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Do Actions Occur Inside the Body?

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Abstract

The paper offers a critical examination of Jennifer Hornsby's view that actions are internal to the body. It focuses on three of Hornsby's central claims: (P) many actions are bodily movements (in a special sense of the word "movement") (Q) all actions are tryings; and (R) all actions occur inside the body. It is argued, *contra* Hornsby, that we may accept (P) and (Q) without accepting also the implausible (R). Two arguments are first offered in favour of the thesis (Contrary-R): that no actions occur inside the body. Three of Hornsby's arguments in favour of R are then examined. It is argued that we need to make a distinction between the *causes* and the *causings* of bodily movements (in the ordinary sense of the word "movement") and that actions ought to be identified with the latter rather than the former. This distinction is then used to show how Hornsby's arguments for (R) may be resisted.

Keywords

action, bodily movement, causation, Hornsby, mental events, trying.

In her (1980), Jennifer Hornsby argues for a number of important theses regarding the nature of actions. In this paper, I shall be concerned with three of them: the claim that (P) many actions are bodily movements (the word "movement" to be understood in a special way which will be explained in (I) below); that (Q) all actions are tryings; and thirdly, that (R) all actions occur inside the body. Though Hornsby regards these claims as interconnected, she designates (R) the principal thesis of her essay (1980 , p.14) and it is perhaps the most surprising of the three. To someone unfamiliar with the ambiguity in the phrase "bodily movement" that Hornsby takes some pains to elucidate, and which I shall shortly discuss, (P) might look straightforwardly inconsistent with (R). But even for someone who understood that ambiguity, and accepted (P) only on Hornsby's reading of it, it might still seem bizarre to think of actions as events tucked away deep inside the agent's body, unperceivable by any ordinary observer of that agent's manipulative interactions with the world. Surely it is a hard thing to deny that (at least sometimes) the actions of others are open to our gaze, that we can simply *see* them. It seems strangely reminiscent of a kind of behaviourist epistemology that generally finds little favour these days to suggest that, strictly speaking, only the effected movements, not our active movings of our bodies are on public view; and oddly out of keeping with another of Hornsby's more recently argued claims, that actions are not present to a wholly impersonal point of view (Hornsby 1993), to suggest that they are internal to the body; for as I shall shortly argue, it is very natural to think that any event which it makes sense to describe as located inside an agent's body should have such an "impersonal" description.

The theory of actions developed in Hornsby's (1980), I believe, has found fewer adherents than it deserves, largely, I think, because people have been unable to bring themselves to accept the thesis I have labelled (R).¹ There are at least three arguments for (R) in Hornsby's *Actions*, none easy to

¹ Dretske, for example, says that this aspect of Hornsby's view is "implausible" (Dretske 1988, p.17)

refute; but the conviction that (R) cannot be true has probably led more people to reject the premises of these arguments than have been persuaded to embrace the unappealing conclusion. In this paper, though, I want to try to disentangle the rest of Hornsby's theory of actions from the unattractive (R), and to show how it is possible to accept most of what Hornsby says about actions without embracing also the thesis that actions occur inside the body. In particular, my case against (R) will not rest on any confusion between the two senses of the phrase "bodily movement" which Hornsby distinguishes from one another, and it is compatible with the view that actions are tryings. I shall thus be arguing, amongst other things, for the consistency of the following triad of propositions:

(P) (many) actions are bodily movements (in the special sense)

(Q) all actions are tryings

(contrary-R) no actions occur inside the body,

a triad which gives, in barest of bare outline, the shape of an account of the nature of actions which I regard as immensely promising. The outline, though, will remain little more than that for the purposes of this paper; my present aim is simply to argue both that there is a strong case for accepting (contrary-R) and that there is no valid route from any of Hornsby's other plausible claims to the conclusion that (R) must be true.

In order to be able to give proper sense to thesis (P), I shall begin, in (I), by briefly explaining the ambiguity in the phrase "bodily movement" to which Hornsby draws attention at the beginning of her book. I shall not, however, undertake a general defence of (P), over and above what can be achieved simply by means of the disambiguation; my interest is in defending (contrary-R) and in seeing whether (contrary-R) can be held consistently with (P) and (Q), rather than in providing a wholesale defence of all three claims. Then, in (II) and (III), I shall offer two arguments in support of (contrary-R). The first attempts to make more persuasive the general claim made above about the desirability of a view according to which actions are in the normal case visually perceptible by any ordinary observer of an agent engaged in acting; the second begins from Hornsby's own (1993) distinction between the personal and impersonal points of view and her claim that actions are not available from within the impersonal point of view. Then, in the remainder of the paper, I examine, in an attempt to undermine, Hornsby's own powerful arguments for (R). I have been able to discern three main arguments, in *Actions*, for the conclusion that actions must occur inside the body, each of which either implicitly or explicitly takes for granted either (P) or (Q) above. Since I believe that both (P) and (Q) are true, my aim will be to show how it is possible to resist Hornsby's arguments for (R) without denying either of them. This will be the task of sections (IV) to (VI). I shall conclude that Hornsby's more recent writings on action, as well as other, general considerations, suggest that what she once called the "principal thesis" of her earlier work ought to be discarded.

1. Movements_I and Movements_T

Hornsby's *Actions* opens with the explanation of a crucial ambiguity in the concept of a *bodily movement*. The ambiguity is traced by Hornsby to the fact that "move" belongs to a special class of English verbs, all of which exhibit a certain distinctive pattern of behaviour. All the verbs in question occur both transitively and intransitively, the two sorts of occurrence being systematically related to one another. A verb counts as a member of this class if and only if it supports inferences of the following form:

and McGinn also criticizes the view for identifying actions with "purely inner events, invisible to the naked eye" (McGinn 1982, p. 89). Timothy Cleveland accuses Hornsby of having a "Cartesian" way of viewing things, an allegation backed up by the suggestion that actions, for Hornsby, are "inner", "mental" events (Cleveland 1997, pp. 9-10).

