ACTION, BEHAVIOR, AND BODILY MOVEMENT: 
A SKETCH OF A THEORY OF ACTION

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"We must conclude, perhaps with a shock of surprise, that our primitive actions, the ones we do not do by doing something else . . . these are all the actions there are. We never do more than move our bodies; the rest is up to nature."

—Donald Davidson in "Agency"

"An act of volition produces motion in our limbs, or raises a new idea in our imagination. This influence of the will we know by consciousness . . . . The motion of the body follows upon the command of the will."

—David Hume in the Enquiry Concerning Human Understanding

I. Actions as Causes. There is a view that certain expressions designating actions or sentences asserting the occurrence of actions can refer to the same action or assert the occurrence of the same action even though their senses are widely disparate. I shall dub this the "unifier thesis," hereafter UT. UT might identify, for example, Booth's shooting Lincoln with his killing Lincoln. Certain critics of UT have fastened upon the absurdities of UT's alleged entailments in their efforts to demonstrate its falsity. Thus it has been argued that if Booth's shooting Lincoln is the same action as his killing Lincoln, then the latter must have taken place when the former did. So Lincoln must have been killed when he was shot; but we know Lincoln to have lingered on for several hours. UT entails that Lincoln
died before he died. I will assume in this essay that such criticisms have been satisfactorily met and that UT cannot be rejected for the reasons usually given. I will later argue for its acceptance.

The positive defense of UT however will rest upon a particular proposal regarding the appropriate analysis to be given action sentences. This proposal I will term the "causal analysis," hereafter CA. It seems to me that a fair amount of the disfavor in which UT is held has its source in the adoption of certain theories concerning the analysis of action sentences which rule out from the start the intelligibility of UT. Some would maintain, for example, that an action is the exemplification of an "action-property"; hence, two action locutions expressing different properties, such as "shooting" and "killing" cannot designate the same action. CA, on the other hand, renders "Booth shot Lincoln" and "Booth killed Lincoln" as "Booth did something which caused a gun to fire into Lincoln's body" and "Booth did something which caused Lincoln to die." On this model of analysis, the actions picked out by the two expressions may be the same. This is because the action is described solely in terms of its consequences. CA makes it neither plausible nor implausible that the actions which were the causes of these two distinct events are the same. This is one of the merits of CA in the context of defending UT. Obviously this is not an argument for the truth of CA. I wish now to do what I can by way of providing grounds for the adequacy of CA.

I take the considerations for CA's tenability to have their roots in a partial analysis of the concept of action itself. Among other things, action is a causal notion. We say that a notion is causal if it is a concept of a kind of entity that by definition causes or brings about, or has a tendency to cause or bring about, certain states or events. Thus the concept of poison is causal in that it is the notion of a kind of entity or substance which brings on illness or death; and so with the concept of a magnet, as a magnet is the sort of thing which causes the movement of ferrous metal objects towards itself. Similarly, there is good reason to believe that action is a causal notion insofar as we understand action to be a kind of event that, barring special circumstances, results in various events or states. This facet of the concept is evidenced by the tendency we have to explicate many action locutions in terms of "bringing about" or "causing." Thus, "shooting" and "killing" are easily so construed. Some perhaps will object here that whereas there may exist this inclination to spell out a wide variety of expressions in such
terms, there is a host of expressions which do not so move us. Examples can be thought of easily; for example, "I promised." The thrust of the objection here I take to be that we have actions which are not causings. It is significant however that cases of this sort are, as far as I can tell, always instances of what have been called "nonbasic actions." The version of UT that I wish to defend is a strong one in that it denies there to be the commonly accepted distinction between basic and nonbasic actions. Such a contention is only seemingly perverse for it would not require the abandoning of the basic-nonbasic distinction; rather UT would hold this duo of properties to attach to descriptions of actions, and not actions themselves. Thus the principles that various theorists of action, e.g. Goldman (A Theory of Human Action, pp. 22-35) have offered for the generation, from basic actions and the circumstances in which they are performed, of nonbasic actions can be reinterpreted as tools for the production of nonbasic descriptions. On this account, the nonbasic descriptions are descriptions of exactly the same thing the basic descriptions are descriptions of. The character of this common referent will be dealt with in III, IV, and V of this essay. What is crucial here however is that even opponents of such a view admit basic actions to be causings, such as the moving of a finger or a part of one's body in the case of physical action. If the above thesis can be made out to be reasonable, then it will not matter that there are noncausal descriptions of actions, for they will still be descriptions of causings. Another class of action descriptions supposedly resistant to the causal analysis are those designating so called "negative" actions i.e. various kinds of refrainings and forbearances. Without arguing so here, I take the above sketch of UT to be capable of providing a way of understanding these "not doings" to be causings as well.

