A Developmental Theory of Intention

by

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ABSTRACT

In this dissertation, I advance a developmental theory of intention, according to which an intention is an action under development. In chapter 1, I define and explain the major theories in contention and offer some motivations for each. The theory that an intention is a belief (cognitivism) can help us explain practical knowledge, the theory that an intention is a sui generis mental state (DPA non-cognitivism) can help us explain the distinctive role of intention, and the theory that an intention is a process (radicalism) can help us explain rational teleology.

In the rest of the dissertation, I try to show what considerations could drive us away from cognitivism and DPA non-cognitivism and toward radicalism. In Chapter 2, I show how cognitivism makes forming an intention into wishful thinking. DPA non-cognitivism has the advantage of avoiding this problem, but it maintains the idea that intention is a mental state and (most naturally) explains acting with an intention in terms of causation by a state. In Chapter 3, I show how this explanation faces the
famous problem of causal deviance. I argue that this problem cannot be solved by a retreat to cognitivism as it is often understood, since the source of the problem is the assumption that an intention is a state and cognitivists often share this assumption. This, together with the previous problem, is why we should consider a non-cognitivist radicalism.

In Chapter 4, I present and motivate what I take to be the best non-cognitivist radicalism: a developmental theory of intention. This theory, I argue, can overcome serious objections to a crude view—naive action theory—according to which an intention is an action in progress. In Chapter 5, I show how a developmental theory can avoid the problems that plague cognitivism and DPA non-cognitivism, and I show how it can help explain practical knowledge and the distinctive role of intention, thereby undercutting the motivation for accepting cognitivism or DPA non-cognitivism in the first place.
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INTRODUCTION

In his “Actions, Reasons, and Causes,” Donald Davidson (1963) famously argued that when one acts for a reason, one’s action is caused by a belief and a pro-attitude. If I flip the light switch for a reason, then there is some belief I have, like the belief that by flipping the switch, I will turn on the light, and some pro-attitude, like the desire to turn on the light, and the belief and pro-attitude together cause my arm to go up and flip the switch. Later Davidson (1978) added to this picture a special and distinctive pro-attitude—an intention. When one acts, in the full-blooded sense of acting intentionally, for a reason, one’s action is caused by a belief and an intention—a pro-attitude distinct from mere desire. Davidson argued that an intention to do A was not a belief that one will do A or an ordinary desire to do A but an all-things-considered desire to do A.

Michael Bratman (1999) modified this picture. Although he accepted that an intention was neither a belief nor an ordinary desire, he rejected that it was an all-things-considered desire. Instead, Bratman argued, an intention must be a sui generis mental state. This was the best way to explain the distinctive causal role that intention has and the distinctive norms to which intentions are subject. The resultant picture of full-blooded action has been powerful and influential.

But it has not been without critics. David Velleman (1989), for instance, challenged the claim that an intention was not a belief. He accepted, with Davidson, that an intention was special and distinctive in some important way, but argued that it could still be a special and distinctive kind of belief. He suggested that an intention was a belief that one will do A (or try to do A) but a special belief that represented itself as self-fulfilling and self-justifying. Together with a desire to know what one will do (which all agents have) such a belief could play the special role of intention. This also, Velleman thought, could explain something that Bratman and Davidson had neglected—namely, what Anscombe (2000) called ‘practical knowledge’. Agents have a spe-
cial sort of knowledge about what they do, and it was not clear that the Bratman-Davidson view could explain this.

Keiran Setiya (2008) seconded this, arguing that cognitivism about intention (the view that an intention is a belief) was the best way to explain practical knowledge. On his view, an intention could not be (as it was for Bratman and Davidson) a wholly non-cognitive state. This could not explain (or not explain very well) how, in forming an intention, one comes to have (if all goes well) a special kind of knowledge. Setiya suggested that an intention to do A is a desire-like belief that one will do A. This suggestion rejects much of Velleman’s complicated story: the belief does not represent itself as self-fulfilling and self-justifying, and there is no desire to know what one will do. For Setiya, the state of intending simply has a complex causal role—one that is motivational (as Bratman and Davidson would accept) as well as cognitive (which they would deny).

