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Intention as action under development: why intention is not a mental state

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ABSTRACT

This paper constructs a theory according to which an intention is not a mental state but an action at a certain developmental stage. I model intention on organic life, and thus intention stands to action as (e.g.) tadpole stands to frog. I then argue for this theory by showing how it overcomes three problems: intending while (1) merely preparing, (2) not taking any steps, and (3) the action is impossible. The problems vanish when we see that not all actions are mature. Just as some frogs (such as tadpoles) are immature frogs, some actions (such as intentions) are immature actions.

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1. Introduction

I pour a cup of flour with the intention to bake bread. I also have the intention to bake cupcakes and to bake pie, but this flour is for bread. Although my intention to bake cupcakes accompanies my flour-pouring and is the sort of thing that might make sense of my action, it does not explain my flour-pouring as my intention to bake bread does. When one is doing A with the intention to do B, the latter doesn't merely accompany the former; it *explains* the former. One is doing A *because* one intends to do B – in a special use of 'because' that gives the agent's reason for doing A.

By far, the dominant view these days sees this explanatory connection as a causal one (Davidson [1963] 2001; Velleman 1989; Mele 1992; Bratman 1999; Setiya 2010). When one acts with an intention, one's intention *causes* the action. Despite its dominance and utter pervasiveness, this causal account faces some well-known, recalcitrant problems.[1] In response, Michael Thompson (2008) has

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proposed a mereological account: when one acts with an intention, the intention is a wider action of which the given action is a narrower *part*. Thus, when one is doing A with the intention to do B, the latter doesn't merely accompany the former. Rather, the latter is one's doing of B, and one's doing of A is a part of that action.[2]

The mereological account is attractive precisely because it can give us an explanation of acting with an intention that avoids the problems with the causal account. However, the mereological account has a problem of its own: it seems to rest on an implausible theory of intention – namely, that to intend to do an action is to be doing that action.[3]

In this essay, I will develop a novel theory of intention that is compatible with the mereological account. I will argue that this theory is independently plausible and far more plausible than the theory that intending is doing (henceforth, the straightforward theory).

In Section 2, I will present three major problems for the straightforward theory: according to it, if one intends to do B, then one is doing B; however, (a) one can intend to do B while merely preparing to do B, (b) one can intend to do B without taking any steps at all toward doing B, and (c) one can intend to do B while the doing of B is impossible. The straightforward theory looks straightforwardly false. I think this is right.

Thus, in Section 3, I will present an alternative theory that is compatible with the mereological account but with the resources to avoid the three problems. According to this *developmental* theory, intention stands to action as tadpole stands to frog. In other words, an intention to do B is an action of type B *under development*, just as a tadpole is a frog under development.

In Sections 4–6, I will show how this theory avoids each problem. Roughly, when one is merely preparing to do B, or taking no steps toward doing B, or the doing of B is impossible, a mature action of type B (i.e. a doing of B) does not exist. That is why the straightforward theory is false. However, an *immature* action of type B does exist, in the same way that an immature frog exists when it is a tadpole. A prospective intention is, according to this theory, an immature action, which (if all goes well) develops into a mature action or doing.

Through responding to these problems, an illuminating picture of prospective intention, pure intention, and impossible intention will emerge.

2. Problems for the straightforward theory

The first problem for the straightforward theory can be illustrated with the following example. Suppose Betty is booking a flight to Nepal with the intention to climb Mt. Everest. Betty, therefore, intends to climb Mt. Everest. According to the straightforward theory, to intend to do A is to be doing A. Thus, since Betty intends to climb Mt. Everest, she is climbing Mt. Everest. But this is absurd. She

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is not, while she is booking her flight to Nepal, *climbing* anything (Paul 2014; Setiya 2014).

This counterexample is not a fringe case; it is a perfectly ordinary case of preparation: an agent takes a preparatory step with an intention to do A (so she intends to do A), but she is not doing A. The action, the doing of A, is prospective. In other words, the straightforward theory makes preparation, and prospective intention more generally, impossible. Yet these are two central phenomena that any theory of intention should explain.

The second problem for the straightforward theory can be illustrated with another counterexample. Ron, sitting at his desk at work on Monday, forms the intention to build a squirrel house on Saturday. It is true, then, that on Monday he intends to build a squirrel house. Suppose further that he never gets around to building the squirrel house on Saturday, and even more the intention never issues in any action. He doesn't, for instance, start clearing his schedule or drawing up a shopping list. Let us suppose that he does nothing but form the intention, and then on Tuesday he changes his mind. This is a case of *pure intending* (Davidson [1963] 2001). On Monday, Ron intends to build a squirrel house, but this intention is pure because there is nothing he does *with* this intention, and the corresponding action itself (i.e. the squirrel-house-building) never manifests. However, according to the straightforward theory, since Ron intends to build a squirrel house, he is building a squirrel house. The problem is not simply that it seems obvious that, on Monday, Ron is not building a squirrel house. Rather, the problem is that there is *nothing* that Ron is doing out of this intention and so no action to identify the intention with. Thus, it seems that one can intend to do A without doing anything at all to bring it about. But this is impossible under the straightforward theory.

The third problem for the straightforward theory can be illustrated with a further counterexample. Suppose Archie is writing a formula with the intention to square the circle. However, as was proven in 1882, squaring the circle is impossible (since π is transcendental). Therefore, Archie intends to square the circle, but he is not squaring the circle because it's *impossible* for him to be doing that. According to the straightforward theory, since Archie intends to square the circle, he is squaring the circle, but that's impossible (Paul 2013; Setiya 2014).

The overwhelming plausibility of pure intentions like Ron's and impossible intentions like Archie's puts serious pressure on the straightforward theorist to address these problems.

