# Reasoning and its limits

This is the pre-print version of the following article: 'Reasoning and its limits', Synthese, forthcoming, doi: 10.1007/s11229-021-03211-7, which has been published in final form at https://link.springer.com/article/10.1007/s11229-021-03211-7.

Abstract Reasoning is naturally understood as something which we *actively do*—as a kind of action. However, reflection on the supposed limits to the extent to which it is *up to us* how our reasoning unfolds is often taken to cast doubt on this idea. I argue that, once articulated with care, challenges to the idea that reasoning is a kind of action can be seen to trade on problematic assumptions. In particular, they trade on assumptions which could be used to rule out paradigmatic actions from qualifying as such. Accordingly, no distinctive challenge to the idea that reasoning is a kind of action can trade on such assumptions. I suggest that it is a mistaken atomistic way of thinking about action which is the source of the relevant assumptions. Reasoning can unproblematically be maintained to be a kind of action. It is the atomistic way of thinking about action which ought to be rejected.

#### 1. Introduction

There is an ordinary use of the term 'reasoning' with which we can distinguish between coming to hold an attitude by first engaging in reasoning and coming to hold an attitude without doing any such thing. One belief might be the result of prior reasoning, for example, another the result of simply seeing that something is the case. Mirroring other paradigmatic agent-involving processes, such as running, walking and drawing, we see such reasoning as something which one can do more or less of. And if one engages in such reasoning from  $t_1$  through to  $t_{10}$ . What this brings out is that there is an ordinary use of the term 'reasoning' on which we use it to denote a kind of personal-level and conscious process.

Reasoning also involves constituent conscious *events*.<sup>1</sup> Judgments, for example, are contentful events of a sort which often occur outside of the context of reasoning. I might, say, look out of the window and judge that it is windy. My judgment here is a conscious event

<sup>&</sup>lt;sup>1</sup> On the event/process distinction see Crowther (2018), Hornsby (2012), Steward (2013), and sec. 5 below.

which may constitute the acquisition of belief that it is windy (Jenkins, 2018; McHugh, 2009, p. 246), beliefs, in contrast to judgments, being non-conscious states of a sort which can persist during dreamless sleep and which may or may not manifest in consciousness (Crane, 2013; McHugh, 2009, p. 246). But just as judgments often occur outside of the context of reasoning, they often occur as constituents of processes of reasoning, along with other events such as inferences and acts of supposition. I might, for instance, suppose that p, then infer q, then judge that r, reasoning about whether p in doing so. In such a case the events in question qualify as constituents of the unfolding process which is my reasoning.

With reasoning thus understood, it becomes natural to have it that reasoning is something which we *actively do*. Reasoning, as I will put it, is naturally understood as a kind of *action*.<sup>2</sup> Whenever one reasons, on this view, one's reasoning is an action which one is performing. Suppose, for example, that one is reasoning about whether *p*. It is natural to see this reasoning as an action of one's. If one's reasoning is successful it will be appropriate to see one as having worked out/figured out/determined whether *p*. Again, it is natural to see this is being something which one will have actively done by engaging in the reasoning in question. Among what occurs we can distinguish between the actions and the non-actions. When one's leg moves, for instance, one might be performing an action of moving one's leg. But this will not be the case if the movement is a reflex triggered by a doctor's hammer strike. Whenever one reasons, the thought is, one's reasoning belongs on the agential side of this divide. This makes it look like we can be responsible for our reasoning. It similarly makes our capacity to reason look salient when it comes to explaining how we are capable of being active with respect to and responsible for our attitudes (see e.g. Jenkins, 2018; Korsgaard, 2009; McHugh, 2013; O'Shaughnessy, 2000; Soteriou, 2013).

Reasoning's being something which we *do* does not suffice to reveal the above natural thought to be correct. Breathing, for instance, is something which we do. Yet typically, when one breathes, one's breathing is not an action of one's (Alvarez, 2013, p. 102; O'Shaughnessy, 2008, p. 358). Furthermore, according to a prominent line of thought, it is a mistake to think that reasoning is a kind of action. It cannot be, it is claimed, in light of the way in which it is alleged to not be *up to us* how our reasoning unfolds (e.g. Kornblith, 2012; Owens, 2000;

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<sup>&</sup>lt;sup>2</sup> Hornsby (2012) calls processes which we actively engage in 'activities' and reserves the term 'actions' for events which we actively perform. Translated into Hornsby's terminology, my claim is that reasoning is a kind of activity. But others use 'activities' to denote what I here call 'processes', without making any commitments regarding the agential status of the relevant occurrences.

Richards, forthcoming; Strawson, 2003; Valaris, 2016).<sup>3</sup> Reflection on the supposed limits to the extent to which it is up to us how our reasoning unfolds, that is, is taken to force us to accept a revisionary conception of the kind of rational agents we are, where there may in turn be revisionary implications for the extent and form of responsibility that we can have for our attitudes and actions. The challenge here is seen as being distinctive to the case of reasoning. That is, reflection on the extent to which it is up to us how our reasoning unfolds is taken to put pressure on the idea that reasoning is action, whilst analogous reflection on paradigmatic actions such as walking and running is seen as yielding no parallel pressure. There are distinctive reasons to deny that reasoning is a kind of action, the claim is.

Not all are convinced by such challenges to the idea that reasoning is a kind of action. O'Shaughnessy (2000, pp. 200–201), for instance, remains adamant that whenever one reasons one's reasoning is 'active as a whole'. My purpose, in what follows, is to defend O'Shaughnessy's stance, and thus to offer a partial defence of the non-revisionary conception of the kind of rational agents that we are. In particular, I will argue, once articulated with care, challenges to the idea that reasoning is a kind of action can be seen to trade on a problematic atomistic way of thinking about action which ought to be avoided in general (c.f. Hornsby, 2013).