Recently, Sarah Paul (2009a) has challenged the whole Setiya-Velleman strategy. According to this strategy, despite the power of the Bratman-Davidson view to explain the distinctive role and norms of intention, it is on shaky ground because it has no good explanation of practical knowledge. Paul, in her “How We Know What We’re Doing,” challenges this. She shows how a non-cognitivist like Bratman or Davidson could explain practical knowledge. Roughly, she suggests that an intention to do A is not a belief that one will do A; however, the belief that one will do A can be easily inferred from the belief that one has the intention to do A. This is why, in forming an intention, one comes to have a special kind of knowledge. Once the intention is formed, one quickly believes one has that intention and in turn infers that one will do it. This picture, of course, does not explain everything that Setiya or Velleman might want, but it explains considerably more than had been suggested. Thus, with Paul’s picture, the Bratman-Davidson view looks considerably less shaky.
From Davidson to Paul, there is a clear line of thought and debate. Outside of it is Michael Thompson (2008). In response to Davidson, Thompson says, “we should beware of searching for illumination in the thought of intention and wanting as states—and thus also, for example, in the thought of rationalization as involving a sort of causality appropriate to states” (p.133). Thompson rejects, what everyone above assumed, that an intention is a state. And further he rejects, also what everyone above assumed, that when one acts for a reason, one’s action is caused by something wholly distinct from it—that something entirely separate and different in kind from the action (a mental state or group of states) is responsible for bringing about and sustaining the existence of the action. Instead, Thompson argues that an intention is in “the [categorial] space of kinēsis” (p. 134). It is a movement or process or change of state, just like an action. And when one acts for a reason, one’s action is simply a subordinate part or phase of some wider process, which might be an intention (since an intention is a process) or a want, an attempt, or another action (since these are all processes too).

Although Thompson’s response is interesting, it is not clear how it engages with the above line of thought and debate. Bratman and those who follow him are chiefly motivated to explain the distinctive role of intention and the distinctive norms to which it is subject. Velleman and those who follow him are chiefly motivated to explain practical knowledge. Thompson says very little about how his theory might help explain these phenomena. Further, it is not clear what problems the above views face that would drive one to seek an alternative and in particular such a radical alternative. The assumption that an intention is a state is an assumption that fits well with many other established views outside of action theory (e.g., in the philosophy of mind, philosophy of language, and even contemporary cognitive science). It should be clear why we need to give it up.

This dissertation is an attempt to clear things up. In chapter 1, I define and explain the key positions in contention and offer some motivations for each. In short, the
claim that an intention is a belief (cognitivism) can help us explain practical knowledge, the claim that an intention is a *sui generis* mental state (DPA non-cognitivism) can help us explain the distinctive role of intention, and the claim that an intention is a process (radicalism) can help us explain rational teleology. These motivations put the three views on the table.

In the rest of the dissertation, I try to show what considerations could drive us away from cognitivism and DPA non-cognitivism and toward radicalism. In Chapter 2, I raise a well-known problem for cognitivism. Roughly, cognitivism makes forming an intention into wishful thinking. DPA non-cognitivism has the advantage of avoiding this problem. However, DPA non-cognitivism maintains the idea that intention is a mental state and explains acting with an intention in terms of causation by a state. In Chapter 3, I raise a well-known problem for explaining acting with an intention in this way—namely, the problem of causal deviance. I argue that this problem cannot be solved by a retreat to cognitivism as it is often understood. The source of the problem is the assumption that an intention is a state, and cognitivists often share this conservative assumption. This, I claim, is why we should consider radicalism. To avoid the problem of causal deviance, we should consider rejecting the assumption that intention is a state. And to avoid the problem of wishful thinking, we should resist the idea that intention is a belief. We should look in the direction of a radical non-cognitivism.