Now the straightforward theorist could try to defuse any one of these problems by denying some claim made in them and thereby rejecting their status as problems. In this paper, I will not present any arguments against this strategy but instead will assume, quite reasonably I think, that these problems are real. Thus, the force of my argument will be limited to this extent. I will assume, therefore, that the straightforward theory must be rejected. What we are looking for,

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then, is a theory that holds that intention is action (vindicating the mereological account of rationalization) yet has the resources to solve all three problems.

3. The developmental theory

The central idea of developmentalism is that actions develop. And like other things that develop, actions have characteristic stages of development. Consider, for instance, frogs. Frogs have the characteristic developmental stages of egg, tadpole, froglet, and adult frog. Similarly, cherries have the characteristic developmental stages of bud, blossom, set, and ripe cherry. According to developmentalism, actions have developmental structure like frogs and cherries. In particular, actions have the *characteristic* developmental stages of want, intention, attempt, and doing.

This idea is suggested by the fact that actions and cherries are both products of living organisms. It should, then, be no surprise that actions, like cherries, are by their very nature developing things.

The developmental theory of intention is entailed by this developmental theory of action. According to it, an intention to do A is an action of type A at a certain stage of action-development – just as a tadpole is a frog at a certain stage of frog-development. For instance, suppose on 21 June 2016, I had the intention to bake bread. On this view, that intention was not a state I was in with the content 'to bake bread' but, rather, a bread-baking at a certain developmental stage characteristic of actions in general – namely, the intention-stage. Different versions of the developmental theory of intention will have different specifications of the intention-stage of action. Importantly, a token intention is not, for the developmentalist, a stage (or a state) but a token action *at a stage*.

This view has a consequence that is key to solving the three problems for the mereological account. If developmentalism is true, then there are two distinguishable senses of the word 'action'. First, consider the word 'frog'. There is a broad sense of 'frog' such that it is true to say of a particular (fertilized) egg or tadpole or froglet that it is a frog. A token tadpole is a token frog in the broad sense. A particular frog in the broad sense is the particular thing that moves through the developmental stages of egg, tadpole, froglet, and adult frog.

But there is, of course, another distinguishable sense of 'frog': a narrow sense. This is the sense in which it is clearly false to say of a tadpole that it is a frog. The narrow sense of 'frog' refers to a frog in the broad sense at the adult or mature stage of frog-development. A token frog in the narrow sense is a token adult frog. With the narrow sense of 'frog', it is false to say that an egg or tadpole or froglet is a frog, because these are not adult frogs. A particular frog in the narrow sense exists only when a particular frog in the broad sense is at a mature stage of development.

These two sense of 'frog' are a consequence of the developmental structure of frogs in general. A frog in general is a type of thing that admits of characteristic

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developmental stages. Because of this, the type *frog* can be instantiated at different developmental stages. We can thus refer to a token of the type *frog* at any developmental stage as a frog. This is to use 'frog' in the broad sense. But we also have a narrower, stricter use of the word 'frog' that refers to a token frog in the broad sense at, more specifically, a mature stage of frog-development.

Because, for the developmentalist, an action in general admits of characteristic developmental stages, the word 'action' analogously has two distinguishable senses: a narrow and a broad. The narrow sense refers to a token action in the broad sense at a mature stage of action-development. But the broad sense refers to a token of the type *action* at any developmental stage. An action in the narrow sense is only ever a mature action, but an action in the broad sense may be a want or intention or attempt or doing. Each is an action in the broad sense at a certain stage of action-development. That is to say, an intention is not an action in the narrow sense, just as a tadpole is not a frog in the narrow sense. It is not a mature action or a doing. Rather, an intention is an action *in the broad sense* and, more specifically, an action in the broad sense at the intention-stage of action-development.

To avoid this ambiguity, I will use 'action under development' to refer to a token action in the broad sense and 'mature action' to refer to a token action in the narrow sense.[4]

For example, if I am baking bread, then I am doing that action. According to the developmentalist, then, my action of bread-baking is mature. If I am baking bread, there exists a bread-baking under development at a mature stage of action-development. On the other hand, if I merely intend to bake bread, then I am not doing that action. For the developmentalist, my bread-baking is immature. If I merely intend to bake bread, there exists a bread-baking under development at an immature stage of action-development. My intention to bake bread is a bread-baking under development at a certain, immature stage of development. In general, an intention to do A is an action of type A under development at a certain, immature stage of development. And just as a tadpole (if all goes well) will develop into a mature frog, an intention to do A (if all goes well) will develop into a mature action of type A – i.e. a doing of A.

Unlike frogs and cherries, actions are processes.[5] They are, according to the developmentalist, processes with developmental structure.[6] A type of thing has developmental structure in virtue of the roles played by its parts. Developmental roles determine the developmental stage and enable being in further developmental stages. For instance, a cherry under development amounts to a blossom when and because some part of it (e.g. a petal) plays a role characteristic of the blossom stage of cherry-development (e.g. pollination). Pollination is a developmental role because it enables further parts to play a role characteristic of the set stage of cherry-development. Thus, a process (and, in turn, an action) has developmental structure in virtue of the roles played by its parts – in this case, its subprocesses (or sub-actions). For example, a bread-baking under

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development amounts to an intention to bake bread when and because some part of it – one of its sub-actions – plays a role characteristic of the intention stage of action-development. Such a sub-action might be a mental process of calculation or a physical process of heating-to-350 °F or a bodily process of arm movement. If these processes play the right roles (as given by a more specific developmental theory), the action of which they are parts is an intention.[7]

It is important to see that development is something different from both growth and progress. Growth is the *addition* of parts. A tree will grow when it gains a leaf. A process will grow when it gains a subprocess. For instance, a token avalanche will grow as the snow moves further down the mountain, adding the movement from point a to point b, then b to c, and c to d. This is not development. Progress is the addition of a subprocess that *advances* the process. Processes that progress have characteristic completion changes – a change that defines the completion of the process. A process progresses when it gains a subprocess that moves it closer to its characteristic completion change – this is what I call 'advancement'. A token freezing, for instance, will progress as it gains subprocesses of solidifying the relevant bit of matter. This is more than growth because each solidifying constitutes an advancement toward full solidification. This is not development. Development requires *characteristic roles that enable further characteristic roles*. When a process develops, this is not because it gains a subprocess or advances but because a subprocess is playing a characteristic role: the subprocess is enabling the performance of some further characteristic role. For the developmentalist, actions do more than grow and progress; they develop in the sense just described.