Of course if an action is thought of as the causing of our own bodily or mental states, it does not follow that only an action can cause such or that all actions must cause physical or mental states. The concept of action does not demand this much any more than the concept of poison logically requires that all illnesses or deaths are brought on by ingestion of poison or that if such ingestion does take place, illness or death must follow. If this latter were so, antidotes would not be able to do their job. Rather, given "normal" circumstances, actions cause bodily or mental states.

II. Volition as Action. Reflection upon certain "abnormal" circumstances yields what I take to be curious consequences for any theory of action. Consider the now famous psychological experiment reported
The experimental subject was seated in a chair and blindfolded; one of his arms was anaesthetized and then so secured that it was impossible to budge. The experimenter then asked the subject, unaware that his arm was so restricted, to raise his arm over his head. The subject took himself to have obeyed the request. The blindfold was then removed and the subject, to his great surprise, observed the table-bound arm. Similar but grizzlier responses have been made by victims of sudden paralysis or injury upon discovery of their inert or missing members.

It seems plausible, in fact reasonable, to contend that the above account suggests the subject to have indeed performed an action. While certainly there is dispute among philosophers regarding the necessary conditions of action, there are a number of conditions which a great many would be willing to take as jointly sufficient. That is, nothing can satisfy all of these conditions and yet fail to be an action. The above case appears to satisfy such. What are these conditions and how is this so?

A common locution associated with the language of action is that of "doing." While certainly not everything which can be said to have been done is an action, if something is an action then it is something done. The subject in James' experiment would have described himself as having done something. Now he may not have correctly described what he did i.e. before the blindfold was removed he might have said that he had raised his arm; but this is a different, although significant, point. Insofar as the person was able to describe himself as having done something, it is clear that he was aware of having done SOMETHING, however it is to be accurately described. But he is not only aware that he has done something but also that this something was done intentionally. This is so because what was done was done at the request of the experimenter. The subject intended to raise his arm in order to act upon the experimenter's request. Thus he intended to obey the request of the experimenter. And finally, this thing that was done was something over which the subject can be said to have had control. He clearly was not compelled to do what he did; he could just as easily have sought to waste others' time by doing nothing. Given then that the subject was aware of having intentionally done something over which he had control, it is difficult to deny that the baffled subject performed an action, even in the midst of his motionlessness.
Now has James, in providing us with such an account, offered us evidence for the existence of a kind of action peculiar to persons whose bodies are in abnormal states i.e., anaesthetized, paralyzed, or injured? To assert such would surely be artificial; for we would have to imagine that a novel sort of action comes into being only when a person becomes injured or paralyzed; and just when use of the limb is regained the specified kind of action goes out of existence. Rather, if it can be soundly argued that the so-circumstanced people did perform actions, then it would be reasonable to hold that this sort of action occurs whenever a person acts so as to, say, move a part of his body or keep it in a certain state. Let us call this kind of action "volition."

There are numerous philosophers nevertheless who claim that it is false that when, for example, we raise our arms any such action takes place, because no such action ever takes place. When we raise our arms we don't do anything of the sort mentioned, rather we just raise our arms and that's it. If this is taken to mean that we don't first "perform a volition" and then raise our arms (as we might pick up a stick and then throw it), then it is unexceptionable. With respect to this denial by the opponent of volitions, I will simply assume that without the notion of volition we are left in the dark as to how to understand the sorts of phenomena mentioned by James and others. But more importantly, the objection assumes that we perfectly well understand what it is for us to raise an arm or move a leg or whatever. I think such confidence is unfounded and will soon argue that volition plays an essential role in our coming to see what an action such as raising an arm comprises.