After articulating the general challenge to the idea that reasoning is a kind of action (sec. 2) I will move on to considering particular ways to make the challenge precise. I consider the objections stemming from the demand that all constituent of actions must result from appropriate prior intentions (sec. 3) and from the demand that we must continuously control our actions (sec. 4). On reflection, these objections can be seen to trade on overly demanding conditions on what it takes to qualify as an action. These objections aside, apparent disanalogies between reasoning and more paradigmatic actions might still be taken to yield pressure to deny that reasoning is a kind of action. Again, however, once the relevant objections are made precise it can be seen that there is no real challenge to the idea that reasoning is a kind of action here (sec. 5). I then move on to bringing out how challenges to the idea that reasoning is a kind of action are the product of a problematic atomistic approach to actions which should be rejected wholesale (sec. 6). I conclude that reasoning is a kind of

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<sup>&</sup>lt;sup>3</sup> Valaris (2016) does not express his position in quite these terms, since he denies that reasoning is a kind of *process*. He instead claims that reasoning is a kind of *state*. Valaris can use the term 'reasoning' as he likes, but as seen, reasoning, in a perfectly ordinary sense of the term, is a kind of process.

action and is thereby a way for us to be active with respect to our beliefs and other attitudes (sec. 7).

# 2. The general challenge to reasoning's status as action

As noted, it is natural to have it that reasoning is a kind of action. However, as also noted, reflection on the extent to which it is *up to us* how our reasoning unfolds is often taken to cast doubt on this natural view. Whilst reasoning, for instance, one might *judge that p*. But when one judges that something is the case it will typically be natural to have it that it is not up to oneself whether one makes the judgment in question, rather than judging that something else is the case or not judging whatsoever. When I look out of the window to see what the weather is like and judge that it is windy, for instance, it seems that there is a sense in which it is not up to me whether I judge that it is windy. That it is windy rather becomes consciously evident to me, where I lack discretion over whether that is the case. I might later question whether it really is windy, bracketing or suspending my belief that it is windy in doing so. But to do that is not to exercise discretion over whether I made the judgment in the first place. Or suppose that whilst reasoning I *infer q*. It is similarly natural to have it that it will not be up to me whether I infer *q* rather than something else or nothing at all. Typically, at least, when one infers one thing from another it is natural to have it that it will not be up to oneself whether one does so.

Considering a particular case can help to bring out how observations of the above sort are taken to cast doubt on the idea that reasoning is a kind of action (Owens, 2000, pp. 11–12). Suppose that I am reasoning about whether q. From to outset I know that if p then q. I then realise that p and upon doing so infer q, coming to believe q and concluding my reasoning about whether q in doing so. It is utterly plain to me that if p then q. It likewise becomes utterly plain to me that p once I realise that p. Accordingly, questioning whether p or whether if p then q would not seem sensible to me. Given all of this, it seems that once I realise that p here I cannot but go on to infer q. There thus seems to be a significant sense in which it is not p to me whether I infer p when I do so. Again, I might later question whether p, bracketing or suspending my belief that p in doing so. But to do that is not to exercise discretion over whether I infer p in the first place. In this case I reason to the conclusion that p, doing so, in part, by inferring that p. When I infer that p the inference is a constituent of the process which is my reasoning to the conclusion that p. Given this, its not being up to me whether I infer p when I do so is taken to undermine the idea that the process of reasoning as whole in question

can be an action which I perform. We must instead divide up the reasoning into agential and non-agential components (Owens, 2000), or see the reasoning itself as wholly passive (Kornblith, 2012; Strawson, 2003). Strawson and Kornblith, for example, maintain that when one reasons one's reasoning itself cannot be action. At most we are capable of actions by which we initiate, sustain and intervene in the course of our reasoning. As Kornblith puts it, we may be able to actively 'direct our attention in various ways'. But once this is done 'our inferential mechanisms go to work' without what unfolds constituting action (2012, p. 100). Or as Strawson puts it, we might be able to set our minds at problems and 'shepherd or dragoon [our] wandering minds' back to them upon becoming distracted. But 'action, in thinking, really goes no further than this' (2003, p. 232).

If the above line of thought is to be made good then the way in which our reasoning's unfolding is not *up to us* needs to be made precise. Likewise, the way in which this undermines the idea that reasoning is a kind of action needs to be spelled out. Simply putting things in terms of whether our reasoning's unfolding is 'up to us' and leaving it at that is unhelpful. We need to know precisely what it is about the way in which reasoning unfolds that is supposed to undermine its status as a kind of action.<sup>4</sup>

#### 3. Prior intentions

One common way of framing the challenge to the idea that reasoning is a kind of action is to do so in terms of a lack of relevant *initiating intentions* (e.g. Kornblith, 2012; Strawson, 2003). On one prominent way of thinking about actions, all actions are the causal products of prior intentions to perform actions of the relevant sorts. As some see it, reasoning often fails to satisfy this demand and thus cannot be a kind of action.