We are now in a position to see how the developmental theory of intention is different from the straightforward theory. According to the former, an intention is an action qualified by an *intrinsic* property of the action. For the developmentalist specifically, this intrinsic property is the developmental stage or developmental role played by one or more of the action's sub-actions – namely, an intention is an action at a certain stage of action-development. By contrast, for the straightforward theorist, an intention is (most straightforwardly) an action *unqualified* or (less straightforwardly) an action qualified by an *extrinsic* property. The staunch straightforward theorist will say that there is simply no real or absolute or consequential distinction between intending and doing. There's only a token of an action-type. You may call it 'an intention' or 'a doing' regardless of the conditions it is in, since there is no basis on which to make the distinction. The more guarded straightforward theorist will recognize that there are some conditions where it is more appropriate to call a token action 'an intention' rather than 'a doing', but the basis of such a distinction will be purely extrinsic. Perhaps, for instance, we call an action 'an intention', when we believe that the action is unlikely to be further advanced or completed. This theory would make an intention an action qualified by an extrinsic property of the action – in this case, a speaker's beliefs about the action. If a theory of

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intention as action distinguishes intending from doing in terms of an intrinsic property of the action, then it is not a straightforward theory (as I am defining it). The developmental theory is such a theory.

In short, the straightforward theorist doesn't take the distinction between intending and doing seriously. This lands her with our three problems, since each suggests that there is an important distinction. Any straightforward solution, by definition, must attempt to defuse the problems rather than accept what they suggest. The developmentalist, on the other hand, takes the distinction seriously. He accepts that when an intention exists, something intrinsically different from a doing exists. However, he also thinks there is something that much of contemporary philosophy has failed to notice (including straightforward theorists) – namely, that there is action in the broad sense. It is in this sense that an intention is an action: it is an action under development, not a mature action. Material processes – mental, physical, and bodily – instantiate (parts of) action-types at immature stages of development. Let us see how this solves our three problems.

4. Prospective intention

The first problem for the straightforward theory came from the following example. Suppose Betty is booking a flight to Nepal with the intention to climb Mt. Everest. Betty, therefore, intends to climb Mt. Everest. According to the straightforward theory, to intend to do A is to be doing A. Thus, since Betty intends to climb Mt. Everest, she is climbing Mt. Everest. But this is absurd. She is not, while she is booking her flight to Nepal, *climbing* anything.

This is a perfectly ordinary case of preparation: an agent takes a preparatory step with an intention to do A (so she intends to do A), but she is not doing A. The action, the doing of A, is *prospective*. However, the straightforward theory makes preparation, and prospective intention more generally, impossible. Yet these are two central phenomena that any theory of intention should explain.

The developmental theory, however, has the resources to avoid this problem. According to it, an intention to do A is an action of type A under development. Thus, according to it, Betty has the intention to climb Mt. Everest because this intention is her Mt. Everest-climbing *under development*. Therefore, an action of climbing Mt. Everest (in the broad sense) exists. However, this existent action is only immature. It is not a mature climbing of Mt. Everest because, although her flight-booking is advancing her climbing of Mt. Everest, it is doing so by enabling her to be in a further developmental stage of her Mt. Everest-climbing and not by, more directly, completing the action. Therefore, an action of climbing Mt. Everest, *in the narrow sense*, does not exist. This, I think, is the intuition behind the problem. When a frog is a tadpole, there is a sense in which it is not yet a frog. It is not yet a mature frog – the thing with legs that hops around and croaks. With Betty, we notice that something analogous does not exist. A mature climbing of

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Mt. Everest does not exist – the thing that involves being on the mountain and making certain bodily movements. This mature action is prospective. As Betty books her flight, her Mt. Everest-climbing (in the broad sense) is a tadpole, an immature action with little resemblance to the mature action it will (if all goes well) develop into. Yet, it still exists.

This response may not satisfy some. They might say that if Betty's action of climbing Mt. Everest exists at all, then Betty is climbing Mt. Everest (even if this process is at an immature stage of development). An action, they will say, is something that, by its very nature, *is done*; therefore, if it exists, it is being done – i.e. the agent is doing it. And this is the real intuition behind the problem: Betty is simply *not* climbing Mt. Everest; thus no such action exists (broad or narrow).

However, this objection fails to fully appreciate the distinction between 'action' in the narrow sense and 'action' in the broad sense. Once we recognize this distinction, we should also recognize a corresponding distinction between 'doing' in the narrow sense and 'doing' in the broad sense. (In fact, the former pair seem mere nominalizations of the latter.) The difficulty with recognizing this, I think, is that the concept of *doing* itself is likely restricted to the narrow sense, and so the suggestion that there is a 'doing' in the broad sense is likely incoherent. But the developmentalist can sidestep this linguistic distraction by giving a more felicitous characterization of 'doing' in the broad sense (i.e. the de-nominalized verb that corresponds to 'action' in the broad sense).