FROM: $a V_T b$ TO: $b V_I$

where V_T indicates a transitive, V_I an intransitive verb. "Shake" for example, is in the class; if John shook_T the table then the table shook_I. So is "boil"; if Susan boiled_T some water then the water boiled_I. "Move", evidently, behaves in just the same sort of way; if Alf moved_T the plate then the plate moved_I. And if Alf moved_T his body, or any part of his body, then his body, or that part of his body, moved_I.

Hornsby notes that where nominal phrases derived from these verbs occur, a special kind of ambiguity tends to arise, and "move" is no exception. "The shaking of the table", for example, is ambiguous just as it stands. We cannot tell whether it picks out someone's shaking_T of the table or the event which was the effect of that shaking, the table's shaking_I. Similarly, it might be uncertain in a given context whether "the movement of Alf's arm" refers to Alf's movement_T of his arm or his arm's movement_I. The claim that actions are bodily movements is therefore equivocal; as it stands, it cannot be properly evaluated, for it is unclear whether it says that every action is a movement_T by an agent of her body, or whether it rather states that all actions are the movements_I of bodies.

Hornsby argues that since it is never appropriate to answer the question "What did he do?" by saying "His body moved", or by making any more specific claim of this sort ("His arm went up", "His leg swung out to the left", etc.), it cannot be that our actions (which are doings²) are to be identified with bodily movements_I. If they are bodily movements at all, then, they must be movements_T, things which we subsume under kinds by means of sentences like "He moved_T his body" or "He raised_T his arm", sentences which are indeed appropriate answers to the question "What did he do?" Of course, sentences which explicitly claim that an agent has moved_T his body, or some part of his body, are not the only kinds of sentence which might appropriately answer that question; "He shook_T the table", "He boiled_T some water", "He kicked_T the cat" would all be perfectly good answers too, usually better, more natural answers. But given a certain view of action individuation (the view, familiar from the work of Anscombe (1957) and Davidson (1971) that when one ϕ -s by ψ -ing there is just a single action describable both as a ϕ -ing and as a ψ -ing) all these sentences can be understood as committed ontologically only to actions which can be described also as moving_Ts of an agent's body. For when one shakes a table, one does it by gripping the table and moving one's arms up and down or back and forth in a particular way; when one boils some water, one does it by moving one's finger (to flick a switch, say), and so on. Someone's shaking of a table, that is, just is their moving their body in some particular way; it is not some extra action which occurs simultaneously with or subsequent to the original bodily movement_T. From this view of action individuation, then, together with the observations about what it is appropriate to respond to the question "What did s/he do?", it follows that almost all actions are bodily movements_T (the only exceptions being such things as doings of mental arithmetic in one's head and standings still in a game of musical statues, these being intentional doings which do not involve the movements of any body parts).³ It is in this sense that Hornsby's

² On Hornsby's view, all our actions are doings, though not all our doings are actions. The second of these claims is supported by the observation that "What did he do?" (or "What was he doing?") can sometimes be answered by means of a sentence which does not imply that any intentional action has been carried out, e.g. "He was snoring/ digesting his food / breathing loudly". I do not want to become embroiled here in the debate about whether or not the class of actions is correctly characterized, as Hornsby believes, by reference to the concept of intention. I shall simply assume, for present purposes, that at any rate, a philosophically interesting class of events can be picked out by this means, and that there is no harm in calling these "actions".

³ It has been put to me by Diego Marconi in conversation that this general thesis about actions is implausible; he objects, for example, that someone's running for President cannot be thought of as a

claim (P) is to be understood, and I shall follow her in using the subscript "_T" after the word "movement" as a reminder that this is what is meant.

2. Are Bodily Actions Perceivable?

I said earlier that it would be a hard thing to deny that at least sometimes the actions of others are open to our gaze, that we can often simply *see* actions. But what is the evidence for this claim? It might justifiably be retorted that we should beware of accepting too easily the idea that any such view of actions is part of our intuitive conception of what they are; indeed, as Hornsby argues in her (1993), we may simply not have many views about actions *per se* which deserve to be thought of as constitutive of any such intuitive conception. For the fact is that we do not talk explicitly about actions very much at all. The sorts of descriptions which philosophers are used to utilising to pick out items of this special sort, "John's switching on of the light", "Susan's shaking of the table", etc., are rare in everyday discourse. It might be pointed out, for example, with respect to the question in hand, that it would be very strange for an action description to occur as the direct object of the verb "see"; we do not generally say such things as "I saw her chopping of the wood" or "I saw his boiling of the kettle". We would rather say: "I saw her chopping the wood" (or "I saw her chop the wood") or "I saw him boiling the kettle" (or "I saw him boil the kettle"), our preference for one or other of the two sorts of construction depending, normally, on whether or not observation was of the whole completed action (the whole of the chopping, or boiling, or whatever). But evidently neither "her chopping the wood" nor "her chop the wood" is an action description. We say we see subjects doing things, and we say we see them do things; but we do not, by and large, normally say that we see their doings of things. There is thus no easy route to the conclusion that actions are amongst the events we can see.

One might note, though, that our preference for constructions of the form "S saw O φ-ing" or "S saw O φ" over "S saw the (or a) φ-ing of O" is quite universal; it applies across the board, whether or not O is an agent and whether or not O's φ-ing is an action. "I saw the ball rolling down the hill", for example, is much more natural than "I saw a rolling of the ball down the hill"; and "I saw Jones' arm go up" is much better than "I saw a rising of Jones' arm". But in these other cases, we might surely think that despite the fact that we do not usually say explicitly that we see events of the said kinds, there is nevertheless no doubt that we do see them. We surely do observe the events which are the rollings of balls down hills, for example, and it is part of Hornsby's own view that we observe bodily movements_I, like arm risings. One might think, then, that this is enough to lend tentative support to the following claim: that when a proposition of the form "S saw O φ-ing" or "S saw O φ" is true, a proposition of the form "S saw a φ-ing of O" is always true too. If this were right, all of the following