On one way of viewing things, reasoning can appear as amenable to the above causalist approach to action as more paradigmatic actions. I might, for instance, intend to go for a walk at 12. When 12 arrive, I might do so accordingly. Similarly, I might be taking a break and intend to go back to reasoning about whether *p* at 12. When 12 arrives, I might do so accordingly. In line with the causalist approach, we could maintain that my reasoning here is the causal product of my prior intention to reason, just as my walking is the causal product of

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<sup>&</sup>lt;sup>4</sup> McHugh (2009), for instance, maintains that there is a significant sense in which our judgments *are* up to us, in virtue of judging's being something which we do in the light of reasons. He does so whilst accepting that our judgments are not 'voluntary'. He will accordingly maintain that our reasoning's unfolding is up to us in the only way that is required for it to constitute action. Progress requires getting precise about what it is about the way in which reasoning unfolds which is supposed to rule it out from qualifying as a kind of action.

my prior intention to walk. However, reasoning is seen as differing to paradigmatic actions in that *constituent events* of reasoning can fail to ensue from relevant prior intentions in a way which is taken to undermine the status of reasoning as a kind of action. Suppose, for instance, that I am reasoning and whilst doing so judge that p and infer q. Typically, at least, such judgments and inferences are not the products of prior intentions to perform them. When one judges that p, that is, one's judgment will not typically be a product of an intention to judge that p. Likewise, when one infers q one's inference will not typically be a product of an intention to infer q. In fact, it seems clear that we do not typically intend to make the judgments and inferences which we make whilst reasoning whatsoever (Setiya, 2008, sec. 4). It is this which Kornblith (2012) and Strawson (2003) see as revealing that reasoning which has such constituent events cannot constitute action and hence that reasoning cannot be a kind of action.

Once spelled out, however, the above fails to amount to a real challenge to the idea that reasoning is action. Reasoning is seen as failing to be a kind of action in virtue of its having constituents which are not products of prior intentions to perform them and are thus not themselves actions. That is, it is assumed that

- (1) For  $\varphi$ -ing to be an action any given constituent occurrence of  $\varphi \psi$  must also be an action.
- (2) For any given  $\psi$  to be an action it must be a product of a prior intention to  $\psi$  (under some description).

Some given reasoning's resulting from an intention to do so is not enough for it to qualify as an action. That is seen as consistent with some or all of the reasoning's not being actively performed. If it is to be action as a whole, each constituent occurrence which makes up some reasoning must itself be an action (1). Any given constituent inference or judgment, for instance, must also be an action. Furthermore, for any given constituent to itself be an action it must be the product of an intention to perform it (2). It is this demand which is not satisfied by much of our reasoning, much of our reasoning's involving the likes of judgments and inferences which are not the products of intentions to perform them.

The above argument might be contested on the grounds that it relies on the causalist picture of action on which all actions are products of prior intentions. Some insist, for instance, that the likes of absent-minded actions are not the products of intentions and/or object to the causalist way of conceiving of action in general (e.g. Frankfurt, 1978; Hornsby, 2017;

O'Shaughnessy, 1980; Steward, 2012). But there is a more straightforward issue with the argument. It can be seen to make absurdly strong demands on what it takes for a given  $\varphi$ -ing to constitute an action, ruling out paradigmatic actions from qualifying as such as much as it rules out reasoning. Either (1) or (2) must be rejected. Suppose, for instance, that I play a fast, complex, and well-practised phrase on the piano. At one time I count as doing so by playing an A with my ring finger, such that the latter qualifies as a constituent of my action. But the phrase being one which I have practised playing many times, which I play rapidly, and which I learnt to play long ago, I may well do so without forming an intention to play an A with my ring finger and without forming an intention to perform that action under any description whatsoever (Jenkins, 2018, p. 17). I might simply intend to perform the relevant phrase, then do so by relying on muscle memory and thus on an established motor routine. Or suppose that whilst running I move from location L<sub>0</sub> to L<sub>n</sub>. In doing so I run from L<sub>1</sub> to L<sub>2</sub> where L<sub>1</sub> and L<sub>2</sub> are mere centimetres apart. But I need not form intentions to move such small distances in order to move longer distances. Indeed, I need not form intentions to perform such movements under any descriptions of the relevant occurrences. In this way, (1) and (2) rule out paradigmatic actions such as running and piano playing from qualifying as such. It must thus be either (1) or (2) which is at fault (or both), rather than there being a distinctive challenge to the idea that reasoning is action here. We must either deny that our actions can always be decomposed into constituent sub-actions, or deny that such sub-actions must always be products or prior intentions to perform them. But once that is done, the observation that some constituents of reasoning fail to qualify as the products of prior intentions to perform them fails to cast doubt on the natural idea that reasoning is a kind of action.<sup>5</sup> In fact, examples like those just considered reveal that we cannot demand that all constituents of our actions are themselves actions which we intend to perform. Accordingly, no challenge to the idea that reasoning is a kind of action stems from the observation that when it comes to some constituents of our reasoning, such as our judgments and inferences, we typically do not intend to perform them.

### 4. Control

<sup>&</sup>lt;sup>5</sup> It is thus no coincidence that Strawson (2003, p. 241 note 33) ends up dividing the kicking of a ball—another paradigmatic action—into agential and non-agential components. He denies that when one kicks a ball one's doing so really constitutes an action. As he sees it, once one is done actively initiating the kick one's active import is complete. But what this really reveals is that Strawson has failed to identify as distinctive challenge to the idea that reasoning is a kind of action.

Reflection on the way in which constituents of reasoning often fail to be the products of prior intentions to perform them fails to cast doubt on the natural idea that reasoning is a kind of action. But that might just be taken to reveal that the challenge to the idea that reasoning is a kind of action has not yet been articulated adequately. Another common way to put the challenge is in terms control (e.g. Kornblith, 2012; Owens, 2000; Richards, forthcoming). According to those who pursue this approach, the way in which we can lack control over how our reasoning unfolds undermines the idea that reasoning is a kind of action. Consider again when I reason about whether q and, upon realising that p, infer q (sec. 2). Its being plain to me that if p then q, once I realise that p it seems that I cannot but go on to infer q. Accordingly, it seems that when I infer q I do not qualify as in control over whether I do so, rather than something else or nothing at all. That seems to reveal that when I infer q I lack control over how my reasoning about whether q is unfolding. And that is in turn seen as revealing that such reasoning cannot, as a whole, constitute action. Reasoning thus cannot be a kind of action. In general, when we reason we seem to, at points, lack control over how our reasoning is unfolding, given that while we reason we typically do not control the likes of what inferences we make, what judgments we make and what occurs to us. It is this which some take to reveal that reasoning is not a kind of action.