If an agent is baking bread, then she is doing something. But if an agent is *preparing* to bake bread, she is not *doing* that action; rather, she is *developing* that action. If 'doing something' refers to a mature action yet there is such a thing as an immature action, then we need an expression that broadly refers to an action under development, which may be an immature or mature action. Let us then use 'developing something'. So our schematizations should be 'she is doing A' and 'she is developing A', where the former entails that the relevant action is mature while the latter does not.

So, in place of 'doing' in the broad sense, the developmentalist will use 'developing'. In other words, once we recognize the distinction between 'action' in the narrow sense and 'action' in the broad sense, we should also recognize the corresponding distinction between 'doing' (strictly speaking) and 'developing'. Doing is a kind of developing, corresponding to the fact that a mature action is a kind of action under development. By contrast, if an action is not mature, then it is not *being done*; rather it is merely *being developed*. Thus, since Betty's Mt. Everest-climbing, as she books her flight, is not mature, she is not climbing Mt. Everest – she is not *doing* it – but merely developing it.

This is a linguistically appealing solution to the linguistic worry that is uniquely available to the developmentalist.

In general, the developmentalist responds to our first problem by saying that, in cases of preparation, an action of type A *does* exist. However, it is not an action in the narrow sense (i.e. a mature action), and its existence does not

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imply that the relevant agent *is doing* it. Rather, the action is immature, and thus the agent is merely developing it. As the action's degree of development increases and the roles of its sub-actional parts shift to more direct completion of the action, it will eventually become true that the agent is doing it, because it will eventually become true that the action is mature. Therefore, although the developmental theory implies that, in cases of preparation, an action of type A exists, it preserves the intuition that, in such cases, the action in the narrow sense does not exist *and* the intuition that the relevant agent is not doing it.

This response solves the problem because for the developmentalist there is an intrinsic difference intending and doing, which is precisely what the counterexample suggests: something intrinsically different exists when Betty is merely preparing to climb Mt. Everest than when Betty is climbing Mt. Everest. The straightforward theorist, by definition, denies this. Even the staunch straightforward theorist can accept that actions develop, but she must deny that this accounts for the distinction between intending and doing because for her there is absolutely no distinction. The guarded straightforward theorist can also accept that actions develop but again must deny that this accounts for the distinction because for her the distinction is founded in an extrinsic property yet development is an intrinsic property. It must be extrinsic because what makes the straightforward theory straightforward is that when a token intention to do A exists nothing intrinsically different from a token action of type A exists. This is precisely what the counterexample is counter to. So the straightforward theorist cannot solve the problem, even if she accepts merely that actions develop.

However, solutions are possible from theories that account for the distinction in terms of some intrinsic property other than development. Below I very briefly canvas my doubts about some reasonable alternatives before returning, in the next section, to my main line of argument.

One natural proposal is to say that an action in the broad sense is an action in progress. In turn, an intention is an action in progress at an early point of progress, and a doing is an action in progress at a late point of progress. According to this response, the intrinsic property of progress can distinguish intending from doing. Thus, Betty is not climbing Mt. Everest because she has not made a lot of progress in her Mt. Everest-climbing, but she intends to climb Mt. Everest because she has made a little progress.

I doubt this response will work for two reasons. First, I doubt it will be able to explain important ethical and legal distinctions between intending and doing. For instance, merely intending to murder is intuitively less morally bad than fully attempted murder (even when the agent is fully committed throughout). But on the present proposal, intending to murder will be the same as fully attempted murder in all respects except that the agent will have progressed very little. It is hard to see how a mere lack of progress could account for the moral divide between a fully committed intention to murder and a fully followed-through but unsuccessful murder (Paul 2014). On the developmental theory, the ethical and

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legal distinctions will be explained by the differing roles of intention-subactions and doing-subactions.

Second, it is false that an intention is always an action in progress at an early point of progress. For instance, suppose that I am writing the word 'balloon', and on the arch of the 'n' my pencil snaps. When I am sharpening my pencil, I am not writing the word 'balloon', yet I am sharpening my pencil with the intention to write the word 'balloon'. My intention to write the word 'balloon' is my 'balloon'-writing in progress, yet my 'balloon'-writing is almost finished. So, the present proposal must be false. According to developmentalism, however, my intention to write the word 'balloon' is my 'balloon'-writing because my pencil-sharpening is enabling my 'balloon'-writing to be in the doing stage – that is, to be in a position to directly contribute to the completion of the word 'balloon'. The role played by my pencil-sharpening makes my 'balloon'-writing an intention, even when the latter is not at an early point of progress.

Another proposal is suggested by remarks of Elizabeth Anscombe ([1963] 2000).[8] In *Intention*, she talks about 'the break,' which is the point at which we are no longer willing to say that an agent is doing A because she is doing B but only that an agent is doing A in order to do B. In other words, the agent is doing A with the intention to do B, but it doesn't seem like the agent is doing B; she only intends to do B. Anscombe claims that 'the less normal it would be to take the achievement of the objective as a matter of course, the more the objective gets expressed *only* by "in order to"' (40). From this, we can formulate the following proposal. Actions in progress (presumably) have normal and abnormal parts. An intention is an action in progress constituted by an abnormal part, and a doing (or action in the narrow sense) is an action in progress constituted by a normal part. In Anscombe's examples, one is making tea and doesn't merely intend to make tea, when one is putting on the kettle, because putting on the kettle is a normal part of making tea. But one merely intends to make one's uncle change his will, when one is travelling to London, because travelling to London is not a normal part of making someone change his will (as, perhaps, sucking up to him is).

I think this proposal fails because an agent can be doing an action even if it is constituted by an abnormal part. This often happens when an agent invents an original way to perform an action. For instance, suppose I invent a machine that makes a sandwich by use of conveyer belts and pulleys powered by a pedal bike. I might then make a sandwich by pedalling a bike, but indeed that would be an abnormal way to make a sandwich. Nevertheless, I would be making a sandwich and not merely intend to make a sandwich.

