commitment is by no means uncontroversial and, in any case, even if it tells us that we are ontologically committed to token actions, it still doesn't really tell us what these items *are*. The usual presumption, however, of those who follow this line of argument is that actions are *events*, even if not all events are actions: that is, they form a *sub-class* of events. This is because it seems natural to describe events in general, as well as actions in particular, as being individual occurrences that possess a particular time of occurrence. On this view, what is distinctive about actions is that they always have *agents* and also, perhaps – at least according to philosophers such as Davidson (1971) – that they are always *intentional* under some description of them. By contrast, it seems that there are many events, such as the explosion of a supernova in the Andromeda galaxy or the spontaneous decay of a radium atom, that have *no* agent and are not intentional under *any* description of them.

Suppose we agree, at least provisionally, that actions are events, although this has been disputed by some – for instance Kent Bach (1980). It then remains to be asked what *events* are. Two views on this issue are particularly dominant at present. One is Davidson's own view, which is that events constitute a basic and irreducible ontological category of particulars, equally fundamental with that of physical *objects* (things such as John, or a radium atom). The other is Jaegwon Kim's (1976) view that events are *property exemplifications*: more precisely, that an event is the exemplification of a property by an object at a time. On this latter view, each token event may be represented by an ordered triple of an object, a property, and a time, of the form  $\langle o, P, t \rangle$ . So for example John's token action of opening the door, assuming it to be an event, may be represented by the ordered triple  $\langle \text{John, door-opening, 1.00 p.m. on Monday} \rangle$ . According to this view, events do not constitute a *fundamental* ontological category of particulars, since they may always be analyzed in terms of items which belong to other categories: the categories of *objects*, *properties*, and *times*. It might be objected to the Kimian view that it fails to register the fact that events are *changes* and conflates them with *states* – a state being a condition which does not involve change. In reply, however, it might be urged that the distinction between changes and states is, at best, superficial and sometimes difficult to adjudicate upon: for instance, is uniform motion in a straight line (inertial motion) a *state* of the moving object or a *change* in it?

How should we decide between the Davidsonian and the Kimian views of events, presuming that we should adopt one of them? The Kimian view might seem to be ontologically more extravagant because, while it analyzes events in terms of objects,

properties and times, it still leaves us with at least these *three* basic ontological categories, whereas the Davidsonian view is apparently committed only to *two*: objects and events. On the other hand, Occam's razor only enjoins us not to multiply entities (and, by implication, fundamental *categories* of entities) *beyond necessity* – and it may be argued that we need to include *properties* in our ontology in any case, for all sorts of explanatory purposes (for instance, to give adequate accounts of *causation* and causal laws).

Before leaving this issue, however, I want to revisit the question of whether actions really are a sub-class of events. In some cases this assumption seems unproblematic, but in others not. Suppose, for instance, that we attribute to John the action of having killed Mary by shooting her. Suppose also, to make matters interesting, that, although John shot Mary on Monday, she did not die until Wednesday, by which time John had already committed suicide in an act of remorse, say on Tuesday. If John's action of killing Mary was an *event*, then what was its time of occurrence? If we say that it occurred on Monday, then we are implying, counterintuitively, that John killed Mary two days before she died. On the other hand, if we say that it occurred on Wednesday, when Mary died, we are implying, equally counterintuitively, that John killed Mary a day after he himself died. The source of the difficulty might be traced to this: intuitively, for John to kill Mary is for John to cause Mary's death, so that in this kind of case an action is an agent's *causing* of an event. The event which is caused – in this case, Mary's death – may quite unproblematically have a time of occurrence (in this case, it was on Wednesday). But what about the *causing*: does *that* plausibly have a time of occurrence? Take another example, which does not involve agents, but simply the causing of one event by another: the case of an explosion causing the collapse of a bridge. The explosion has a time of occurrence, as does the collapse of the bridge (even if these events are, each of them, spread out over a *period* of time, rather than being momentary). But does the explosion's *causing* the collapse have a time of occurrence? Indeed, is *it* an event, in addition to the explosion and the collapse themselves? It is not so clear. I suggest, that the correct answer to either of these questions is 'Yes.' If causings, quite generally, are not events and at least some actions are causings, then not all actions are events, even if some are. We might have to conclude, on this basis, that actions don't constitute a unified category of entities at all – not even a sub-category of some other category.