The above argument against the idea that reasoning is a kind of action trades on the following assumption:

(CONTROL) If  $\varphi$ -ing is an action of one's then at any point during which  $\varphi$ -ing is unfolding one qualifies as in control over how  $\varphi$ -ing is unfolding.

Reasoning is then ruled out on the grounds that, at points, when we reason we seem to lack control over how our reasoning is unfolding. For instance, we sometimes seem to lack such control in in virtue of lacking control over which judgments and inferences we make.

Talk of our being in control of our actions themselves is pervasive in recent philosophy of action. Levy, for instance, takes himself to be giving voice to the orthodoxy in claiming that [i]t is natural to suppose that actions are distinguished by being under our voluntary

control.' (2013, p. 713)

However, CONTROL can be seen to be an absurdly strong demand on what it takes for any given occurrence to constitute an action. In fact, it can be seen that CONTROL should be rejected for reasons which are perfectly analogous to those on which it is now denied that we

must cause our own actions. As Steward notes, a dilemma from Davidson (2001, pp. 52-53) reveals that

it is fatal to a proper understanding of actions to suppose that they are caused by agents. (2012, p. 38)

Suppose, for reductio, that agents always cause their own actions. We can then ask how they do so. If we say that agents cause their actions by performing distinct prior actions then we are off on a regress. Performing a single action would require performing infinitely many prior actions. The alternative is to say that agents cause their own actions *without doing anything else*. Agents cause their own actions without there being anything which they *do* to cause their actions. But saying that mystifies action (2001, pp. 52–53; Steward, 2012, p. 38). We can allow that agents cause *some* of their actions. I might cause myself to do something in the future by making a note of that I need to do it now, for instance. But it should not be maintained that agents cause *all* of their own actions.

We should deny that agents must *control* their own actions on grounds which are parallel to the above. Suppose, for reductio, that agents always control their own actions. We can then ask how they do so. Again, if we say that agents control their own actions by performing distinct prior actions then we are off on a regress. The alternative is to say that agents control their own actions *without doing anything else*. We would have to say that agents control their own actions without their being anything which they *do* to control their actions, thereby mystifying action. The appropriate response is to deny that agents must control their own actions, just as we should deny that agents must cause their owns actions. Our actions are our *exercises of control themselves*, not occurrences which we must ourselves control somehow.

In light of the above, the present challenge to the idea that reasoning is a kind of action can be seen to trade on an absurdly strong demand on what it takes for an occurrence to constitute an action. CONTROL should be rejected on the grounds that we need not always control our actions themselves. It thus cannot be leaned on in order to undermine the natural view that reasoning is a kind of action. Although when one is reasoning one may not qualify as controlling which judgments and inferences one is making, for instance, this should not lead us to deny that one's reasoning itself is an action which one is performing. After all, reflection reveals that when one walk or runs one similarly may not qualify as controlling one's walking or running itself.

## 5. Alleged disanalogies between reasoning and paradigmatic actions

On reflection, the fact that reasoning involves constituent events which are not the products of prior intentions fails to cast doubt on the suggestion that reasoning is a kind of action. Not all constituents of extended actions can themselves be seen as actions which their agents intend to perform (sec. 3). Similarly, the fact that agents often do not control how their reasoning unfolds fails to cast doubt on the suggestion that reasoning is a kind of action. Agents need not control their own actions (sec. 4). With all of this said, comparing reasoning to more paradigmatic actions might still seem to yield pressure to deny that reasoning is a kind of action. Apparent disanalogies between reasoning and more paradigmatic actions, that is, might be taken to suggest that reasoning cannot be a kind of action.

To bring this out it may be helpful to compare reasoning to a particular paradigmatic action. Suppose that you are walking to the shops. You do so by first crossing the street. When you get to the other side you know that you need to turn right in order to continue heading to the shops. You do so accordingly, continue walking, and eventually arrive at the shops. Your action of walking has constituent sub-action (e.g. crossing the street, turning right, ...), many of which themselves have constituent sub-actions (e.g. taking one step, then another, ...). If we consider a given sub-action (e.g. taking a step, turning right) it seems clear that there will be a sense in which it is up to you whether you are performing the action in question. When you turn right, for instance, it seems clear that there is a sense in which it is up to you whether you are doing so. You could just as easily have turned left, although in doing so you would ceased heading to the shops. Reasoning, it might be alleged, is not parallel. Consider when I reason about whether q above, for instance (sec. 2). My reasoning also has constituent subactions, such as judging that p and inferring q. When I perform these sub-actions, however, it seems that it may well not be up to me whether I do so in the way in which it is up to me whether I turn right when walking to the shops. Upon realising that p, for instance, q becomes evident to me in a way such that I cannot but infer q. Such apparent disanalogies, when it comes to the way in which the unfolding of paradigmatic action is up to us as compared to reasoning, might be taken to cast doubt on reasoning's status as a kind of action.

Again, if the above is to be made into a clear challenge to the idea that reasoning is action then the way in which our walking and running's unfolding is 'up to us' whilst our reasoning's unfolding is not needs to be made precise. What condition on being an action does reasoning often violate? One natural candidate, in light of the above examples, is that when we walk and run, unlike when we reason, we are always such that we *can go on otherwise* than we in fact do. Before you turn right above, for example, you are such that you *can turn left*, even though you

in fact go on to turn right. The relevant sense in which you can do otherwise is not merely that of metaphysical possibility. You can do otherwise than go on to turn right in the sense that you have both the *ability* and the *opportunity* to go on otherwise (Kenny, 1975, Chapter 7; Levy, 2013, p. 714). Doing otherwise is something that you have the ability to do insofar as you have the ability to turn left, for example. But you also have the opportunity to do otherwise by turning left—an opportunity that you would not have had in some circumstances, like if your way was blocked or if you were being dragged. With that said, it might seem like the condition on being an action which walking and running satisfy and reasoning violates is the following:

(OPPORTUNITY) If  $\varphi$  is an action with constituent  $\psi$  then *just before* one  $\psi$ s one must have the ability and the opportunity to do otherwise than go on to  $\psi$ .