Another proposal is suggested by remarks of Michael Thompson (2008). In *Life and Action*, he considers ways in which the expression 'S is doing A' may be logically stronger than the expression 'S is IMP to do A', where the latter is 'an action of type A is in progress by S' in the active voice. He suggests that 'S is doing A' has an 'ideal of "presence" … but it is a presence of the sort expressed

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by "now" and "at the moment", not that expressed by the present tense' (144). If an agent is doing A, then an action of type A is in progress by her now. If an agent merely intends to do A, then an action of type A is in progress by her in the future. So, when an agent merely intends to perform an action, it is in some sense presently progressing but in another sense in the future, while when the agent is doing it, the action is both presently progressing and in the present. From this, we can formulate the following proposal. Actions in progress possess a special form of temporality. An intention is an action in progress in the future, where this of that special form of futurity, and a doing (or action in the narrow sense) is an action in progress in the present, where this of that special form of presence.

My problem with this proposal is that it is simply not clear what this special form of temporality is, especially when Thompson also claims that a token action while it is in progress doesn't exist (137). Further, Thompson claims that the difference between 'S is doing A now' and 'S is doing A in the future' is evidence of this special form of temporality – for example, in the difference between 'I am baking bread now' and 'I am baking bread tomorrow'. Thompson claims that when we say the latter, we are saying that an action of type A (a bread-baking) is presently in progress but in another sense in the future. But a better explanation is available: when we say 'I am baking bread tomorrow', we are saying that a bread-baking-tomorrow is in progress. A bread-baking-tomorrow is simply a more specific type of action than a bread-baking, one that is required to be done or mature tomorrow. In general, we don't need a special form of temporality to explain the difference between 'S is doing A now' and 'S is doing A in the future'. The explanation is that these refer to two different action-tokens – namely, a token of *a doing of A now* and a token of *a doing of A in the future*.

Developmentalism is, I believe, the best way to solve the preparation problem.

5. Pure intention

The second problem for the straightforward theory came from the following counterexample. Ron, sitting at his desk at work on Monday, forms the intention to build a squirrel house on Saturday. It is true, then, that on Monday he intends to build a squirrel house. Suppose further that he never gets around to building the squirrel house on Saturday, and even more the intention never issues in any action. He doesn't, for instance, start clearing his schedule or drawing up a shopping list. Let us suppose that he does nothing but form the intention, and then on Tuesday he changes his mind. This is a case of *pure intending*. On Monday, Ron intends to build a squirrel house, but this intention is pure because there is no action he does *with* this intention, and the corresponding action itself (i.e. the squirrel-house-building) never manifests. However, according to the straightforward theory, since Ron intends to build a squirrel house, he is building a squirrel house. The problem is not simply that it seems obvious that, on Monday, Ron is

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not building a squirrel house. Rather, the problem is that there is *nothing* that Ron is doing out of this intention and so no action to identify the intention with. Thus, it seems that one can intend to do A without doing anything at all to bring it about. But this is impossible under the straightforward theory.

Some, like Richard Moran and Martin Stone (2011), have tried to respond to the pure intending problem by pointing out special logical features of imperfective aspect. First, statements with imperfective aspect, such as 'Harry was building a squirrel house' or 'Harry is building one', do not entail corresponding statements with *perfective* aspect, like 'Harry built a squirrel house'. (There isn't even a corresponding statement with perfective aspect and present tense.) The metaphysical upshot of this is that an action can be in progress even if it never completes. For example, Harry can be building a squirrel house even if he only gets the walls up and drops dead. Second, statements with imperfective aspect do not entail present constitution. The statement 'Harry is building a squirrel house', for instance, does not entail that for any x, there is an x such that x constitutes Harry's process of squirrel-house-building. An action, that is, can be in progress (in a certain sense) even if nothing right now constitutes its advancement or even maintenance. The action may be *in hiatus*, we might say. For instance, it may be true that Harry is building a squirrel house, even as its pieces sit in the garage and he sits drinking coffee and reading the paper. If asked about his present projects, he might say, 'I am building a squirrel house', and this would be true (Falvey 2000).

Moran and Stone use these two metaphysical insights about action to respond to the pure intending problem. They claim that, on Monday while at work sitting at his desk, Ron *is* building a squirrel house. However, his action is both incomplete and in hiatus. Therefore, even though all Ron has done is form the intention to build the squirrel house, his action is in progress. Yet, nothing right now constitutes its advancement or maintenance; so it is in progress but only in the way that actions in hiatus are. And, by hypothesis, the action never completes, since Ron changes his mind on Tuesday. But this is possible because an action can be in progress even if it never completes. So, a pure intention is simply an incomplete, in hiatus, but in progress action.

The problem with this response is that it insists that Ron is building a squirrel house, but as we saw in the previous section, this is false. Ron's action is prospective. In other words, because this response embraces the straightforward theory, which cannot explain prospective action, it cannot help us explain pure intending either.

The developmental theory, however, can incorporate Moran and Stone's insights to deliver an effective explanation of pure intending. According to the developmental theory, Ron's squirrel-house-building is not a mature action but an immature action under development. But an action under development is still, by its very nature, in progress. After his decision, Ron's squirrel-house-building

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under development never grows, advances, or develops further; however, it is nevertheless in progress but only in the way that actions in hiatus are. It is like a bud that never blossoms. For the developmentalist, forming an intention is not putting oneself into a state but putting one's action into a further developmental stage. When Ron decides to build a squirrel house, he moves his action of squirrel-house-building out of the want stage of action development and into the intention stage. From here the action is in hiatus until Ron gives it up.

In general, then, a pure intention is an action under development in hiatus that never grows, advances, or develops further. Thus, even in cases of pure intending, an action exists although nothing right now constitutes its advancement or maintenance. It is simply an immature action under development in hiatus.