III. Action and Bodily Motion. Thus far I have argued that volition counts as action; such a thesis is of central concern in that I will later argue volition alone to count as action. Before undertaking such a defense however, it will be necessary to outline and criticize certain currently either explicitly or implicitly adopted views on the character of action. Now I wish to argue what action is not.

The most general form of the position to be here scrutinized I call the "bodily motion thesis." This thesis has two forms, a strict and a relaxed, hereafter BMTS and BMTR. BMTS is the bald assertion that all actions are identical with bodily motions or movements. BMTR is the less rigid notion that all actions are identical either with bodily motions or with such and certain of their consequences or effects. (BMTR then can be seen as a species of the view regarding the relation of nonbasic actions to basic actions such that the former "contain" or "include" the latter.)
BMTS is open to a number of objections more and less damaging. Through the paper we will progress from the elementary to the more trenchant of difficulties for BMTS. Certain of these more elementary criticisms will be noted as familiar in that they are formally similar to criticisms of that version of behaviorism which seeks to identify mental events with bodily movements. Let us look at some of these. We commonly think that certain actions take place when no movement of the body, or at least none which appears relevant to the performance of the action, occurs. There are at least two kinds of such action, which the following will illustrate. Consider a scenario in which John Wilkes Booth waits motionlessly outside the box in Ford's theatre where President Lincoln is seated. Booth is anticipating exactly the appropriate moment at which to enter, running through "in his head" for the final time his plan of escape following the assault.

First, most would take Booth here to have engaged in action by "running through" his scheme; the action is of a special sort, a "mental" action. Now with what bodily movement are we to identify this action? Ex hypothesi no bodily movement is occurring, or at least none that seems relevant to the action described. Thus suppose Booth to have swayed nervously from side to side while he plotted. Would this bodily agitation have been his scheming? One could attempt to escape this difficulty by denying that Booth was acting, that mental actions are not "fullfledged" actions. But this seems counterintuitive. We think that to plot or scheme in the fashion of Booth is something one can be aware of doing, doing intentionally and having control over. In short there seems to be no good reason for denying there to be action here.

A second tack for skirting the difficulty is the interesting but dialectically premature maneuver of identifying actions with events occurring in the brain. Thus, in order to preserve BMTS in the face of this elementary counterexample of the mental action, the mental event is claimed to be a brain event. This may be of use for the mental action but how does it aid us in our understanding of an action like raising an arm? Will it too be identified with such an event or process? Perhaps it can be, but it would appear that a number of other issues must be raised for us to be able to understand why someone might wish to make the identification at this point. The motivation for equating mental actions with brain processes, i.e. adherence to a view which holds every mental event, of which mental action is a species, to be a brain process, does not seem, at
least at this stage of the argument, to be appropriate for identifying physical actions like the raising of an arm with brain processes. More will be said later about the connection between the identity theory of mind and the theory of human action I wish to propose.

The second kind of action which provides at least prima facie difficulty for BMTS is exhibited in the same Booth-Lincoln encounter. This is the sort of action which does not appear to involve any bodily movement. When Booth lingered outside the box, keeping his body as still as possible, was he not, in so doing, acting? After all, the less movement made, the more successful he was. This point reminds us that while many bodily actions are causings of bodily movement, some are not; for some concern the maintenance of a bodily state or the cessation of bodily movement. This remark provides supporters of BMTS the opportunity to make their principle more credible. Thus, "bodily movement" can be interpreted broadly enough, although perhaps misleadingly, to cover in its scope relevant bodily states. BMTS then is the view that all actions are either movements or states of the body or of one or some of its parts. Whether such emendation can be responsive to BMTS' more serious difficulties will be taken up in a little while.