It might seem as if the likes of walking and running do not violate OPPORTUNITY, whilst reasoning does, such that it is reasoning's violating OPPORTUNITY that rules it out from qualifying as a kind of action. Just before you turn right above, for example, you have both the ability and the opportunity to do otherwise by turning left, or by ceasing to walk altogether. Just before I inferred q, meanwhile, it seems that I lacked the opportunity to do otherwise. Once it became evident to me that p, I could not but go on to infer q. On reflection, however, it can be seen that paradigmatic actions such as walking and running can violate OPPORTUNITY just as much as reasoning can. Leaning on OPPORTUNITY thereby fails to yield a distinctive challenge to the idea that reasoning is a kind of action.

Suppose, for example, that I am sprinting as fast as I can. At time  $t_n$ , mid sprint, it might be that I lack the opportunity to go on in such a way that I do not qualify as running at  $t_{n+1}$  just after  $t_n$ . At  $t_n$  I might be mid step, for instance, such that if I tried to slow myself, or even allowed myself to fall, I would still qualify as running at  $t_{n+1}$ . Actions such as running can, in this way, have momentum such that we cannot always stop performing them 'on a dime'. Walking is the same. If I am walking at  $t_n$  then it might be that I lack the opportunity to go on in such a way that I do not qualify as walking at  $t_{n+1}$  if  $t_{n+1}$  is just after  $t_n$ . My front foot might be just about to hit the ground with my weight behind it at  $t_n$ , for instance, such that even if I were to begin to allow myself to fall I would still count as walking at  $t_{n+1}$ . In this way, walking and running can violate OPPORTUNITY, just as reasoning can. What this reveals reveals is that OPPORTUNITY cannot be maintained in light of the way in which we cannot always stop performing actions 'on a dime', our actions' sometimes having momentum such that it

can take time for us to cease engaging in them. Once again, there is no distinctive challenge here to the idea that reasoning is a kind of action, only what turns out to be an overly restrictive demand on what it takes for an occurrence to constitute an action.

Someone still unconvinced might take the above to reveal that OPPORTUNITY is not the right condition to appeal to in order to articulate the way in which our reasoning's unfolding can fail to be up to us in the way that our paradigmatic actions are. Another seemingly natural condition to impose is that when one engages in an action by doing something one must be such that one *could be doing otherwise*, and such that one could be doing so without this requiring that things went otherwise *up to the time at which one acts*. That is, when we engage in actions we qualify as such that we could be doing otherwise, and not just because things might have unfolded differently up to the point at which we act, or because we might have performed different prior actions, such that we would have been led to be doing otherwise as a result. When you walk to the shops by turning right above, for example, you are such that you could be doing otherwise. You could be turning left, for instance. And it seems like you could have turned left without things having had to have gone otherwise up to the time at which you in fact turned right. That is, paradigmatic actions might seem to satisfy the following condition, whilst reasoning can violate it:

(DIRECTNESS) If one is engaging in an action  $\varphi$  in  $\psi$ -ing then when one  $\psi$ s one must be such that one *could be doing otherwise*, and without things having to have gone otherwise *up to the time at which one*  $\psi$ s.

When I inferred q from p (sec. 2), for instance, it seems that I was not such that I could have done otherwise given how things went up to the time at which I inferred. Once it became evident to me that p, I could not but infer q. In this way, paradigmatic actions might seem to satisfy DIRECTNESS whilst reasoning can violate it, such that it is this which rules out reasoning from qualifying as a kind of action.

In scrutinising the claim that there is a genuine disanalogy between the way in which reasoning unfolds compared to more paradigmatic actions, a thing to attend to is what sort of events are in question. If, whilst reasoning, I make a judgment or inference I might violate DIRECTNESS, whereas it seems like the same might not be so when you turn right whilst walking to the shops. But judgments and inferences are events of a distinctive sort. In particular, they are what Vendler (1957) calls 'achievements'—events which are such that they are over as soon as they have begun (Crowther, 2011, p. 5; McHugh, 2009, p. 246; Soteriou, 2013,

pp. 233–234). Once the event of judging that *p* has begun, for instance, it is thereby complete. Similarly, once the event of inferring *q* from *p* has begun it is thereby complete. Inferring and judging, unlike walking or turning, are not occurrences of a sort which continue to occur once they have begun to occur. They are not things which we can be in the process of doing. Accordingly, inferences and judgments might be taken to be *instantaneous events* (Crowther, 2011, p. 5; McHugh, 2009, p. 246; Soteriou, 2013, pp. 233–234). Accordingly, in the case of walking it is events like *arriving* which are closer to being parallel to judging or inferring in the case of reasoning. Like inferring and judging, arriving is a kind of achievement—an event of a sort which is over as soon as it has begun.<sup>6</sup> Similar to judging and inferring, then, arriving might be seen as a kind of instantaneous event.