In Chapter 4, I present and motivate what I take to be the best radical non-cognitivist view: developmentalism, according to which an intention is an action under development. This view, I argue, can overcome serious objections to a crude view—naive action theory—according to which an intention is an action in progress. In Chapter 5, I show how this view avoids the problems that plague cognitivism and DPA non-cognitivism. Further, I show how developmentalism can help explain practical knowledge and the distinctive role of intention. This undercuts the motivation for accepting cognitivism or DPA non-cognitivism in the first place. Again, my claim
is not that, in the end, developmentalism is the true view. At least, this is not my principal claim. Rather, my claim is that developmentalism is a contender. In the end, I hope to have shown that radicalism does engage with the above line of thought and debate and that, despite its radicalness, it has its own advantages and the promise of explanatory power.
CHAPTER 1

But I’m just a soul whose intentions are good
Oh Lord, please don’t let me be misunderstood
– Nina Simone

Introduction

In this dissertation, I formulate a developmental theory of intention according to which an intention is an action under development. I argue that this is a promising theory with significant explanatory advantages over today’s leading theories, which are cognitivism—according to which an intention is a belief—and DPA non-cognitivism—according to which an intention is a sui generis mental state distinct from both belief and desire. To do this, I argue that the developmental theory can help us explain future-directed intention better than cognitivism and that it can help us explain acting with an intention better than DPA non-cognitivism. These are the advantages that the developmental theory has over those theories.

Despite these advantages, the developmental theory contains an unorthodox claim—namely, that an intention is not a mental state but a certain kind of action. Given the degree to which this departs from much respectable and well-argued contemporary philosophy, such an unorthodox claim will signal a cause for worry. To mitigate this, I will argue that accepting this unorthodox claim can still help us explain a central phenomenon that cognitivists want to explain—namely, practical knowledge—and a central phenomenon that DPA non-cognitivists want to explain—namely, the distinctive role of intention in human lives. I will not be able to do this conclusively, but I will try to say enough to show that the developmental theory holds explanatory power.

More importantly, to mitigate the worry that the developmental theory is too radical, I will show how it is a major improvement over a more familiar theory that shares the same unorthodox claim. This theory is naive action theory (NAT), accord-
ing to which an intention is an action in progress. (More precisely, according to NAT, to intend to do A is to be doing A.) Because both NAT and the developmental theory share the claim that an intention is not a mental state but a kind of action and NAT faces some serious objections, many might worry that the developmental theory is just as unpromising as NAT. I will argue, on the contrary, that the developmental theory avoids the objections faced by NAT while gaining the explanatory advantages that come with the unorthodox claim.

The structure of this argument is as follows. In Chapter 2, I present a well-known problem for cognitivism. Roughly put, the problem is that cognitivism makes intending into wishful thinking. This pushes us to look for a non-cognitive alternative. The popular alternative is DPA non-cognitivism. In Chapter 3, I present a well-known problem for causal theories of acting with an intention (the problem of causal de-viance) and argue that this is a problem for DPA non-cognitivism and any theory according to which an intention is a state. This pushes us to look for a non-cognitive alternative according to which an intention is not a state. The familiar theory able to meet this criterion is naive action theory. In Chapter 4, I present three serious objections to NAT and argue that the developmental theory can avoid them. A non-cognitive developmental theory of intention is the most promising alternative to cognitivism and DPA non-cognitivism. In Chapter 5, I return to the problems raised in Chapters 2 and 3 and show how the developmental theory better explains the relevant phenomena. I also show how, at the same time, the theory doesn't lose the explanatory benefits of cognitivism and DPA non-cognitivism.

The purpose of this chapter is to prepare us for everything just mentioned. In outline, we need a familiarity with the topic—intention—and with the three major theories I will address—namely, cognitivism, DPA non-cognitivism, and naive action theory. More specifically, we need a detailed enough picture of cognitivism and DPA non-cognitivism in order to understand the problems they face. To that end, I will present a simplified version of these views. Although many views in the literature will
diverge to greater and lesser extents from the simplified versions I present here, my aim is to make salient the claims they do have in common and from which the problems arise. We also need a preliminary sketch of naive action theory to see how it competes with cognitivism and DPA non-cognitivism. This will also serve to set up Chapter 4, where we will criticize NAT and improve upon it.