### What Are the Identity Conditions of Actions?

The foregoing discussion feeds directly into another important ontological question concerning actions that was raised at the beginning of this chapter. How are actions *individuated* and – if this is a different question – what are their *identity conditions*? Since the issue of action individuation is a leading theme of chapter 2, I can afford to be fairly brief here as far as this question is concerned. The word 'individuate' has two importantly different senses: a *cognitive* one and a *metaphysical* one. In the cognitive sense, individuation is the singling out of some entity in thought. In the metaphysical sense, it is a mind-independent determination relation between entities. It is in the former sense, for instance, that the police witness may be said to have individuated

the perpetrator of the crime at an identity parade. It is in the latter sense, however, that we may say, for example, that a set is individuated by its members: for it is the members of a set, and they alone, that determine *which* set it is – they fix its identity. Since we are concerned in this chapter only with the ontology of action, we shall consider here the individuation of actions only in the metaphysical sense of the word ‘individuation.’

What, then – if anything – determines *which* action a given action is (assuming that we are still talking here exclusively about *token* actions)? On the Kimian view of events and actions, the answer seems straightforward enough: a certain *object*, *property*, and *time* always jointly determine this, for an action just *is* the exemplification of a certain property by a certain object at a certain time. This also provides us, immediately, with a *criterion of identity* for token actions, in the following form: If *a* and *b* are token actions, then *a* is identical with *b* if and only if *a* and *b* are exemplifications of the same property by the same object at the same time. However, on the Davidsonian view, no such easy answer is forthcoming. Davidson himself (1969) originally proposed a *causal* criterion of identity for events – and hence for actions – along these lines: If *e* and *f* are token events (or actions), then *e* is identical with *f* if and only if *e* and *f* have the *same causes and effects*. But it was soon pointed out that this criterion seems problematic, because it appears to be implicitly circular, at least on the assumption that all causation is causation by and of events. For then to say that *e* and *f* have the same causes and effects is just to say that the same events cause *e* and *f* and the same events are caused by *e* and *f*. Yet the criterion is supposed to tell us under what conditions events are the same or different, and so it shouldn’t just presume that, where the causes and effects of *e* and *f* are concerned, this can be regarded as being already settled.

Even if this problem can be overcome, the Davidsonian criterion of identity for events and actions raises another contentious issue: namely whether a criterion of identity for events tells us how events are *individuated*, in the metaphysical sense of ‘individuate.’ It is not clear that it necessarily does so. For an account of what individuates an entity *x* is supposed to tell us what determines *which* entity of its type *x* is: and it should presumably tell us this even with regard to *counterfactual* circumstances in which *x* may be supposed to exist, not just with regard to its *actual* circumstances. Now, this appears to imply that, if we consider Davidson’s criterion of identity for events as telling us what individuates an event – namely, its causes and effects – then we must assume that an event always has the *same* causes and effects in all counterfactual circumstances in which it may be supposed to exist. And yet this assumption is highly counterintuitive. One readily imagines for example that, although *John’s* shooting Mary was actually one of the causes of Mary’s death, her death – that very event – could instead have been caused by, say, *Peter’s* shooting Mary in exactly the same way at the same time. This being so, Davidson’s criterion of identity for events and actions, even if it serves to distinguish a given token action from any other token action in the *actual* world, does not serve to identify it in other possible worlds: that is to say, it does not serve as a principle of *transworld identity* for events, and hence as a principle of individuation in the metaphysical sense. By contrast, Kim’s criterion of identity for events fairly clearly does serve this further purpose, because it is plausible to say that a given property exemplification couldn’t have been an exemplification by a different object of a different property at a different time – in short, that a Kimian

event's constituent object, property, and time are all *essential* to it, unlike an event's causes and effects. This may be considered to be another advantage of the Kimian view over the Davidsonian one.

## Agents and their Powers

So far I have said very little about the ontological status of the *agents* of actions, but it should be evident that I have been taking these at least to be individual objects of some kind (individual substances, in an older terminology) and, moreover, objects possessing mental as well as purely physical properties, human persons providing a paradigm. However, in everyday and scientific language we often find the term 'agent' applied also to inanimate objects. For instance, in chemistry various chemical compounds are commonly described as being 'agents' and 'reagents.' In this broader sense of 'agent,' an agent is just something that does something – acts in a certain way – and often does so *to* something else – something which, on that account, is often described as a 'patient' in respect of the action being performed. As a corollary to this, the agent and the patient are commonly described as possessing, respectively, an *active* and a corresponding *passive* power (or 'liability'), the agent's action and the patient's reaction constituting the manifestation or exercise of their respective powers on the particular occasion of action.