With achievement events in view, it can be seen that DIRECTNESS is violated in paradigmatic cases of action, just as much as it is in cases of reasoning. Reliance on DIRECTNESS thus fails to yield a distinctive challenge to the claim that reasoning is action. Suppose, for instance, that on your journey to the shop you arrive at the other side of the street at  $t_1$  and arrive at the shop later at  $t_2$ . Just as judging that p and inferring q are constituent events of the unfolding process which is my reasoning about whether q, arriving at  $t_1$  and arriving at  $t_2$  are constituent events of the unfolding process which is your action here. Furthermore, the latter events violate DIRECTNESS. Consider when you arrive the other side of the street at  $t_1$ , for instance. Given how things have unfolded up to the time at which you arrive at the other side of the street you cannot but arrive there. In order to not arrive at the other side of the street at  $t_1$  things would have to have gone otherwise up to  $t_1$ . Things are likewise in the reasoning case. Consider when I conclude my reasoning about whether q by inferring q. Given how my reasoning has unfolded up to the time at which I infer q I cannot but do so. But this violation of DIRECTNESS really presents no more of a challenge to the idea that such reasoning is action than it does to the idea that walking to the shops is action. In general, when we consider a given achievement event which is a constituent of an unfolding action one will not be such that one could be doing otherwise given how things have unfolded up to the time at which the event occurs. This is simply a consequence of the temporal profile of the relevant events, rather than something which should lead us to deny that processes with such constituent events are actions.

<sup>&</sup>lt;sup>6</sup> Although 'arriving' can also be used to denote the process which terminates with one's arrival. Similarly, 'judging' might be used to denote a process of reasoning which terminates with one's making a given judgment.

With the constituents of paradigmatic actions like walking and running which are achievements in view, it can be seen that reasoning actually seems to be perfectly parallel to such actions when it comes to the way in which its unfolding is up to us. Suppose, for example, that I arrive at the shops by walking. There may be a clear sense in which it is up to me that I arrive at the shops. But similarly, when I figure out what the answer is in a simple Sudoku puzzle it can be up to me what I figure out in the same way. I might figure out which number goes in a given square, for instance, where it is up to me whether I bother doing so. In addition, it will not always be up to me whether I end up in a given location by walking. Environmental factors and my own physical limitation restrict where I can get to by walking. If I tried to reach the summit of a mountain by walking, for instance, I might make it. But it might not count as up to me whether I do so, my success' depending on the weather not having turned and on my not suffering from altitude sickness. Similarly, it is not always up to me what I figure out when I reason in the same way. Some puzzles will be difficult for me to resolve. My success might depend on my pursuing what turn out to be productive lines of thought rather than dead ends, where I am incapable of seeing in advanced which is which, or on my happening to be sensitive to the right kinds of inferential connections. What this suggests is that when I reason, just like when I walk, it is up to me what I am doing in the only way that is required for what I am doing to constitute action. I engage in the activity in question and can refrain from doing so, or go on otherwise, even if I cannot always do so 'on a dime'.

### 6. Standalone actions

It will be instructive to consider one more way to frame the challenge to the idea that reasoning is a kind of action. Doing so will help to bring out how opponents and advocates of the idea that reasoning is a kind of action alike are led astray.

# Recall OPPORTUNITY:

If  $\varphi$  is an action with constituent  $\psi$  then *just before* one  $\psi$ s one must have the ability and the opportunity to do otherwise than go on to  $\psi$ .

As seen, OPPORTUNITY needs to be rejected in light of the way in which actions can have momentum. Some of our actions have constituents  $\psi$ -ings where we are not such that we have the opportunity to do otherwise than  $\psi$  immediately prior to their occurrence. That is, some of our actions are such that we lack the opportunity to do otherwise than perform constituent  $\psi$ -ings just before we do so, where this is the case because of the place of the relevant  $\psi$ -ings

place in more extended actions with momentum. However, it might nonetheless seem reasonable to maintain that if an action is performed as what we might call a 'standalone action' then one must have the ability and opportunity to do otherwise just before performing the action in question (e.g. Alvarez, 2013, pp. 117–118). That is, when an action is performed without its being a constituent of some further more extended action one must have the ability and the opportunity to do otherwise than perform the action in question just before one does so. Whilst running, for instance, I might not have the opportunity to do otherwise than finish taking the present step (sec. 6). But before I start running whatsoever I surely must have both the ability and the opportunity to do otherwise if my running is to constitute an action. This suggests the following condition:

STANDALONE If  $\varphi$  is an action which is not a constituent of any more extended action then *just before* one  $\varphi$ s one must have the ability and the opportunity to do otherwise than go on to  $\varphi$ .

Furthermore, events such as judgments and inferences, which can occur as constituents of extended reasoning, do not appear to satisfy STANDALONE. Suppose, for instance, that I am idly staring at the entrance of the room when I notice Pierre walk in. It seems that I will lack the opportunity to do otherwise than notice Pierre just before I do so—I cannot but notice him given my circumstances. On the face of it, meanwhile, events of a sort which can occur as constituents of paradigmatic actions like walking and running do seem to satisfy STANDALONE. I can take a step as a standalone action, for instance, and if I do then I will have the ability and the opportunity to do otherwise just before I do so. It might then be thought that it is reasoning's having constituents of a sort which fail to satisfy STANDALONE which rules it out from qualifying as a kind of action. That is, it might be thought that events of a sort which occur as constituents of reasoning such as judgments and inference do not satisfy STANDALONE and thus cannot (or at least often do not) constitute standalone actions when they occur outside of the context of reasoning. And it might in turn be thought that reasoning would need to be made up of constituents which amount to standalone actions when they occur outside of the context of reasoning in order for reasoning itself to amount to a kind of action.

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<sup>&</sup>lt;sup>7</sup> The term 'standalone action' is adapted from Soteriou's (2013, sec. 11.1) use of 'standalone act' in his discussion of supposition.