With this in mind, this chapter will proceed as follows. In Section 1, I will present the relevant phenomena that characterize intention. Here I will also highlight two central phenomena that any adequate theory of intention must help explain. This will help us understand the three major theories by considering how each theory would explain these phenomena. That will be the task of Section 2. In the end, we should have the preparation needed for the arguments to come.

1. Our topic

1.1 Appearances of intention

Intentions are ubiquitous in everyday life.

You bake a cake for your friend’s birthday and decide to add nuts. “A delicious addition,” you think. As it turns out, your friend is allergic to nuts—a fact she neglected to tell you. She eats the cake and goes into anaphylactic shock. You feel terrible, but your intention was good. You didn't intend to hurt your friend but to bake her a delicious treat. You go to the airport to catch a plane to London, England. You see a gate marked “London” and board the plane. Unbeknownst to you, the plane you just boarded is flying to London, Ontario. Your intention was to fly to London, England—not to fly to London, Ontario. You enter the gym determined to exercise but as you stand staring at all the intimidating equipment, you can’t work up the motivation to do it. Your intention was to exercise but you failed. On Monday, you have the intention to see a movie on Saturday, but a friend calls with tickets to your favourite band. So, you change your mind—that is, you abandon your previous intention and adopt a
new one. You now intend to attend the concert on Saturday. These examples high-
light the difference between intention and action. In the first two, you intend one 
thing but do another, and in the last two, you intend one thing but never do it. Inten-
tion and action come apart in various ways.

Despite this, intention and action are intimately related. Often, if one intends to do 
something, it is likely that she'll do it—at least, when the action is easy, routine, or 
simple. For instance, if I intend to meet you for lunch downtown, you will expect 
that I'll be there, given that this is something that ordinary people know how to do 
and do all the time. Even simpler, if I have the intention to flip the pancake once it 
bubbles (as I stare at the pan waiting for it), it is likely I'll flip it. And even simpler, if 
I form the intention to take a breath now, it is likely that I'll immediately do it. In-
tentions often lead to and issue in actions.

Intentions also explain actions. Suppose we come across Norman in the hardware 
store buying some wood. If we are friendly acquaintances of Norman, it would not be 
uncommon to ask, “why are you buying wood?” In other words, we are asking Nor-
man to explain his wood-buying to us. And a perfectly appropriate answer, from him, 
would be “I intend to build a table.” Norman has the intention to build a table, 
though he is not building a table right now. He will, most likely, build a table in the 
near future. But right now, his intention to build a table helps explain his wood-buy-
ing. He is buying wood in order to build a table. Intentions have a special, ‘teleologi-
cal’, explanatory connection to actions.

Apart from leading to and explaining actions, intentions play some other important 
roles in our lives. First, they seem to determine the type under which a particular ar-
tifact falls. For instance, whether an object is a sock or a sock-puppet seems to be 
partly determined by how its creator or user intends it to be used. Intentions also 
seem to determine the meaning of speech acts. If I say ‘take care of him’, I might 
mean ‘kill him’ or ‘keep him healthy’, depending on my intention.
Second, some—most famously Thomas Aquinas (13th c)—have thought that intentions are relevant to the moral permissibility of actions. For instance, it is thought that the action of a strategic bomber who merely foresees that he will cause civilian deaths but does not intend those deaths is easier to justify than the action of a terror bomber who intends civilian deaths in order to weaken the resolve of the enemy. If something like this is right, then the nature of intention has implications for morality and moral thinking.

Last, in criminal law, the nature of an agent’s crime, her culpability, and the severity of her punishment depend on her intentions.

In sum, intention matters.

1.2 Two central phenomena

A theory of intention, as I understand it, is a set of propositions about intention meant to help explain various phenomena characteristically related to intention. In the previous section, I mentioned a number of phenomena that a theory of intention could help explain, but in this dissertation, the focus will be much narrower. We will be concerned with two central phenomena: acting with an intention and future-directed intention. We will consider various theories (and thus competing claims about intention) and with each, we will attempt to characterize these phenomena. The aim will be to assess how well these characterizations help explain the phenomena. So let us first note these phenomena.