sequence of bodily movements because no such sequence could possibly *count* as someone's running for President unless a certain social, political and institutional context is in place. But, first, it is not clear to me that someone's running for President *is* an action (as opposed to a (rather vaguely delimited) series of discrete actions); and, secondly, even if it is, Marconi's reason for supposing that someone's running for President cannot be identified with any sequence of bodily movements seems to be weak. It is true of most action descriptions that their application to a particular bodily movement_T is conditional on the existence of a certain context (my moving my finger cannot be identified with my alerting of a prowler unless there is a prowler there to be alerted, for instance) but given that there *is* a prowler present, and that my moving my finger succeeds in alerting him, there can be no bar to the identity. Nevertheless, Professor Marconi's point is important to the extent that it reveals that there is an unclarity which needs to be resolved about exactly which sentences of the form 'S φ-ed' can be taken to reveal commitment to the existence of a *single* action of φ-ing (supposing other issues relevant to the question whether S's φ-ing was an action to have been settled (e.g. is there any ψ such that S's φ-ing *was* S's ψ-ing and such that it is true that S ψ-ed intentionally?) This is not, however, a task I shall attempt here.

inferences, for example, would be sanctioned:

FROM	TO
(i) S saw the ball rolling down the hill	S saw a rolling of the ball down the hill.
(ii) S saw the bomb exploding	S saw an explosion of the bomb.
(iii) S saw the ice melting	S saw a melting of the ice.
(iv) S saw Jones' arm go up	S saw a rising of Jones' arm.

And it is only a small and natural extension of this inference principle to suggest that inferences of the form "S saw O ϕ -ing B" (or "S saw O ϕ B") to "S saw a ϕ -ing of B by O" are also acceptable, and again, this seems to apply whether or not O is an agent in the strict sense. If this were right, inferences (v) and (vi) below would also be sanctioned:

(v) S saw the sun melt the ice	S saw a melting of the ice by the sun.
(vi) S saw Jones raise his arm	S saw a raising of his arm by Jones.

But now, given only the premise that we do often say truly that we see people raise their arms, bend their knees, wave their hands, or whatever, we have reached the conclusion that bodily movements_T as well as bodily movements_I are amongst the events we can see.

This argument cannot be regarded as conclusive. Given a sufficiently strong reason to doubt the truth of its conclusion, the inference principles on which it relies might be questioned, either wholesale, or just in the case of inferences such as those in (v) and (vi); or perhaps in the case of inferences like (vi) alone. But I think the inference principles are *prima facie* plausible. I suggest, then that in the absence of countervailing argument, we have a reason to suppose that bodily actions are perceptible; and hence a reason to suppose that they are not internal to the body.

3. Actions and the Impersonal Point of View

In her (1993), Hornsby argues that actions are not accessible from the impersonal point of view. It is not possible, she contends, to conceive of an action as "a link in a causal chain that could be viewed without paying any attention to people, the links being understood by reference to the world's causal workings" (Hornsby 1993, p.161). Though she maintains both that actions are events, and that the rational explanation of action is a variety of causal explanation, she denies that the events which are actions can be impersonally described or singled out. They cannot be identified with bodily movements_I (we knew that already); but neither, it becomes clear, on her view, are we to identify them with such things as neuron firings or signals going out to the nerves. We are not, according to Hornsby, to think of actions as things with purely impersonal descriptions at all; the singling out of the events which are actions, on her view, can only be done by someone who can operate with concepts which belong to the personal perspective, concepts like belief, desire, intention as well as the concept of action itself, and of course, and perhaps centrally, the concept of a person, of someone who acts. Someone not in possession of this set of concepts, the concepts which characterise the personal point of view, would not, according to Hornsby, be in a position to single out an action. And it is important to realise that by this she intends not merely the relatively weak claim that the events which are actions could not be recognised to *be* actions by someone operating without personal level concepts. The much stronger thesis asserted by Hornsby is that the events which are actions simply cannot be singled out as events at all, by someone adopting an impersonal point of view.

What is the argument for thinking that actions could not be identified by someone operating only with concepts which are available from what Hornsby calls the impersonal point of view? More than one argument is offered in Hornsby's (1993); here I shall focus on just one of them. Hornsby asks us to reflect on a particular action, Peter's switching on of the kettle on some particular occasion, and to consider the series of events which occurs in the outwardly observable portions of the impersonal realm in consequence: the movement_i of a finger, the switch's going on, the element's beginning to heat up, etc. Then she invites us to extend the series of events backwards, as it were, so that it now also includes the impersonally describable events which occurred inside Peter's body and which were the causes of the bodily movement_i: various muscle contractions_i, the firings_i of neurons, and so on. In view now, it would seem, we have a whole series of events which can be located and identified without mention of Peter or any of his doings. Hornsby then asks the question "how much of all that we have brought onto the scene does the action consist of?" And at this point, we are likely to see the force of her claim that actions have no place at all in this impersonal picture. For what seems to have become apparent by reflection on this particular case is that we do not know how to return a definite answer this question, not only in practice, but in principle. We do not know how to draw lines which correctly encompass the action itself and which separate it off clearly from its causes and effects. What is more, it seems inconceivable that further empirical investigation could decide the matter. For even supposing we could find some brain event which we can regard incontrovertibly as the first event which was part of the action, it is hard to see how empirical findings could enable us to draw the line between the action and its *effects*; as Hornsby notes "... this has always seemed to everyone to be a philosophical question - not a question for further empirical investigation, but one about how common sense and talk operate" (1993, p.175). The truth seems to be that "common sense and talk" simply do not provide us with sufficient resources to enable us to carve out some definite portion of the impersonally available causal order and to identify this portion with the action itself, and if common sense and talk have not provided them, there is simply nowhere else to turn.

I think this argument is very powerful. For present purposes, though, I am less interested in defending it against possible objections than I am in understanding what would be the consequences of its conclusion for Hornsby's (1980) thesis, (R). If it were true that actions could not be identified from an impersonal point of view, what ought we then to say about the claim that they occur inside the body?