We now for the moment turn to BMTR, the less radical and more widely accepted of the "bodily state" variations. Take again the example of Booth's killing Lincoln. It is considered by a fair number that this action begins with Booth's pressing his finger against the trigger of the gun and terminates in and includes Lincoln's death. The assassination then is a very "long" or "extended" action. The impetus for wanting to give this action such a temporal span, can be found, at least in part I think, in considerations of the following sort. Since Booth cannot be said to have killed Lincoln until Lincoln dies, the action cannot have ended until Lincoln has died. This inference however is invalid. While it is true that Booth cannot be said to have killed Lincoln until Lincoln has died, it does not follow that the action which is only at Lincoln's demise describable as a "killing" has not already taken place in its entirety; i.e. it does not follow that Lincoln's death must be a part of the action (cf. Vollrath, p. 334; and Davidson, p. 23f.) In the following an argument will be presented to demonstrate that we are not only not forced to infer that Lincoln's death must be included in the action of killing, but that we cannot so infer because it is false. And so it will be urged that BMTR is false.
The most cogent articulation of the argument I take to be decisive against BMTR has been laid out by Donald Davidson in his paper, "Agency" (pp. 21-22). [The argument, as there formulated, is carried out in the terminology of "basic" and "nonbasic" actions; Davidson's intention is to argue that all actions are basic actions. I mention earlier in the essay (p. 45) the manner in which I would handle the notions of basic and nonbasic, i.e. as properties of descriptions. This is, verbally at least, at odds with Davidson's account. Nevertheless the force of his argument, mutatis mutandis, remains.] Lincoln's death should not be countenanced as part of the action of Booth's killing Lincoln since whatever action that is the killing has been performed, in all of its "completeness," prior to Lincoln's death. This is so because after Booth has moved his finger against the trigger of the gun, there is, with respect the killing of Lincoln, nothing left for him to do. To paraphrase Davidson, Booth has done his work; it is left for nature to do its.

That this is the case can be made clearer if we add a point of fiction to the Booth-Lincoln story. Thus suppose Booth to have suffered an instantly fatal heart attack as soon as he fired the gun. Persons cannot continue to perform actions after they are dead. Consequently, whatever the action was which was the killing of Lincoln by Booth cannot have terminated at Lincoln's death since this would, I take it, require someone to be performing the action in the while between the gun's firing and Lincoln's death. The same point can be made in another way. History tells us that Booth in fact did not die at the theatre, but rushed furiously from that place, mounted a horse, and fled the city. If the action were to have begun at the time of the finger-moving and ended at the President's death, it must have been taking place at all times in between. This would entail that while Booth was desperately speeding from town, he was continuing to perform the action of killing Lincoln. But this is surely implausible to suppose. Nor would it matter if a penitent Booth had maintained a bedside vigil with the wounded statesman. Whatever action Booth performed which was the killing had since passed.

IV. Davidson and BMTR. Davidson himself, in "Agency," subscribes to a version of BMTR. He there claims that if the idea of bodily movement is interpreted generously (perhaps in the manner suggested above?), then all primitive actions are bodily movements. Given that he takes primitive actions, i.e. basic actions, to be the only actions there are, it follows that he adopts BMTR.
In order to gain some insight into the character of Davidson's position let us look at a probing question he anticipates being put to him regarding the thesis that all primitive actions are bodily movements. It goes something like as follows: in order to point my finger, I do something which causes my finger to move, e.g. contract certain muscles; and perhaps this requires that I make happen certain events in my brain. But such actions do not sound like at least ordinary bodily movements.

Davidson provides a curious response to the above, so I will quote it in full:

I think that the premises to this argument may be true, but that the conclusion does not follow. It may be true that I cause the finger to move by contracting certain muscles, and possibly I cause the muscles to contract by making an event occur in my brain. But this does not show that pointing my finger is not a primitive action, for it does not show that I must do something which causes it. Doing something that causes my finger to move does not cause me to move my finger; it is moving my finger. (p. 23)

This reply is odd for a number of reasons. First, Davidson seems to be employing as a necessary condition for an action's being basic that it not be caused by another action. This is evidenced by the penultimate sentence of the response. But there has been sufficient criticism of this principle. Secondly, if Davidson's stance with regard to nonbasic actions is correct, then any description of an action will be a description of a basic action. Thus, on Davidson's view, not only must moving my finger be a basic action, but so also must be my contracting certain muscles and making some event occur in my brain. To be consistent it appears that Davidson must hold that contracting certain muscles with the result that my finger moves is moving my finger; and that making an event occur in my brain with the result that my muscles contract is contracting my muscles. Thus making an event occur in my brain is moving my finger. It follows that, as expressions referring to an action, "making an event occur in my brain," "contracting my muscles" and "moving my finger" are coreferential.