Unfortunately, this explanation faces an objection that Moran and Stone's does not. Recall that their insights flowed from observations about imperfective aspect. For instance, 'he is doing A' can be true, even if nothing right now constitutes the advancement or maintenance of an action of type A. This suggests that the action can exist even if nothing right now constitutes its advancement or maintenance. The developmentalist claims, by contrast, that Ron is not building a squirrel house. Rather, he merely intends to build a squirrel house. However, 'he intends to do A' does not have imperfective aspect. It does not represent the action of type A as in progress but instead as the object of the intention. Therefore, the metaphysical insights of imperfective aspect do not apply to intentions, and thus it is not at all clear whether or how Ron's immature squirrel-house-building is in hiatus.

This objection is what compels Moran and Stone to insist that Ron is building a squirrel house. For if he is, even in the weakest possible way, then we can use the metaphysical insights of imperfective aspect to explain pure intending. If Ron merely intends to build a squirrel house, then, it would appear, we cannot.

I think we should insist, with the developmentalist, that Ron is not building a squirrel house and reserve the schema 'he is doing A' for cases of mature actions in progress. The developmentalist should respond, instead, that contrary to appearances, 'he intends to do A' *does* have imperfective aspect. I cannot fully argue for this here,[9] but I will say that there is little reason to think that English always represents imperfective aspect with a present participial. Rather, it is perfectly plausible that when, in English, we represent an agent's present, in progress, mature action, we bind an infinitival verb to a subject by using the verb's present participial and the verb 'to be' – e.g. 'she is baking bread'. *But* when, in English, we represent an agent's present, in progress, *immature* action, we bind an infinitival verb to a subject by using simply the verb's infinitival form and the relevant stage-verb – e.g. 'she intends to bake bread'.

Thus, for the developmentalist, an intention is something that is, by its very nature, in progress. So the developmentalist is not denying that an action, when it is a mere intention, is in progress. He is merely denying that an action, when

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it is a mere intention, is being done. An action is being done if it is in progress and mature, but it is merely in progress or, more precisely, in progress in another way (namely, *being developed*) if it is in progress and immature. Thus, the developmentalist can accept the metaphysical insights about an action in progress and respond to the pure intending problem in a similar way to Stone and Moran: a pure intention is an incomplete, in hiatus, but in progress, *immature* action under development.

Therefore, on Monday, Ron's squirrel-house-building is in progress but he is not building a squirrel house. His squirrel-house-building is under development yet immature. At this moment, in addition, it is in hiatus and thus nothing right now constitutes its advancement or maintenance.

One might object that, for Ron's squirrel-house-building to be in progress while it is in hiatus, Ron must be in a state – a state that persists throughout the hiatus and continues to make it true that Ron is developing a squirrel-house-building, even as he attends to other matters.[10] But this is not true. Ron decided to build a squirrel house, and this (among being in the appropriate circumstances) made it the case that he was developing a *squirrel-house-building*. Given that his action is of that type, it is *incomplete*: there is more to come, if all goes well, according to that type of action. It is for this reason that Ron's squirrel-house-building remains in existence but in hiatus. Because Ron decided on that type of action, his action remains incomplete until he gives it up or completes it. He does not need to be in a state for his action to have started but not completed.

The developmentalist can explain pure intending.

6. Impossible intention

The third problem for the straightforward theory came from the following counterexample. Suppose Archie is writing a formula with the intention to square the circle. However, as was proven in 1882, squaring the circle is impossible (since π is transcendental). Therefore, Archie intends to square the circle, but he is not squaring the circle because it's *impossible* for him to be doing that. According to the straightforward theory, since Archie intends to square the circle, he is squaring the circle, but that's impossible.

If the straightforward theorist tries to claim that Archie is, despite appearances, squaring the circle, we need an explanation of how this could be. She might try to point to the fact that an action can be in progress even if it never completes and claim that Archie's case is an extreme instance of this. Archie's circle-squaring will *never* complete because it's simply impossible for it to do so.

The problem with this response is that Archie's circle-squaring doesn't seem to be in progress at all. Since the characteristic completion change of a circle-squaring is something logically impossible, not a single step that Archie takes could be advancing such an action. Circle-squaring seems to be a type of action

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that is logically impossible to instantiate and thus could never even begin. But surely one can intend an impossible type of action, when one is unaware that the action is in fact impossible.

For the developmentalist, this problem reveals a constraint on *doing* but not intending. It must be, if we take this problem seriously, a requirement on doing an action under development that its sub-actions be successfully making some sort of progress. Thus, it is impossible to *do* a logically impossible type of action. And since, for the straightforward theorist, there is no intrinsic difference between doing and intending, this means she must deny the possibility of intending a logically impossible type of action. But for the developmentalist, there is an intrinsic difference between doing and intending, and therefore he need not suffer the same fate. He can claim that successful advancement is a requirement on doing but not intending.

Here's how: an action under development can merely grow. That is, it can be constituted by narrower actions that themselves are making progress but that are not successfully contributing to overall progress. For instance, Archie may be calculating and drawing and measuring, and *these* actions may be successfully advancing and even completing. But as parts of his circle-squaring under development, they are not at all contributing to the advancement of that action. His circle-squaring under development is growing, gaining parts (e.g. the calculating, drawing, and measuring), but not advancing.

Now if successful advancement were required to be a part of an action under development, then it would be impossible for a logically impossible type of action to have any parts at all. But successful advancement is too strong a requirement for parthood. All that seems to be required (all else being equal) is for the sub-action to have a role to play in the development of the wider action under development. It may fail at playing this role, but having the role is enough to make it a part (all else being equal). So even if successful advancement is required to *do* an action under development, it is not required to be a part of an action under development, and thus an action under development can grow even if it is not advancing. Therefore, a logically impossible type of action can be under development even if it is impossible to advance, because it is not impossible for it to grow.