On the face of it, I think it would be odd to suppose that any event which it made sense to locate *inside* the body should be invisible to a purely impersonal gaze. According to Hornsby, "From the *personal* point of view, an action is a person's doing something for a reason, and her doing it is found intelligible when we know the reason that led her to it" (Hornsby 1993, p.161). But is a person's doing something for a reason something which it makes any sense to locate more precisely than *at* the place where that person is? One might think so if one held out the prospect of being able to identify an action with some brain event or other, or a bodily movement_i, or to find it to be constituted out of some set of such events. But in the absence of any faith in this kind of physicalism (and I take it that the claim that actions cannot be singled out from the impersonal point of view amounts to a declaration of the absence of any such faith) is it not odd to think of a person's doing something for a reason as something which occurs *inside* their body?

It is important to distinguish between two different reasons one might have for thinking that Hornsby's views about the inaccessibility of actions from an impersonal point of view are in tension with her claim that actions are internal to the body. One might suppose that there is a difficulty about taking an event *E* to have occurred inside something *S*, where there is no definite answer to the question *where* inside *S* exactly *E* occurred. But this cannot be right. It is not problematic to suppose that we might have a reason for thinking, of some *S*, that we are definitely right to say that an event *E* occurred inside it, though we cannot give an answer to the question , even in principle, where exactly inside *S* *E* occurred. For example, suppose a wedding takes place inside a church. We need not be in

doubt that the wedding did take place inside the church just because the concept "wedding" might leave it vague which particular bits of the proceedings counted as parts of it. We might, for example, be unclear whether to count only what goes on between the couple concerned as parts of the wedding or whether things that happen to members of the congregation are also to qualify. But the fact that we cannot resolve this unclarity in any definite way should not prevent us from being sure that the wedding did take place inside the church.

However, there is another, better reason one might have for thinking that no event which is accessible only from the personal point of view could sensibly be located inside a person's body.⁴ For the personal point of view, presumably, essentially involves the identification of *persons*; and in general, I suggest, one would expect it to be impossible to make the location of an event available only from the personal perspective more exact than one can make the location of the person herself. To go inside the body, I suggest, is automatically to change aspect. It is automatically to lose persons and their special properties, to go below the threshold where such things are visible. Inside the body we find muscles contracting_I, food digesting, hearts beating, neurons firing, substances dissolving, ions forming: a whole rich assortment of physiological, chemical and physical events. But unless they are impersonally available in the same way as all these other physiological, chemical and physical events, what reason could there be for thinking that we find actions there also? Hornsby, of course, has her reasons, in the shape of the powerfully compelling arguments of the first three chapters of *Actions*. It is to those, then, that I shall now turn.

4. The Arguments for R: (i) The Linguistic Argument

Hornsby's first argument for the conclusion that actions occur inside the body rests on a claim about the behaviour of verbs in the special class to which "move" belongs and which I discussed in section I above (i.e. the class of verbs which support inferences of the following form: FROM: $a V_T b$ TO: $b V_I$, where V_T indicates a transitive, V_I an intransitive verb). The claim is that where " a " designates something in the category of continuant, and where " ϕ " stands for a verb in the relevant class, it is a necessary condition of the truth of " $a \phi_{T-s} b$ " that a cause b to ϕ_I . Hornsby says that this claim is more than three hundred years old,⁵ and that as far as she knows, it has never been questioned (1980, p.13). Given this claim, the argument then proceeds as follows:

- (i) Where " a " designates something in the category of continuant, it is a necessary condition of the truth of " $a \phi_{T-s} b$ " that a cause b to ϕ_I .
So ("in that case") (ii) Movements_T are events that cause bodily movements_I.
But (iii) Whatever events they are that cause the body to move_I, they presumably occur inside the body.
So (iv) Movements_T occur inside the body.
But (v) (Some) actions are movements_T.
So (vi) (Some) actions occur inside the body.

What I am going to try to question is the move from (i) to (ii).

Let us grant the three hundred year old claim that for verbs in the class to which "boil", "shake", "move" and the like belong, it is a necessary condition of the truth of " $a \phi_{T-s} b$ " that a cause b to ϕ_I .

⁴ I assume for the purposes of what follows that a person is not identical to her body, since a person's body may exist at times when the person does not (e.g. after death). The relation between the two may be *constitution*, a concept well characterised by Wiggins (1968, 1980) and by Boyd (1980).

⁵ The reference is to John Wilkins (1668).

So, for example, it is a necessary condition of the truth of "Peter boiled the kettle" that Peter caused the kettle to boil; and it is a necessary condition of the truth of "Peter raised his arm" that Peter caused his arm to rise. But how is it supposed to follow from this that Peter's raising of his arm is an event that caused his arm's rising? Hornsby is not explicit about the steps in the main text of her book, but her reasoning becomes clear in an Appendix (1980, Appendix A: On Some Causative Transitive Verbs, pp.124-32). To begin with, events are introduced into the picture by means of Davidson's proposal that we should see places for events introduced by verb predicates; thus, (switching for convenience of exposition to Hornsby's example) if Rupert woke_T Rachel up, then there was a waking up of Rachel by Rupert. And similarly, if Rachel woke_I up as a result, then there was a waking_I up of Rachel. So far, then, we have the suggestion that we can represent the two sentences as follows:

- | | |
|--|--|
| (1) Rupert woke _T Rachel up | $(\exists e)(\text{Woke up (Rupert, Rachel, } e))$ |
| (2) Rachel woke _I up | $(\exists e)(\text{Woke up (Rachel, } e))$ |

Hornsby then comments as follows:

The slots for events revealed here permit a very old suggestion to be cast in a new form. It has been said that "wake up Rachel" means "cause Rachel to wake up". But now one can say that Rupert's waking Rachel *is* his causing her to wake up; or again, with an eye to the representations, that an event that makes (1) true causes an event that makes (2) true. So (1) can be replaced by:

(1*) $(\exists e)(\exists f)(\text{Action (Rupert, } e) \ \& \ \text{Cause (} e, f \text{)} \ \& \ \text{Wake up (Rachel, } f))$ (1980, p.126).