It is clear what it wrong with the above line of thought. As seen (sec. 5), it is a mistake to see the likes of taking a step whilst walking as the analogue of judging or inferring whilst reasoning. The latter are achievement events and are thus more closely analogous to events of arriving. Furthermore, arriving is not something which can be done as a standalone action. I cannot actively arrive at the other side of the street without performing some more extended action such as walking, for instance. We should deny that all constituents of actions must be such that they can be performed as standalone actions. Accordingly, judgments' and inferences' apparent failure to satisfy STANDALONE does nothing to cast doubt on their being apt to feature as constituents of active reasoning. In fact, we can accept that judgments' and inferences' failure to satisfy STANDALONE does cast doubt on the idea that judgments and inferences amount to standalone actions when they occur outside of the context of reasoning. It is just that this does not prevent us from seeing such events as apt to figure as constituents of active reasoning. Analogously, we might accept that when one notices something outside of the context of any given extended action one's noticing is not an action. My noticing Pierre whilst I idly stare at the entrance, for instance, might not seem to be an action of mine in virtue of its failure to satisfy STANDALONE. But this should not lead us to deny that I might actively find Pierre by looking for him. Were I to do that, my spotting him where he is can qualify as something which I actively do in virtue of its place in my extended action of searching.

What the above suggests, I contend, is that the mistake behind challenges to the idea that reasoning is a kind of action is a sort of *atomistic* thinking about action which should be avoided in general (c.f. Hornsby, 2013). The mistake is to think that extended actions must always be made up of constituent sub-actions which can be seen as such *independently from their place in more extended action*. Just as arriving needs to be considered as a constituent of a broader action (e.g. walking or running) in order to be seen as itself something one actively does, inferring and judging need to be considered as constituents of broader actions in order to be seen as acts by which we can engage in active reasoning. One objection to the idea that reasoning is a kind of action considered, for instance, stemmed from the claim that any given constituent  $\psi$  of extended action  $\varphi$  must be a product of a prior intention to  $\psi$  (under some description) (sec. 3). We can see why someone might buy into this condition if they were implicitly committed to an atomistic approach to action. Those who buy into the causalist approach to action on which being an action requires being a causal product of a relevant prior intention

might then see the only option as being to insist that any given constituent  $\psi$  of extended action  $\varphi$  must be a product of a prior intention to  $\psi$  (under some description). Similarly, we can see why someone implicitly committed to an atomistic approach to action might buy into CONTROL (sec. 4). Seeing oneself as controlling what is occurring at any point during which is performing some extended action might be seen as the way to articulate how each constituent action qualifies as such without making reference to the more extended action which one is engaged in. Likewise, OPPORTUNITY might seem similarly tempting to someone implicitly committed to an atomistic approach to action. Maintaining that one will have the ability to do otherwise than  $\psi$  just before  $\psi$ -ing when  $\psi$  is a constituent of some more extended action of  $\varphi$ -ing might be seen as the way to capture how each constituent  $\psi$ -ing of some extended action of  $\varphi$ -ing will itself constitutes an action and in turn be apt to feature as a constituent of an action of  $\varphi$ -ing, and as the way to do so without making reference to the extended action of  $\varphi$ -ing. In general, I contend, challenges to the idea that reasoning is a kind of action really have their source in the problematic atomistic approach to action.

If it is atomistic thinking of the above sort which leads many to deny that reasoning is a kind of action, it needs to be explained why such thinking is not seen as similarly casting doubt on the idea that paradigmatic actions such as running and walking really are actions. Why is it that there is seen as being a distinctive challenge to the idea that reasoning is action (sec. 1)? The above suggests the following answer. The most natural way of carving up token paradigmatic actions *does* yield constituents which appear to be performed as standalone actions when they occur outside of the context of the relevant extended actions. Consider my walking to the shops, for instance. My action of doing so naturally decomposes into constituent actions such as crossing the street, taking steps, turning right, and so on. Reasoning, on the other hand, naturally decomposes into constituents many of which are achievements, such that seeing how these events are themselves active requires considering their place in more extended actions. When considered in isolation, such constituents can look like they cannot be apt to feature as constituents of extended actions.

Many have taken it to be necessary to insist that judgments and inference do qualify as standalone actions when they occur outside of the context of reasoning, despite their often seeming to violate STANDALONE (e.g. McDowell, 2009; McHugh, 2009; Peacocke, 1999, 2008). What the above suggests is that there is no need to take this stance. We can instead say that reasoning is a kind of action and that constituent judgments and inferences qualify as

actively performed in virtue of their place in extended active reasoning. Saying this does not require saying that judgments and inferences occur as standalone actions, any more than saying that one might actively arrive at the shops by walking or find a friend by searching for them requires saying that arriving and noticing can occur as standalone actions. Others have defended the idea that reasoning is a kind of action by arguing that it qualifies as such on their idiosyncratic accounts of action. Buckareff (2005), for instance, argues that reasoning qualifies as a kind of action on his distinctive version of the causal theory of action. Wu (2013), meanwhile, argues that it qualifies as such given his account of action as the appropriate solving of a relevant 'Many-Many Problem'. Problems with these accounts of actions aside, the above reveals how we can undermine challenges to the idea that reasoning is a kind of action without committing to any particular account of action. It thus amounts to a far more dialectically effective response to those challenges. It is a problematic atomistic approach to reasoning and action in general which lies behind challenges to the idea that reasoning is a kind of action. This observation constrains but nonetheless leaves open what precise account of action we ought to accept.