The first is acting with an intention. Suppose you are kneading dough. That is, you are moving your arms and hands about in the ways characteristic of kneading and the bread-dough is folding and flattening. Often, such an action will be, intuitively speaking, aimed at something further that is intended. In this case, it would normally be the action of baking bread. We might put it by saying ‘you are kneading dough in order to bake bread’. And normally this action would also be what you intend, i.e. you
would have the intention to bake bread. In such a case, your intention to bake bread is the intention with which you are kneading the dough. Put another way, your intention to bake bread is issuing in and guiding your kneading. In general, when one acts with an intention, the intention (given by one description) is related in a special way to the action (given by a different description). We refer to this relation with the expressions ‘aimed at’, ‘issue in’, and ‘guide’. A theory of intention should help us understand this special connection.

The second central phenomenon we want a theory of intention to explain is future-directed intention. Suppose you have the intention to attend a concert on Saturday, but it’s Monday and you’ve got the whole work week ahead of you. This is a future-directed intention because what you intend is something that (if all goes well) will happen in the future. Attending a concert is not something you are doing right now but something you will do (you hope) on Saturday. By contrast, a present-directed intention has something you are doing right now for its object. Consider, for instance, the intention to bake bread with which you knead dough. Here your intention is directed at something you are currently doing—namely, you are baking bread. A theory of intention should help us understand the contrast here and, in particular, the future-directedness of intention.

2. Theories

2.1 Belief or distinctive practical attitude

According to cognitivism, an intention is a belief. More precisely, to intend to do A or, equivalently, to have the intention to do A is to have a special kind of belief about an action of type A. For example, to intend to bake bread is to have a special kind of belief about baking bread. For most cognitivists, an intention-belief is special in that it, characteristically, motivates one to act. This is how it differs from an ordinary belief.

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For instance, normally when one has the belief that Ottawa is the capital of Canada, this belief, by itself, is a mere, inert representation, contributing in no way to motivating what one does. By contrast, normally when one has an intention-belief about (e.g.) baking bread, one is motivated to act in some corresponding way.

This helps to explain our central phenomena in the following way. On a straightforward version of cognitivism, a future-directed intention is a belief that one will do A, and a present-directed intention is a belief that one is doing A. When one does B with a future-directed intention to do A, one’s doing of B is motivated by the belief that one will do A. And when the intention is present-directed, one’s doing of B is motivated by the belief that one is doing A. For instance, when Martha is kneading dough with the intention to bake bread, her dough-kneading is motivated by her belief that she is baking bread. When, earlier, she was buying flour with the intention to bake bread, her flour-buying was motivated by her belief that she will bake bread. Thus, the future-directedness of an intention is explained by its content: it is a belief about the agent’s future actions. And acting with an intention is understood as being motivated by a special kind of belief.

According to a competing theory, DPA non-cognitivism, an intention is not a belief but a distinctive practical attitude. More precisely, to intend to do A is to have a sui generis mental state with an action of type A as part of its content. To intend to bake bread, therefore, is just that—a sui generis mental state with the characteristics of intention and with baking bread as part of its content. DPA non-cognitivists agree with cognitivists that an intention characteristically motivates one to act, but since they deny that an intention is a belief, they deny—contra cognitivists—that it is a special, motivating belief. Instead, DPA non-cognitivists are impressed by the distinctiveness of intention. An intention, they will insist, has characteristics that distinguish it from belief and all other types of mental state.