What should we say about this reasoning? I have no quarrel with the suggestion that Rupert's waking of Rachel *is* his causing of her to wake up,⁶ just as Hornsby says it is; nor, indeed with the suggestion that Rupert's waking_T of Rachel is his causing of the event which was Rachel's waking_I up. That conclusion, indeed, seems reachable by another route; we merely need to note that we might have reason, in certain circumstances, to say that Rupert caused Rachel to wake up *by waking her up*. There are, after all, other ways in which one might cause someone to wake up; one might set an alarm clock beside their bed the evening before, for example. But if this is right, we can now simply use Anscombe's principle of action individuation (that when one ϕ -s by ψ -ing there is just a single action describable both as a ϕ -ing and as a ψ -ing) to reach the conclusion that on this occasion, Rupert's waking up of Rachel just was his causing of her to wake up. But note the form of what we have permitted ourselves to say so far. We have said that Rupert's waking_T up of Rachel just was his causing of Rachel's waking_I up, but we have not allowed yet that it was a cause of Rachel's waking_I up. What is it, though, that permits us to move from the first of these claims to the second?

It might be thought that if some event *C* is describable as the causing of some other event, *E*, there can be no doubt that that event *C* is also describable as a cause (*simpliciter*) of *E*. That causings cause the events of which they are the causings might seem obvious. I want to try to suggest, nevertheless, though, that we should resist this idea, at any rate in any form which would permit the crucial move in Hornsby's argument, the move from (ii) taken together with (iii) to (iv), the claim that movements_T occur inside the body.

⁶ Provided, of course, that the nominals in question are treated as definite descriptions which refer to particular events, rather than as nominalizations of whole sentences. See Bennett (1988, pp.4-12) for a helpful discussion of the differences between these two sorts of nominal expression.

I want to begin by clearly disowning one possible and perhaps *prima facie* attractive reason one might have for wanting to deny that a causing of an event E might also be one of its causes, and by repudiating also the view of actions which is made natural by this justification for the distinction between causings and causes. Someone might think that a causing of an event cannot also be one of its causes because a causing of any event must include the effect event as a part; whereas a cause event must be entirely distinct from and prior to the effect to which it gives rise. A causing, it might be said, should really be thought of as a process composed of cause, effect and perhaps any other causally significant intervening events, all taken together.⁷ A causing of some event E cannot therefore be identified with a cause, since it has parts which no simple cause of that event could have. The view of actions which seems to fit best with this suggestion is something like the "component approach" described by Thalberg in his (1977); on this view, for example, Peter's raising of his arm might be regarded as a process composed of a set of events, some of which are internal to his body, but some of which are externally observable. In particular, one significant component of the relevant process in this case would be Peter's arm going up, something one can see. On this view, then, at least some parts of actions are observable. They are not entirely internal to the body.

The price of this style of account, though is high, too high, so it seems to me. What it appears to demand is that one give up the Anscombe-Davidson approach to action individuation and the attractive suggestion that actions can be multiply redescribed in terms of their effects (or in the language which the view to be argued for here makes preferable, in terms of effects of which they are the causings). For if Peter's raising of his arm includes his arm's going up as a component, then presumably his alerting the teacher's attention includes her becoming alerted as a component, and so in a case where Peter alerts the teacher's attention by raising his arm, there must be at least two distinct actions, only one of which includes the teacher's becoming alerted as a part. And of course each new effect will bring in its tow a new action. The ensuing theory multiplies entities horribly beyond necessity. We need a theory according to which Peter's causing of his arm to rise can be unproblematically identified with his causing of the teacher's attention to be alerted; and no component view can ensure this.

I believe, though, that there is another, better way to secure the wanted distinction between the causings and the causes of events. Let us return to Hornsby's original argument and let us suppose that instead of (ii), we were to permit ourselves only (ii*):

(ii*) Movements_T are the causings of bodily movements_I.

Then, in order to reach (iv), we would need not (iii) but (iii*):

(iii*) Whatever events they are that are the causings of bodily movements_I, they presumably occur inside the body.

What I shall try to suggest is that we can deny (iii*) without implausibility.

What is a causing? Presumably, it is a kind of event which occurs when something or other brings about an effect. I shall not consider here the possibility that that something or other might itself be an event; I am not sure whether the idea that as well as events which are the causes of effects there are separate events which are their causings by those causes is one which makes sense.⁸ What I am

⁷ Dretske, for example, denies, as I deny, that a cause of X is the same thing as a causing of X . But the reason he gives is that "The former is typically over before X occurs; the latter cannot exist until X occurs" (1988, p.18 n.11).

⁸ This may be the place to point out where the view of actions I am about to recommend differs from

interested in for present purposes are just those causings which are causings of events by continuants. We have no reason to be sceptical about the existence of these causing events; anyone who is happy about Davidson's treatment of sentences containing event verbs is committed to the events I am calling causings, for they are committed by that treatment to meltings_T, shakings_T, boilings_T, etc. - all the particular species of causings - and so can hardly be sceptical about the existence of the genus. When the sun causes a chocolate bar to melt, for example, there is a causing by the sun of a melting_I (or as we might say equivalently, there is a melting_T). When a washing machine causes some clothes to spin there is a causing by the washing machine of some spinning_I (there is some spinning_T). And where an agent acts, there is a causing of some movement_I or other by that agent (a movement_T). It is these kinds of events of which I wish to speak when I talk of causings.

Now, where a complicated entity, like a washing machine, say, brings about some effect or other, the spinning_I of some clothes, for example, there will often be a causal story to be told about how events internal to the complicated entity brought about that effect. These internal events - the clickings of various switches, the completions of various circuits, etc. - can be regarded as some of the causes of that effect. But there will be no reason, or so I want to maintain, to regard any of them, or any sum of them, as identical with *the causing of that effect by the washing machine*, i.e., with the spinning_T of the clothes by the washing machine. The spinning_T is by the whole washing machine, and not by any of its parts. And unless we are to place absurd and unnatural restrictions on our powers of observation we should surely allow that the washing machine's spinning of the clothes is something one can watch. I can certainly see the clothes spinning_I. But more than that, I should say, I can see the washing machine spinning_T the clothes, and hence, by the inference principles advocated earlier, we ought to allow that I can simply see the washing machine's spinning_T of the clothes. But I cannot see the internal operations which permit the spinning which I can witness to come about. The internal operations cannot, therefore, be identical with the spinning_T.