Thus, Archie is not a counterexample to the developmental theory. His intention to square the circle is an immature circle-squaring. It is growing, gaining parts, even though it is impossible to advance. Archie is, however, a counterexample to the straightforward theory, since Archie is not squaring the circle. *Doing* so is impossible.

7. A non-starter?

We have seen how the suggestion that an intention is an action under development can respond to immediate objections to the idea that an intention to do

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A is an action of type A, but should we even entertain the possibility of putting intention in the category of action? One might object that the developmental theory must be false, since an action has essential properties that an intention simply does not have. An action initiates, unfolds over time, moves through phases, and moves closer to completion and further away from initiation. As Moran and Stone (2011) put it, actions 'involve a diminishing future and a swelling past' of phases. By contrast, the objection goes, intentions do not. Consider the intention to swim across the river. When one is swimming across the river, one can be just starting one's action of swimming across the river or halfway through it or about to finish it. One cannot, however, be just starting one's intention to swim across the river or halfway through one's intention or about to finish one's intention. An intention, it seems, does not involve a diminishing future and a swelling past of phases. It is always complete, unchanging, and merely persists through time rather than progessing. Thus, an intention cannot be an action as the developmental theory suggests.

This objection conflates a particular intention with the object of a particular intention. Sometimes we use 'an intention' to refer to a particular, datable thing. On this use, it is a nominal of the verb 'to intend'. Thus, if, at a particular time, an agent intends to do A, we can nominalize that which is attributed to the agent and say 'the agent has an intention to do A'. Here, 'an intention' refers to something particular and datable – the agent's token attitude of intending, we might say. Other times, we use 'an intention' to refer merely to the object of a token intention. On this use, 'an intention' refers to a type of action – something general. Thus, if, at a particular time, an agent intends to do A, we can specify what she intends by saying 'the agent's intention is to do A'. Here, the agent's intention is identified with a type of action (namely, to do A), but we have not nominalized 'to intend' and we do not mean to be referring to something particular and datable. What the agent intends – to do A – is something others could intend and something she could intend on different occasions through distinct token intentions.

Therefore, on one interpretation, the objector's claim that an intention does not unfold or move through phases means that an agent's *token intention* does not unfold or move through phases. On the other interpretation, the objector's claim means that *the object* of an agent's *token intention* does not unfold or move through phases. On the latter interpretation, the claim is plainly true and the objection is sound. The object of a token intention is a type of action, and types of action do not unfold or move through phases. Token actions do. When a type of action is instantiated, it unfolds and moves through phases. However, it does not follow from this that the developmental theory is false. This is because this theory is about token intentions, not the objects of token intentions. According to the developmental theory, a token intention is a token action. Thus, the claim that the object of a token intention does not unfold or move through phases is consistent with the developmental theory.

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On the other interpretation, the objection is about token intentions and thus its claim is that a token intention is not a token action. If this objection were sound, it would immediately follow that the developmental theory is false. However, on this interpretation, the basis for this claim is that a token intention does not unfold or move through phases, *which is not at all obvious*. The initial attraction of the objection, I suspect, is based on conflating the two interpretations. But now that we have distinguished the two, it is not clear why we should think that a token intention does not unfold or move through phases. And if any remaining attraction to the objection comes from a prior commitment to the thought that an intention is a state, then the objection begs the question. So, we are left to wonder why we should think that a token intention does not unfold or move through phases. It is reasonable to entertain the developmental theory.

8. Conclusion

Using the developmental theory, then, we can explain prospective intention, pure intention, and impossible intention without the problems faced by the straightforward theory. An initial want is the bud of action. As planning and preparation begin, a want develops into a prospective intention, an action-blossom. Planning actions and preparatory steps constitute an action under development at the intention stage. What remains prospective is the mature action it will become (if all goes well). When nothing right now constitutes its advancement or maintenance, the intention is in progress but only in a hiatus-like way. The intention is pure. When the characteristic completion change of the action-type is logically impossible, more steps may be taken and the intention may continue to grow, gaining parts, but it will never advance and never develop into a mature action. But when change is possible and all goes well, the intention develops into an attempt and then a doing – the fruit of action. Finally, it completes and evaporates into the past. That is the life of an action.

This theory does not hold that if an agent intends to do A, then she is doing A. It also does not hold that there is no intrinsic difference between intending and doing. However, it does hold that an intention is an action and, thus, is compatible with the mereological account of rationalization. The developmental theory vindicates the mereological account.

Notes

1. See especially George Wilson (1989) and Scott Sehon (1997) on the problem of causal deviance, and David Velleman (1992) on the problem of the missing agent and Helen Steward (2012) on both.
2. When I speak about action and doing, I mean, more precisely, *intentional* action and doing something *intentionally*. I omit the words 'intentional' and 'intentionally' simply for ease of reading. The theories given below, thus, presuppose but remain as neutral as possible on a theory of intentional action.

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3. Sarah Paul (2014, 103) describes the theory thusly: '[when] we resort to apparently psychological descriptions of an agent such as "he intends to" or "he is trying to", these do not in fact function to refer to distinctive mental states or to behavior that falls short of doing what one had in mind. Rather, they serve to characterize the agent as being already in the process of doing, but where little or no progress toward success has been made'. Kieran Setiya (2011, 176) understands the theory as saying that 'there is no fundamental contrast between intending and doing' and Richard Moran and Martin J. Stone (2011, 70) that 'intention in a future action does not differ fundamentally from intention in (a present) action, or from intentional action'.
4. The idea for this theory comes from Warren Quinn (1984). One notable point of departure is that developmentalism does not require Quinn's gradualist metaphysics. For the developmentalist, an action under development is not a partially existing action but a fully existing, incomplete, developing action.