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2 Representative examples are Bratman (1987), Davidson (1978), and Mele (1992).
DPA non-cognitivism helps to explain our central phenomena in the following way. Like cognitivists, DPA non-cognitivists can claim that a future-directed intention has propositional content. Most straightforwardly, this content is not *one will do A* but *one has done A*. The content of a present-directed intention is the same. This is because the agent, in executing the intention, is aiming to make this proposition true—i.e., she is aiming to have done A. The difference between a future-directed intention and a present-directed one is not in their content but in their motivational role. A future-directed intention motivates one (among other things) to reason about how to do A, to form further, more specific intentions, to resist forming conflicting intentions, and to take preparatory steps, and a present-directed intention motivates one (among other things) to take those steps when the occasion arises. When one does B *with* a future-directed intention to do A or present-directed intention to do A, one’s doing of B is motivated by the corresponding state. Thus, the future-directedness of an intention is explained by its motivational role: it is a *sui generis* mental state with a pre-planning role, putting things in place with a view to a prospective action. And acting with an intention is understood as being motivated by a *sui generis* mental state with the characteristic motivational role of an intention.

In sum, the cognitivist and DPA non-cognitivist explanations of our central phenomena share a certain picture—namely, an intention is a propositional attitude that motivates action. Since cognitivists and DPA non-cognitivists disagree about what kind of propositional attitude an intention is, they disagree about what future-directedness consists in, but much of the rest of the picture remains the same.

A chief attraction of cognitivism is the explanation it can give of practical knowledge. When one comes to have practical knowledge, one characteristically comes to have knowledge about what she will do in a way distinct from theoretical knowledge about what she will do. With theoretical knowledge, one comes to know about what she will do on the basis of evidence and by aiming to match the content of one’s mind to the facts. With practical knowledge, by contrast, one comes to know about what
she will do not on the basis of evidence but by aiming to match the facts to the content of one’s mind. Consider the difference, for instance, between the boxer who comes to know that he will go down in the third round by considering the strength of himself and his opponent, thus assessing the likelihood of being knocked out in the third round, and the boxer who comes to know the same thing by deciding to throw the fight and let his opponent beat him. These are often thought to be two distinct ways of coming to know about what one will do, although the latter stands in need of explanation.

Cognitivists can explain practical knowledge by saying that an intention is a belief and that practical knowledge is embodied by such a belief, which (being an intention) is not characteristically formed on the basis of evidence. Practical knowledge is a special sort of knowledge embodied by an intention. As such, it is attained by forming an intention, i.e. by deciding. This explains (at least in part) why one comes to have practical knowledge not on the basis of evidence but by deciding. One forms a belief not on the basis on evidence but by deciding. Further, in deciding and hence forming an intention, one does not characteristically aim to match the content of one’s mind to the facts but to match the facts to the content of one’s mind, to act as one intends. Thus, when one comes to have practical knowledge, embodied by an intention, one comes to have it by aiming to match the facts to the content of one’s mind. The claim that intention is a belief, then, can help us to understand practical knowledge.

On the other hand, a chief attraction of DPA non-cognitivism is the explanation it can give of the distinctive role of intention. When one has an intention to do A, one has certain characteristic tendencies. Namely, one has the tendencies to reason about how to do A, to form the further intentions given by this reasoning, and to (at least) attempt to do A by executing these further intentions (whatever they will be). In this way, intention is unlike desire and belief. When one has a desire to do A, one does not, typically, have these tendencies. When one has a desire to drink a glass of milk,
for instance, we do not think of such a person as, paradigmatically or normally, highly likely to reason about how to get a glass of milk and drink it, to form the further desires to get up, go to the kitchen, and grab a glass (for instance), or to attempt these things. Desire is, in its most paradigmatic sense, an uncommitted aspiring. Similarly, when one merely believes that she will do A (without desiring to do it), one does not typically have the tendencies to reason about how to do it, to form further intentions, or to attempt to do it. Belief is, in its most paradigmatic sense, without motivation to do anything. Thus, intention is associated with tendencies distinct from both desire and belief.

DPA non-cognitivists can explain this by saying that one has these tendencies because an intention is a *sui generis* motivational state. To have an intention to do A is to be in a certain motivational state with respect to doing A. It is (among other things) to be motivated to reason about how to do A, to form the further intentions given by this reasoning, and to (at least) attempt to do A. For Bratman (1999), for instance, this is because intention is a *planning* attitude. The tendencies associated with intention are grounded in its nature as a distinctive motivational state. Since it is a motivational state, it is unlike belief, and what it characteristically motivates is unlike what desire characteristically motivates. In this way, DPA non-cognitivism explains the distinctive tendencies of intention.