It should be clear, now, how this suggestion is intended to extend to actions. Actions (at any rate, where they are bodily movements_T) are the intentional causings of movements_I by agents.⁹ But there is no plausibility in the claim (iii*) that whatever events they are that are the causings of movements_I are internal to the body. Some of the causes of bodily movements_I are certainly internal. Perhaps even some of the causings are too. If an arm movement is brought about by the contraction of a muscle, for example, then that muscle's causing the arm movement might be something we wanted to think of as internal to the body (since it is a causing by a muscle, and muscles are certainly internal to the body). But we have been given no compelling reason to think that *all* the causings of bodily movements_I are

the view of "behavior" offered by Dretske (1988). It is (roughly speaking) true both for me and for Dretske that actions (or "behaviors", in his case) are causings of bodily movements_I - but for Dretske, an action is a causing of a bodily movement_I by an *event* (or set of events); for me it is essential that actions are causings of bodily movements_I by *agents*.

⁹ The idea that a bodily action is a causing of something by an agent is, of course, not a new one; it has been embraced by a number of philosophers, notably R. Chisholm (1966, 1976), R. Taylor (1966), and J.J. Thomson (1977)). Some of these philosophers have connected the idea that an action is a causing by an agent with a more radical metaphysical thesis: that there is a special kind of causality involved in agency which involves irreducible causal links between persons and events. Am I arguing for the existence of this kind of agent causality? That depends precisely what is meant by "agent causality". I am arguing for the existence of events which cannot be identified except by reference to continuants (which may or may not be agents in the strict sense); and I see nothing problematic about supposing that continuants can cause events. But there is nothing in either of these claims to warrant the accusations, which the mere mention of "agent causality" seems frequently to attract, of commitment to a peculiar and utterly non-naturalistic variety of causation. There is clearly more to be said about this matter; but space precludes a more detailed discussion.

internal to the body; and in particular, no reason to think that the causings which are actions are internal. Very often, I suggest (though probably not always) the sensible thing to say about the location of causings by continuants will be that they occur where the continuant is. And in the case of actions, it seems right to locate them wherever the agents whose actions they are are located. But we have been given no reason to suppose, as yet, that they occur inside them.

It might be thought that the distinction I have tried to make between causings and causes must be sophistical; it might be hard, at first, to see how what is apparently only a small change in terminology could matter so much to an argument. But the change in terminology is not really small. What the change does is to bring to the fore by grammatical means the role of continuant things in certain instances of event causation. A causing, unlike a mere cause, has to be *by* something; there is a grammatical remnant, in the nominal "causing", of the original subject of the verb, which disappears once we move to speaking of causes. In speaking of causes, if we think of them as events, we are encouraged to picture causal chains not merely as strings of occurrences which are impersonally available, in Hornsby's sense, but also as strings of causally related particulars which have only loose and contingent relationships with continuant individuals of *any* kinds. This encourages us in turn to imagine that these events might be available to stand in all sorts of relationships with one another (identity, constitution, and so on), quite irrespective of any special relations any of them might bear to continuants. Whereas in talking of causings, the centrality of what one might call the powerful particular to the metaphysics of many of the kinds of causal interaction we speak about is preserved. It is plausible to suppose that a causing which is by some such particular could not be identified independently of that particular - that I could not, for example, identify the event which is the spinning_T of some clothes by a washing machine if I could not identify the washing machine - though there is no reason to think that this would prevent me from being able to identify the spinning_I of the clothes. People have worried that to think of what goes on when a person acts in terms solely of event causation must necessarily be to leave the person herself without a role to play and hence to lose what is most important about agency. But we need not lose the agent when we try to account for agency in term of event causation, provided the events concerned are thought of as causings by the agent, rather than causes inside her. An agent's causing of some event can scarcely be thought of as an event which leaves the agent's causal role out of account.

What I want to suggest, then, is that we can avoid the conclusion of Hornsby's argument by refusing to move from the true and significant claim that actions are causings of bodily movements_I to the arguably false and certainly misleading one that they are causes of such movements. I now turn to Hornsby's second argument for the view that we must think of actions as internal to the body.

5. Argument (ii): Muscle Contractions and Fist Clenchings

Hornsby's second argument for the claim that actions are internal to the body occurs in Chapter 2 of *Actions*, and begins from an examination of a puzzle that has long intrigued philosophers of action. She considers the often discussed possibility that there might be circumstances in which one might want to say of some individual that he contracted his muscles by clenching his fist, if, say, he learns that he can contract some particular muscles by clenching his fist and is then asked by some experimenter to contract those muscles. But, asks Hornsby, if we say that a man contracts his muscles by clenching his fist "do we not mean that his action of fist clenching causes his muscles to contract"? (1980, p.21). If we do, though, it seems we are in trouble, unless actions are inside the body. For presumably, whatever events they are that cause muscles to contract, they must occur where the physiologists tell us that the causes of muscle contractions occur, i.e., they must take place inside the body.

Indeed, as Hornsby notes, the argument does not really require consideration of any peculiar experimental circumstances to get it off the ground. She argues very convincingly that the agent's intention in such cases cannot really be crucial; if there is a puzzle here, it is a puzzle about actions in general, not just about peculiar cases in which someone is trying to please an experimenter for some reason. Whenever someone clenches her fist, for whatever reason, she always brings about an event of muscle contraction that occurs earlier than the clenching_I of the fist. And if this is right, it looks as though her clenching_T of her fist needs to be (a) distinguished clearly from the clenching_I, (b) temporally located prior to the contraction_I, and (c) spatially located inside the body.

We might try to summarise Hornsby's argument here as follows:

- (i) There are at least some occasions on which we might want to say of some agent, *S*, that she contracted her muscles by clenching her fist.¹⁰
- (ii) When we say such a thing, we mean that *S*'s action of fist clenching caused her muscles to contract.
- (iii) Whatever events they are that cause muscles to contract, they presumably occur inside the body.
- (iv) *S*'s action of fist clenching must occur inside the body.