Clearly some powers and liabilities are *causal* in character: for example, a drop of water's power to dissolve salt is causal in character, because any manifestation or exercise of the power actually consists in the drop of water causing some salt to dissolve on a particular occasion. In the case of human agents, some powers are clearly *mental* in character. Thus John Locke (1975) held the human will to be such a power, volitions (or 'acts of will') constituting its manifestations or exercises on particular occasions (see chapter 60). But, although Lockean volitions are clearly supposed to be capable of having *effects* such as motions of the agent's body, it does not seem that the will, as conceived by Locke, should be thought of as being a causal power in the way that water's power to dissolve salt should be. This is because Locke appears to have supposed, as seems intuitively correct, that the will could be exercised without giving rise to any further effect, as in the case of a person afflicted by paralysis who wills to move his or her body in a certain way but fails to bring about any such motion.

Some theorists of action, however, suppose human and other intelligent agents to possess distinctive *agent-causal* powers. According to one version of this view, a human agent possesses an agent-causal power to cause particular intentional or volitional states in him or herself, with these states then normally playing a contributory causal role in the generation of bodily activity in the agent. Such an agent-causal power, according to these theorists, should not be assimilated to the 'active' causal powers of inanimate substances, such as water's power to dissolve salt. This is basically because, whereas water exercises this power *by acting in a certain way* on some salt so as to bring about its dissolution, a human agent is not, according to these theorists, to be thought of as acting in any way so as to bring about a certain intentional or volitional state in him or herself. Rather, the agent him or herself is supposed to be the (or at least a) cause of the state in question in a direct and irreducible sense, which does not implicate any

further action on his or her part. This is the classical doctrine of agent causation, which raises a host of interesting and difficult metaphysical and ontological issues peculiar to itself (see chapter 28).

Setting aside these doctrinal differences between action theorists, we may inquire now into the ontological status of powers and their manifestations. Both seem to be categorizable as *properties* of agents, at least in a relatively broad sense of the word 'property.' Thus *solubility* in water would seem to be a property of salt, as would its actual *dissolving* in water on some occasion. And the same would seem to apply in the case of human agents. John may have a power to close a door and exercise this power on a particular occasion by actually closing one: both the power and his exercising of it seem to qualify as properties of John. However, in recent years, metaphysicians working on the ontology of properties have been keen to emphasize the distinction between properties conceived as *universals* and properties conceived as *particulars* – the latter commonly referred to as 'tropes' or 'modes,' and often described as 'abstract particulars.' Now, when we were discussing earlier the Kimian view of events as property exemplifications, it is evident that it was properties conceived as universals that were at issue. Indeed Kim's view was developed before the modern resurgence of interest in trope theory. Simple examples of tropes would be the particular or individual redness of a certain red apple, or the particular or individual roundness of a certain round ball. However, once we have the ontological resources of trope theory at our disposal, the ontology of action requires some significant re-thinking. For it is natural to categorize both the powers of individual objects, and their manifestations or exercises on particular occasions, as particular properties or tropes, if we think of them as properties at all. And this has important implications for the individuation of actions and their identity conditions.

If an agent's action on a given occasion is to be regarded as trope or mode of the agent that constitutes a particular manifestation or exercise of one of the agent's powers, then we can replace the Kimian account of action individuation by a somewhat similar but importantly different one. On this view, since actions are tropes or modes, they are individuated in the same way in which tropes or modes quite generally are. One common view, thus, is that a trope or mode is individuated simply by its *object* (the thing whose particular property it is) together with its *time of existence*. For example, on this view, it is just *this apple* and *the present time* that, jointly, determine *which* redness the present redness of this apple is. We need no longer invoke – as on the Kimian view – a new (albeit non-fundamental) category of property exemplifications to house token actions, defining the latter as exemplifications of certain universals by certain objects at certain times. Instead we can just say that token actions are, quite simply, a sub-class of *particular* properties – tropes or modes – distinguished (at least) by the fact that they are also manifestations or exercises of another sub-class of particular properties, namely, powers. Indeed, on this approach, it is no longer apparent that we need to include in our ontology a distinctive category of events as such, of which actions are supposedly a sub-category. Tropes or modes seem to do all the ontological work that events were formerly called upon to perform. To be sure, this still leaves us with certain apparent problems on our hands, such as that posed earlier by the question of *when*, precisely, John's killing of Mary should be supposed to have taken place: for tropes, no less than events, seem to be items that are necessarily datable, at least if we are talking

about the tropes of objects which themselves exist in time. But these are probably problems for anyone's ontology of action.

*See also:* BASIC ACTIONS AND INDIVIDUATION (2); BODILY MOVEMENTS (4); ADVERBS OF ACTION AND LOGICAL FORM (6); PLURALISM ABOUT ACTION (12); VOLITION AND THE WILL (13); AGENT CAUSATION (28); LOCKE (60); DAVIDSON (73).

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