   I am also heavily inspired by Thompson (2008). One notable point of departure here is, again, a metaphysical one. For Thompson, an action under development – that is, a particular thing, a token of an action-type, that moves through developmental stages – never exists: 'the transition to a genuine particular arises only with "I did A"' (137). The developmentalist claims that, from the moment one wants to do A, a particular thing, an action of type A under development fully exists. This particular thing, however, like a zygote, is at a certain developmental stage. Furthermore, Thompson never claims that his table (99) represents developmental stages.
5. See Helen Steward (2013) for a metaphysics of action that a developmentalist would embrace.
6. It is important to see that, for the developmentalist, the action under development is the analogue to the cherry and not the process of the cherry's development. There is the potential for confusion here because an action under development is a process. When an action under development develops, both the process constitutive of the action under development exists and the process of its development exists. But these two processes are distinct. Consider a bread-baking under development, this is (among other things) a change from there being no baked bread to there being baked bread. The development of a bread-baking, by contrast, is a change from there being an undeveloped bread-baking to there being a fully-developed bread-baking. This is a higher-order process. There is little potential for confusion in the cases of cherries and frogs because cherries and frogs are not processes. So the processes they undergo are not likely to be confused with them. But in the case of action, a process undergoes a process. Despite this, we should not confuse the first-order process – namely, the action itself – with the higher-order processes it undergoes – e.g. its development.
7. For the developmentalist, intentional action is explanatorily prior to intention. That is, a theory of what makes a material process (e.g. a mental, chemical, physical, or bodily process) an intentional action will help us explain what an intention is, not the other way around. In describing developmentalism, I am presupposing that the true theory of intentional action will tell us which processes are intentional actions, which processes are intentional sub-actions of wider intentional actions, and what roles those intentional sub-actions are playing in their wider intentional actions. For instance, it will tell us why some arm movement is an intentional sub-action of an intentional bread-baking and playing a certain developmental role. Thus, it can explain why some mental process of calculation or physical process of heating an oven or bodily process of arm movement (e.g.) amounts

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to an action under development at a certain stage and thereby amounts to an intention. In other words, a theory of intentional action will help explain what an intention is. Providing this theory of intentional action is beyond the scope of this essay, but it seems like such a theory will make reference to an agent's knowledge or beliefs (Anscombe [1963] 2000). This knowledge somehow links processes together in a means-end relationship and, for the developmentalist, gives them developmental roles.

8. This is Anscombe interpreted as a non-straightforward theorist. It may be true (and, I think, quite likely) that Anscombe is a straightforward theorist.
9. See Thompson (2008, 97–134) for a compelling case.
10. Thanks to an anonymous referee for pressing this objection.

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References

Anscombe, G. E. M. (1963) 2000. *Intention*. Cambridge, MA: Harvard University Press.

Bratman, Michael. E. 1999. *Intention, Plans, and Practical Reason*. Cambridge, MA: Harvard University Press.

Davidson, Donald. (1963) 2001. "Actions, Reasons, and Causes." In *Essays on Actions and Events*, 3–20. Oxford: Clarendon Press.

Falvey, Kevin. 2000. "Knowledge in Intention." *Philosophical Studies* 99 (1): 21–44.

Mele, Alfred R. 1992. *Springs of Action: Understanding Intentional Behavior*. Oxford: Oxford University Press.

Moran, Richard, and Martin J. Stone. 2011. "Anscombe on Expression of Intention: An Exegesis." In *Essays on Anscombe's Intention*, edited by Anton Ford, Jennifer Hornsby, and Frederick Stoutland, 33–75. Cambridge, MA: Harvard University Press.

Paul, Sarah K. 2013. "The Conclusion of Practical Reasoning: The Shadow between Idea and Act." *Canadian Journal of Philosophy* 43 (3): 287–302.

Paul, Sarah K. 2014. "Embarking on a Crime." In *Law and the Philosophy of Action*, edited by Enrique Villanueva, 101–124. Amsterdam: Editions Rodopi B.V.

Quinn, Warren. 1984. "Abortion: Identity and Loss." *Philosophy and Public Affairs* 13 (1): 24–54.

Sehon, Scott R. 1997. "Deviant Causal Chains and the Irreducibility of Teleological Explanation." *Pacific Philosophical Quarterly* 78 (2): 195–213.

https://doi.org/10.1080/00455091.2017.1414524 Published online by Cambridge University Press

Setiya, Kieran. 2010. *Reasons without Rationalism*. Princeton: Princeton University Press.
Setiya, Kieran. 2011. "Knowledge of Intention." In *Essays on Anscombe's Intention*, edited by Anton Ford, Jennifer Hornsby, and Frederick Stoutland, 170–197. Cambridge, MA: Harvard University Press.
Setiya, Kieran. 2014. "Intention." *Stanford Encyclopedia of Philosophy*. http://plato.stanford.edu/entries/intention/.
Steward, Helen. 2012. *A Metaphysics for Freedom*. Oxford: Oxford University Press.
Steward, Helen. 2013. "Processes, Continuants, and Individuals." *Mind* 122 (487): 781–812.
Thompson, Michael. 2008. *Life and Action: Elementary Structures of Practice and Practical Thought*. Cambridge, MA: Harvard University Press.
Velleman, David. 1989. *Practical Reflection*. Princeton, NJ: Princeton University Press.
Velleman, David. 1992. "What Happens When Someone Acts?" *Mind* 101 (403): 461–481.
Wilson, George. 1989. *The Intentionality of Human Action*. Palo Alto, CA: Stanford University Press.

https://doi.org/10.1080/00455091.2017.1414524 Published online by Cambridge University Press