Given the account of actions as causings outlined in the previous section, what should be said about this argument? Evidently, that account suggests a reformulation of (ii). On the account of actions developed so far, we should say that *S*'s action of fist clenching was her causing of her muscles to contract, not the cause, but the causing of the contraction of her muscles. But this manoeuvre, it might be said, is not enough to avert a paradox. For it might be alleged that the causings of muscle contractions still need to be temporally prior to those contractions themselves. And it is not obvious how this can be so, unless we think of them as occurring inside the body.

I think, though, that it can be plausibly argued that it is not true that the causings of events have to be temporally prior to the effects of which they are the causings. It will be important, once again, however, to avoid saying that this is so for the wrong sorts of reasons. I resisted earlier the component approach to the individuation of actions. It will not do to say that a causing of any effect *E* always includes that effect as a part, and so lasts until the effect has occurred, since that scuppers what I take to be by far the most elegant, straightforward and plausible account of the individuation of actions. We would have to say, for example, that when someone kills another by shooting them, the killing is not over until the death has occurred, even if that is some days or weeks later and I am not willing to go down that road. But one might quite reasonably think that it could be said of those causings which are our actions, our settings of our bodies in motion, that they are not normally over until our bodies have been set in motion. We might think of *S*'s clenching_T of her fist, for example, as a bodily action that is not over until her fist is clenched. But if this event just was her causing of her muscles to contract then we are committed to the view that *S*'s causing of her muscles to contract is an action that is not over until *S*'s fist is clenched. Is this implausibly paradoxical?

I do not think we should find it so. Certainly, we no longer face the straightforward paradox that confronts the claim that the *cause* of the muscle contraction_I occurs after that contraction has occurred. In most ordinary cases, it must be admitted, there will be no reason to suppose that where there is a causing of an event *E* by some continuant thing *S*, that *S*'s causing of *E* goes on after *E* has occurred, and in many cases (e.g. the killing/dying example above), there will be reason to suppose that the causing finishes long *before* the effect *E* has happened. But it seems to me that there are also cases in which we might want to say that *S*'s causing of *E* goes on after *E* has occurred and thus that

¹⁰ Hornsby is careful not to suggest that this would be the right thing to say in these circumstances; indeed, she says later in the book that she is disposed to deny that such statements are ever true.

there are simply no straightforward rules about how a causing must relate temporally to the effect of which it is a causing. Everything depends on the specifics of the case. Take, for example, someone's skilful hitting of a golf ball or kicking of a football. It is natural, I think, to suppose that someone's hitting of a golf ball is an event that goes on after the ball has been hit, and likewise, that someone's kicking of a football continues after the ball has been kicked. In both these cases, the agent moves his or her body in a single controlled sweep, and it is unnatural to cut the action off, temporally speaking, once contact has been made with the ball. Indeed, an agent might be told precisely to focus on the part of the action which occurs after the intended effect has happened as a way of ensuring that the effect is of the desired sort. The follow through is important for golfers and footballers alike; the precise trajectory taken by the ball in each case depends on a plan which encompasses the whole of the golfer's swing or the footballer's kick. Likewise, I suggest, when *S* contracted her muscles by clenching her fist she performed a single action which lasted as long as it took her to move her body in the way she intended. That action had two descriptions: it was a contracting_T of her muscles and a clenching_T of her fist, and we should say that her contracting_T her muscles, in this case, was not over until her clenching_T of her fist was over, and that was not until her fist had clenched.

6. Argument (iii): The Argument from Trying

Hornsby's third and final argument for the view that actions are internal to the body occurs in Chapter 3 of *Actions*. I shall not dispute the controversial claim, on which the argument depends, that actions are tryings. Rather, I shall try to argue that it does not follow from the view that actions are tryings that they must be internal to the body.

I shall begin by quoting a passage from Hornsby, in which the main structure of the argument from trying becomes apparent:

We try to act in a certain way whenever we intentionally act in that way; and second, we may try to act though there is no action at all. The first point suggests that every action is accompanied by a trying. The second will help to demonstrate that at least some tryings do not reach to the surface of the body. But if that can be shown to be true of all tryings, then if actions may be identified with the tryings that accompany them, we shall reach the general conclusion that actions themselves lie within the body. (1980, pp.33-4).

As I have said, I shall simply accept that we do indeed try to act in a certain way whenever we intentionally act in that way; and I shall accept also the claim that we may try to act though there is no action at all (as demonstrated, for example, by the possibility of someone's having a disorder in virtue of which they suffer intermittently from partial paralysis; such a person may try to move her arm and fail). In such cases, I shall accept that there is a trying though there is no action. What I shall question is the idea that it is correct to locate tryings, successful or unsuccessful, inside the body.

Hornsby devotes quite a lot of attention in this chapter to the case of Landry's patient, a case mentioned by William James in his (1890). Landry's patient had lost all sensation in one arm, but was still able to move it. When asked, for example, to put his arm on top of his head with his eyes closed, he was able to do so without difficulty. But when his arm was held down, he was surprised to find, on opening his eyes, that his arm was not on the top of his head in the position to which he thought he had moved it. The natural thing to say about Landry's patient, Hornsby argues, is that on this occasion he tried to move his arm, but failed. That seems right; he tried to cause his arm to move, but failed to do so. But why must we say that the trying event which occurred when he tried to cause his arm to move happened inside his body? What is wrong with thinking of it as an event which, perhaps like most other mental events, being unavailable from a purely impersonal perspective, cannot be located

any more exactly than the agent?