Davidson's reply to the original query is, at least in part, responsive to that aspect of the question regarding the primitiveness of moving my finger, but it is still not clear with what bodily movement this action is identical, i.e. what bodily movement is the referent of "moving my finger?" Let us consider the possibilities.
Could the referent be the finger movement itself? Some philosophers hold to this view, but its difficulties run deep. How could the action which is the moving of my finger be the finger movement if the action is to be understood as that thing which I did which caused the finger movement? This would be to identify the cause and its effect. This very same line of reasoning would show that the referent of "contracting certain muscles" cannot be the event of the muscles' contracting and that the designation of "making a certain brain event occur" cannot be the brain event. What we do is not what we cause; rather our doings are our causings.

Perhaps a partial explanation for confusing these lies in the possible ambiguity of the expression "what a person does." There is some precedent for taking what a person does as that which he causes or brings about. Thus imagine me forgetting to return the typewriter carriage to the next line after completion of a line and typing over the same line again. Suppose that I don't notice this mess and hand the page to someone for proofreading. He points to the jumble on the page and says, "Look what you did!" This is an interesting extension of the concept of action but surely a secondary and parasitic one.

Assuming the above form of argument is successful, perhaps someone will say the following: if the action in question is identical with that the causing of which is the action, surely it at least includes as one of its constituents what is brought about or caused. Thus the finger movement is part of the action of moving my finger. But Davidson himself has given us reasons for rejecting this move. Recall what he would say concerning the relation of Lincoln's death to the action of killing Lincoln. The action description "Booth's killing of Lincoln" is generated through one of the action's effects i.e. Lincoln's dying; but we are not to say that the referent of the description actually includes Lincoln's dying since the referent would be the action which causes his dying. Causes do not include their effects. So not only are the finger movement, the muscle contraction, and the brain event not identical with the action of moving the finger, contracting the muscles, and making a brain event occur, neither are they constituents of such. What bodily movement then is it that is the action in this case? Whether in fact some form of BMTS can be salvaged is an issue to which we will return.

V. Action as Volition. I now wish to return to an examination of that event earlier termed "volition," which was argued to count as action. I now wish to defend the
claim that volition constitutes action, i.e. volition alone is action.

We saw previously that a Davidsonian argument would have it that Booth's "killing Lincoln" is a description of the action described as Booth's "moving his finger against the trigger of his gun" since once Booth had so moved his finger there was literally nothing more for HIM to do with respect to causing Lincoln's death. Now why is it that primacy of description would be given to "moving his finger?" After all, Davidson says that he is at least willing to consider the possibility that this description has the same referent as "contracting certain muscles" and "making a brain event occur." Why is it not said that once the brain event has been made to take place, there is nothing more for Booth to do with respect to killing Lincoln, or for that matter with regard to causing the finger movement?

The bearing the above has on the claim that volition alone is action is this: once the act of volition has been performed, there is nothing left for Booth to do with respect to his making an event occur in his brain, contracting certain muscles, moving his finger, pulling the trigger of the gun, shooting Lincoln, and, ultimately, killing Lincoln. Booth, in performing the volition has acted; we await the course of nature, i.e. physiology and gun mechanics, for means of describing the action through its effects.

It is here that one can see the utility of UT and CA for the theory of volition as action and action as volition. This view is in accord with Davidson's in that the referents of the diverse action descriptions are taken as identical; however it conflicts with BMTS insofar as the latter requires our identifying the action variously described with any of the bodily motions so far mentioned.

VI. Volitions as Mental Events. Thus far I have sketched volition as action, but said little else about its character. What sort of event is it? Just as I provided a number of conditions to indicate volition to be action, so now I want to provide reasons for taking volition to be a kind of mental event.

Consider first the manner in which volition is known to occur when it is known to occur. Let us take as our focus of attention James' experimental subject. He did not find it necessary to observe any motion of his body or disposition of his internal organs, nor, obviously, did he have to ask anyone if he had done such a thing. Of course he would have been surprised if he had
asked, while blindfolded, whether his arm had risen, and been told that he had not raised his arm. But the experimenters could not have told him that he had done nothing, for they were in no position to do so. Their knowledge of the occurrence of any such event seems like that we have of the occurrence in others of various sensations, mental images, and thinkings. In short we seem to possess privileged access in our own case to these events.