Cognitivism and DPA non-cognitivism compete because the former has the better explanation of practical knowledge and the latter has the better explanation of the distinctive role of intention, but they are contradictory theories of intention. For cognitivists, it is hard to say why believing that one will do A would give one the tendency to reason about how to do it, form further intentions, and attempt to do it. After all, characteristically, a belief all by itself does not motivate anything. For DPA non-cognitivists, it is hard to say what practical knowledge is, since they cannot say that it is embodied in an intention. But cognitivism and non-cognitivism cannot both be true. So if we are in the business of advancing a theory of intention at all, we are
forced to take a side. Yet the two sides lead to two different characterizations of our central phenomena. So we must assess how well these characterizations help explain these phenomena. That will be the topic of Chapters 2 and 3.

2.2 Processes

Orthodox versions of cognitivism and DPA non-cognitivism—the popular theories these days—are, as I will henceforth call it, *conservative*. Conservatives maintain that an intention is some kind of mental *state*. So, the debate between cognitivists and non-cognitivists, as it ordinarily unfolds these days, is a debate over what *kind* of mental state an intention is.

Departing from this orthodoxy, naive action theory (NAT) rejects conservatism. According to NAT, an intention is not a state at all but a *process*. More precisely, to intend to do A is to be doing A. For example, to intend to bake bread is nothing more than to be baking bread. To be baking bread is importantly distinct from being in a state. It is *being in the process* of baking bread. The rough idea here is that an action does not belong to the metaphysical category of state because a state is not itself a *change*. A state can change, but a change itself from one state to another must be its own metaphysical category. An action belongs to the metaphysical category of change or, more specifically, non-instantaneous change or ‘process’.

Looking at an example will make this clearer. Suppose you drop a sugar cube into your tea. Prior to the drop, the sugar is a solid cube. Having a cubic shape is a state of the sugar. Slowly, the sugar dissolves and takes on the properties of the tea. Once fully dissolved, the sugar is part of the tea solution and as such has a tea-cup shape. So the sugar changes states from having a cubic shape to having a tea-cup shape, but this

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3 Representative examples are Thompson (2009) and Moran and Stone (2009). To be clear, Moran and Stone do not advance NAT as their own view but attribute it to G. E. M. Anscombe. Also, I do not interpret Thompson as a NAT theorist, but since many people do, I have listed him as a representative example. I will not argue for any interpretation of Thompson in this dissertation, though my own view is that he is best interpreted as a developmentalist.
doesn't happen instantaneously. At a time shortly after the drop, the sugar is dissolving and thus changing from one state to the other. It is becoming tea-cup shaped. (This is what happens in dissolution: the solute takes on the characteristics of the solvent.) Dissolution is a process—not the mere concatenation of one state followed by another but the non-instantaneous movement from one state into another. A state is, by its very nature, static, while a process is, by its very nature, kinetic.

Conservatives and NAT theorists can agree that an action is a process. This won't affect the explanations we saw above. The fundamental disagreement between them, however, is over whether an intention is a process. Because conservatives, as I have defined them, maintain that an intention is a state, they cannot accept that an intention is process, since state and process are mutually exclusive metaphysical categories. By contrast, NAT entails that an intention is a process, since according to it, to intend to do A is to be doing A. Having the intention to do A is being in the process of doing A.

A chief attraction of naive action theory is the explanation it can give of rational teleology. We start with the recognition that a process resolves into subprocesses. The changing of the sugar from cube-shaped to cup-shaped, for instance, resolves into sub-changes of shape (e.g., from cube-shaped to blob-shaped, and from blob-shaped to cloud-shaped, and so on). Given that an action is a process, it has this structure too: an action resolves into sub-actions. For instance, the baking of bread resolves into certain phases (e.g., the mixing of ingredients, the kneading of dough, and the placing of dough in the oven). Each narrower phase is itself an action that constitutes part of the whole action.