One natural answer is that there was certainly no externally observable event when the patient's arm was held down; hence, if the trying was an event at all, it had to be one that was internal to his body. But this move seems too quick. To begin with, there might be room for doubt about whether it is really true that there was no externally observable trying event when Landry's patient tried to move his arm and failed. Certainly, there was no arm movement; perhaps we can even stipulate for the sake of argument, what is in fact most unlikely to have been the case, that there were no external signs of the exertion at all. But there might be reasons for thinking that not all observable events require movements, particularly where actions are concerned. One can observe someone trying to keep still in a game of musical statues, for example, and perhaps in such a case we ought to say that one observes a trying event, even where the person is very successful and hence no discernible movement occurs. Or consider another case: suppose I pass someone who is lying down pretending to be dead, for some reason. I am fooled by the pretence, and run off, shouting for help. On the way, I am stopped by someone, who tells me not to worry. She assures me that the person concerned was simply pretending. In such circumstances, it seems to me correct to say that I saw the person pretending to be dead, even though that is not how I should have described it at first. I did not know I had seen a person doing anything at all. Though I was not able to distinguish what I in fact saw from a situation in which no action occurred, I did in fact witness an action; I witnessed someone's pretending to be dead. Can we not then say, of Landry's patient, that someone observing him during the time of his attempt to raise his arm did indeed see him try to do this, even though they would not have been able to describe what they saw in this way, and even though they might not have realised they were witnessing an event at all?

I am not sure whether this line of thought could be sustained; it seems to me not unpromising. But even if it ultimately fails, it might be argued that there is in any case no safe inference from the claim that an event was not observable from an external point of view to the claim that it must therefore have occurred internally. Mental events in general, one might argue, are things which it does not make sense to think of really, either as internal or external. When one decides something or perceives something or thinks of something, there may be no external sign that this has happened. But it need not follow from this that any of these kinds of event needs to be thought of as located inside the body. They occur where the person is; we need not feel ourselves obliged to suppose that it is always possible to give a location more precise than that. And tryings, being mental events, are no different. If we are prepared to give up the view that every event must be available from an impersonal perspective, there should be no temptation to think of every mental event as an internal happening.

The view that successful tryings are the causes of bodily movements_I may be another source of the conviction that both successful and unsuccessful tryings alike should be located within the body, in the place where the physical causes of bodily movements_I undoubtedly occur. But on the view I have outlined, we should not of course think of successful tryings as the causes of bodily movements_I, but as the causings of bodily movements_I. And as I have argued above, I think this removes the pressure to find them to be internal to the body. When one tries to move and succeeds in moving one's body, there are no doubt lots of internal events which matter crucially to that success. But we need not think it makes sense to identify these, or any subset of these with the trying. And in the unsuccessful case, we do not have to go internal either. There is simply a trying which occurs where the agent is, and just because it cannot be detected by an outside observer, it does not follow that we have to think of it as going on under the skin.

In conclusion, it seems to me that it should be possible to hold (P), (Q) and (contrary-R) concurrently with one another. The view of actions thus delineated, though it accepts that actions are events, takes them (or at any rate, those of them which are bodily movements_T), to be the causings, not the causes,

of bodily movements, and I have argued that this leaves open a way to deny (R), that actions must be internal to the body. And though I have done nothing in this paper to substantiate the claim, I suspect that the view that actions are causings might have other considerable merits besides its usefulness in making way for a view of actions according to which they do not need to be regarded as internal to the body. It seems at least conceivable to me that it may be the key to seeing how the view that actions are events can be rendered consistent with retaining a proper place for the agent in the causal story about what happens when we act, and that this story could be told in such a way as to render "agent causation" metaphysically unmysterious. But seeing how to accept this key and how exactly it is to be made to work, once accepted, will not be easy matters. For one thing, we shall certainly require a rather richer metaphysics of causation than the one which currently dominates philosophy of mind, one which permits us to remember the important truth that the vast majority of the events to which we have occasion to refer in attempting to describe and explain the causal workings of the world are the actions and interactions of continuants. But we shall need also to learn a lesson that Hornsby herself has pressed upon us. For the causings of bodily movements by agents, if that is what actions are, seem not to be the sorts of things that could be identified from what Hornsby calls the impersonal point of view. If we are to be able to accept that actions are causings, then, we shall first have to be able to agree with Hornsby that availability from the impersonal perspective is not the touchstone of reality.

References

- Anscombe, G.E.M. (1957) *Intention* (Oxford, Blackwell).
- Bennett, J. *Events and Their Names* (Oxford: Oxford University Press).
- Boyd, R. (1980) Materialism Without Reductionism: What Physicalism Does not Entail, in N. Block (Ed.), *Readings in Philosophy of Psychology*, Vol. 1 (London: Methuen) pp.67-106.
- Cleveland, T. (1997) *Trying Without Willing: An Essay in the Philosophy of Mind* (Brookfield, VT, Ashgate).
- Chisholm, R. (1966) Freedom and Action, in K. Lehrer (Ed.), *Freedom and Determinism* (New York, Random House).
- Chisholm, R. (1976) The Agent as Cause, in M. Brand & D. Walton (Eds.) *Action Theory* (Dordrecht, Reidel).
- Davidson, D. (1971) Agency , in his *Essays on Actions and Events* (Oxford, OUP).
- Dretske, F. (1988) *Explaining Behavior: Reasons in a World of Causes* (Cambridge, MA, MIT Press).
- Hornsby, J. (1980) *Actions* (London, Routledge and Kegan Paul).
- Hornsby, J. (1993) Agency and Causal Explanation, in J. Heil & A. Mele (Eds.), *Mental Causation* (Oxford, Oxford University Press); repr. in her (1997), pp.129-53.
- Hornsby, J. (1997) *Simple Mindedness* (Cambridge, MA, Harvard University Press).
- James, W. (1890) *Principles of Psychology* (New York: Dover).
- McGinn, C. (1982) *The Character of Mind* (Oxford, OUP).
- Taylor, R. (1966) *Action and Purpose* (Englewood Cliffs, NJ, Prentice Hall).
- Thalberg, I. (1977) *Perception, Emotion and Action: A Component Approach* (Oxford, Blackwell).
- Thomson, J.J. (1977) *Acts and Other Events* (Ithaca, NY, Cornell University Press).
- Wiggins, D. (1968) On Being in the Same Place at the Same Time, *Philosophical Review*, 77, pp.90-95.
- Wiggins, D. (1980) *Sameness and Substance* (Oxford, Blackwell).
- Wilkins, J. (1668) *An Essay Towards a Real Character and a Philosophical Language* (London: Printed for Sa. Gallibrand).

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