I do not take this to entail that if we do perform a volition then we must be aware of its occurrence in this special way; for it seems that there are many cases where we must infer to their occurrence, using the same kinds of evidence others would use. But when we are aware in the way the experimental subject was aware we do not have to seek evidence. Now whether it makes sense to say that we can believe ourselves to be engaging in volition but not actually be doing so is debatable. But it is debatable in the same way that like questions regarding pains and thoughts are so.

Further, this sort of awareness we have with respect to volition, which again is like that we have of our mental states, serves to explain how it is that we know that we are raising our arms when we are raising our arms as opposed to simply experiencing the motion of our arm. When the notion of volition was introduced in this essay originally, a certain objection was anticipated. This criticism denied the existence of volition in cases of arm raising, for the sake of claiming that we just raise our arms and do nothing else. I there said that this is true if it is to be understood as meaning that we don't first perform a volition and then raise the arm. But on my account, the action referred to by the description "raising my arm" is my volition. When we are aware of ourselves raising our arms we are certainly aware of something more than the simple motion of the arm. And what we are aware of which guarantees our belief that we are performing the action of raising the arm cannot be simply our knowledge of the intention we had to raise the arm plus the experience of our arms motion, for, in Hugh McCann's pithy comment, "Intentions are not their own execution." How then are we to explain our knowledge of the distinction between the movement of the arm and our moving it if not through the awareness of volition? These considerations then lead us to include volition in that class of events called "mental."

In closing this section I want to make a last comment on BMIS. In construing volition to be mental it should be made clear that I do not take such to rule
out the possible truth of some form of the identity theory of mind. It is in this way, and I think only in this way that BMTS may be true. Its vindication rests ultimately upon that of the identity theory. And it is for this reason that I took any attempt to identify action with a brain event before volition as mental event was defended to be dialectically premature. And at this stage of the controversy over the identity theory, it is perhaps premature to adopt BMTS.

VII. Conclusion. If it be admitted that volitions are mental events, then there must be some way of distinguishing them from other such occurrences such as sensations, thoughts, and most importantly from that with which they are often confused, intentions. This is a difficult and complex task, but one which must be undertaken if volition is to be something more than an "I know not what" which causes bodily and other mental states. I will not attempt any such thing here.

A final remark upon a perhaps unnoticed advantage this theory possesses. It will be apparent in pursuing a good deal of the literature on action that quite a number of philosophers preface their account with an apology that space or some other factor does not permit the handling of what we ordinarily call "mental actions." (If I had thought to do so, I would have done the same!) Perhaps the abundance of such comments is not entirely accidental; for given the widespread equation of action, in the context of bodily action, with bodily movement, it is not easy to see what bodily movements could have in common with mental events or states to warrant designating them both as "action." If the same tack which is frequently taken for physical action is used to deal with mental action then we must identify the mental action with, say in the case of an imagining, the image produced and not the producing of the image. But if such a move is implausible with respect to bodily action, then it is also for mental action. Seeing actions, both physical and mental, as mental events which are causes of bodily events or states (bodily action) and mental events or states (mental action) points a way towards at least a unified ontology of action.

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2See especially John Vollrath, "When Actions Are Causes," Philosophical Studies, 27 (1975), pp. 329-39. The central thesis of Vollrath's paper is that UT (in Vollrath's terminology "the explanatory identity thesis") does not, by identifying Booth's killing Lincoln with his shooting him require that Lincoln die before he dies. If an action is understood as a cause, then it is not the cause of x (where x is some particular event) until x transpires, and so does not warrant the description "cause of x" until x occurs. Let us interpret "Booth's killing of Lincoln" or "the action of Booth's which caused Lincoln's death." On this account, Booth's action of shooting does not "come to be" a killing until Lincoln dies, while nevertheless it has already taken place. If the action had already been a killing before Lincoln died, then it would be the case that Lincoln died before he died. But UT does not hold any such thing. Analogously, that Booth became infamous as the first presidential assassin does not require that Booth must have been alive when he became infamous. There is then nothing problematic, at least as far as the objection mentioned is concerned, about identifying the referents of "Booth's shooting Lincoln" and "Booth's killing Lincoln." What is of concern, as we shall see, is whether actions can be viewed in a causal manner.