#### 7. Conclusion

I have defended the natural idea that reasoning is a kind of action. Our reasoning's unfolding appears to be up to us in the only way which is required for this to be so. What might seem like necessary conditions on qualifying as action which are violated by reasoning are in fact no such thing. As seen, the natural conditions to appeal to are violated by paradigmatic actions such as walking and running as much as they are by reasoning. Once carefully articulated, the challenge to the idea that reasoning is a kind of action can be seen to trade on overly demanding conditions on what it takes to qualify as an action. Reflection reveals no distinctive challenge to the idea that reasoning is a kind of action. Of course, there can be significant differences between token actions of reasoning and other more paradigmatic actions. When I arrive at the shops by walking, for instance, I might intend to do just that. When I reason to the conclusion that *p*, meanwhile, I will not intend to conclude that *p*. But no necessary condition on being an action is thereby violated by such reasoning. In general, for instance, we cannot demand that all constituents of actions are themselves intended. What has led authors astray, I have suggested, is a problematic atomistic approach to action on which

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<sup>&</sup>lt;sup>8</sup> For examples of problems with Wu's account see Levy (forthcoming) and Jennings and Nanay (2016).

constituents of actions must be seen to be active when considered in isolation from their place in the relevant more extended actions. This approach is problematic when applied to paradigmatic actions as much as when it is applied to reasoning. Furthermore, it is an approach which is implicitly bought into by opponents and advocates of the idea that reasoning is a kind of action alike. The mistake is particularly tempting in the reasoning case, I have suggested, because of the way in which reasoning naturally decomposes into constituents which often fail to amount to events of a sort which are performed as standalone actions when they occur outside of the context of reasoning.

With reasoning's status as action defended, it can be seen how we are capable of being active with respect to our doxastic attitudes, and directly so, without this requiring us to see the likes of judgments and inferences as events which occur as standalone actions when they occur outside of the context of reasoning (Jenkins, 2018). It is by engaging in extended action such a reasoning that we can be active with respect to our beliefs and other attitudes, and potentially be responsible for them accordingly.

#### References

- Alvarez, M. (2013). VI—Agency and Two-Way Powers. *Proceedings of the Aristotelian Society*, 113(1pt1), 101–121.
- Buckareff, A. A. (2005). How (not) to think about mental action. *Philosophical Explorations*, 8(1), 83–89.
- Crane, T. (2013). Unconscious Belief and Conscious Thought. In U. Kriegel (Ed.), *Phenomenal Intentionality* (pp. 156–173). Oxford: Oxford University Press.
- Crowther, T. (2011). The Matter of Events. *The Review of Metaphysics*, 65(1), 3–39.
- Crowther, T. (2018). Processes as Continuants and Processes as Stuff. In R. Stout (Ed.), *Process, Action, and Experience* (pp. 58–81). Oxford: Oxford University Press.
- Davidson, D. (2001). Agency. In *Essays on actions and events* (pp. 43–62). Oxford: Oxford University Press.
- Frankfurt, H. G. (1978). The Problem of Action. *American Philosophical Quarterly*, 15(2), 157–162.
- Hornsby, J. (2012). Actions and Activity. Philosophical Issues, 22(1), 233-245.
- Hornsby, J. (2013). Basic Activity. Aristotelian Society Supplementary Volume, 87(1), 1–18.
- Hornsby, J. (2017). Agency Time and Naturalism. *Proceedings and Addresses of the American Philosophical Association*, 91, 137–153.

- Jenkins, D. (2018). The Role of Judgment in Doxastic Agency. *Thought: A Journal of Philosophy*, 7(1), 12–19.
- Jennings, C. D., & Nanay, B. (2016). Action without attention. *Analysis*, 76(1), 29–36.
- Kenny, A. (1975). Will, Freedom, and Power. Oxford: Blackwell.
- Kornblith, H. (2012). On Reflection. Oxford: Oxford University Press.
- Korsgaard, C. M. (2009). The Activity of Reason. Proceedings and Addresses of the American Philosophical Association, 83(2), 23–43.
- Levy, Y. (forthcoming). The most general mental act. In M. Brent (Ed.), *Mental Action and the Conscious Mind*. Routledge.
- Levy, Y. (2013). Intentional Action First. Australasian Journal of Philosophy, 91(4), 705–718.
- McDowell, J. (2009). Having the World in View: Essays on Kant, Hegel, and Sellars. Cambridge MA, Harvard University Press.
- McHugh, C. (2009). Judging as a non-voluntary action. Philosophical Studies, 152(2), 245–269.
- McHugh, C. (2013). Epistemic Responsibility and Doxastic Agency. *Philosophical Issues*, 23(1), 132–157.
- O'Shaughnessy, B. (1980). *The Will: Volume 2, A Dual Aspect Theory* (1st ed.). Cambridge: Cambridge University Press.
- O'Shaughnessy, B. (2000). Consciousness and the World. Oxford: Clarendon Press.
- O'Shaughnessy, B. (2008). *The Will: Volume 2, a Dual Aspect Theory* (2nd ed.). Cambridge: Cambridge University Press.
- Owens, D. (2000). Reason Without Freedom: The Problem of Epistemic Normativity. Oxford: Routledge.
- Peacocke, C. (1999). Being Known. Oxford: Oxford University Press.
- Peacocke, C. (2008). Truly Understood. Oxford: Oxford University Press.
- Richards, M. (forthcoming). Is reasoning a form of agency? In M. B. Jackson & B. B. Jackson (Eds.), Reasoning: New Essays on Theoretical and Practical Thinking. Oxford University Press.
- Setiya, K. (2008). Believing at Will. Midwest Studies in Philosophy, 32(1), 36–52.
- Soteriou, M. (2013). The Mind's Construction: The Ontology of Mind and Mental Action. Oxford: Oxford University Press.
- Steward, H. (2012). A Metaphysics for Freedom. Oxford: Oxford University Press.
- Steward, H. (2013). Processes, Continuants, and Individuals. Mind, 122(487), 781–812.

Strawson, G. (2003). Mental Ballistics or the Involuntariness of Spontaneity. *Proceedings of the Aristotelian Society*, 103(3), 227–257.

Valaris, M. (2016). What reasoning might be. Synthese, 194, 2007–2024.

Vendler, Z. (1957). Verbs and Times. The Philosophical Review, 66(2), 143–160.

Wu, W. (2013). Mental Action and the Threat of Automaticity. In A. Clark, J. Kiverstein, & T. Vierkant (Eds.), *Decomposing the Will* (pp. 244–61). Oxford: Oxford University Press.