Extending NAT to all rational goal-directed activities, the NAT theorist gives a compelling unity to them. In short, to want to, intend to, try to, or simply do A in order to do B is to be doing B and for an action of type A to be a sub-action of this doing of B. Therefore, for example, when one is kneading dough in order to bake bread, this is
because one is baking bread and one’s dough-kneading is a sub-action of one’s bread-baking. And in precisely the same way, when one wants to buy wood in order to build a chair, this is because one is building a chair and one’s wood-buying is a sub-action of this chair-building. The attraction of NAT as extended to all goal-directed activities is the elegant way, according to it, these seemingly disparate activities are, fundamentally, one. Rational teleological activity is \textit{sub-acting}.

NAT and the NAT theorist’s explanation of acting with an intention flows from this wider picture. NAT theorists will say this: to do A with the intention to do B is to be doing B and for an action of type A to be a sub-action of this doing of B. So for example, when Martha is kneading dough with the intention to bake bread, this is because Martha’s dough-kneading is a sub-action of her wider action of bread-baking. Acting with an intention is \textit{sub-acting}.

NAT theorists can also explain present-directed and future-directed intention as follows. A present-directed intention to do B is an \textit{unfolding} action of type B. When Martha is kneading dough and this is a sub-action of her bread-baking, her bread baking is unfolding (since her dough-kneading is advancing it). In this case, her intention to bake bread is present-directed because her bread-baking is unfolding right now. A present-directed intention is an unfolding action.

A future-directed intention to do B is an action of type B \textit{in hiatus}. When Martha takes a break from her bread baking to answer the phone, she is still in the middle of baking bread—that is to say, it is still true to say of her that she is baking bread even though her action is not unfolding: there is nothing further she is doing (like kneading dough) that is advancing her bread baking. Yet she is still in the process of baking bread: her action is, as we say, in hiatus. In this case, her intention to bake bread is future-directed because there is more to come of her bread-baking. An action that was not unfolding and had no future phases to come would not be an action in hiatus but a completed or abandoned action. A future-directed intention is an action in hiatus.
In sum, NAT theorists can explain the future-directedness of intention by its features as a process. It is a process in hiatus, which entails that more of the process is to come. Further, acting with an intention can be understood as sub-acting.

The developmental theory, just to give a preview, shares with NAT the claim that an intention is a process. Thus it breaks from the orthodox assumption that an intention is state. However, the developmental theory also breaks from NAT by rejecting the claim that to intend do A is to be doing A. Instead, developmentalists claim, to intend to do A is to be developing A. What it is to be developing A and how this differs from doing A will be explained in Chapter 4. We shall see, in Chapters 4 and 5, how this alters their explanations of rational teleology, the future-directedness of intention, and acting with an intention.

**Conclusion**

All three major theories have their own motivations and their own explanations of the two central phenomena. Cognitivism’s chief attraction is its explanation of practical knowledge, DPA non-cognitivism’s is its explanation of the distinctive role of intention, and naive action theory’s is its explanation of rational teleology. This leads each to explain future-directed intention and acting with an intention in different ways.

In claiming this, I am not claiming anything about the relative importance of these motivations or of the success of the explanations. I am merely suggesting that they have a prominent place in the competition for best theory of intention. In the next two chapters, I will argue that cognitivism and DPA non-cognitivism suffer some serious disadvantages. Of course, how damaging this is to them in the overall competition will depend on the relative significance of their motivations and how well they explain the phenomena. This overall weighing-project is beyond the scope of this dissertation; so I will, for the sake of argument, operate on the assumption that all else is equal. (Though I will, at the very end, say a little about why I think developmental-
ism comes out on top.) Thus, given the serious disadvantages, we should look for an alternative without those problems. That, I will argue in Chapters 4 and 5, is developmentalism—a theory that, like NAT, states that an intention is a process but, unlike NAT, is not a non-starter. Let us now turn to the problem for cognitivism.
CHAPTER 2

Introduction

The principal aim of this dissertation is to show that developmentalism is a viable theory of intention that avoids two well-known problems for such theories. The first afflicts cognitivism, and the second afflicts DPA non-cognitivism and conservative theories generally. So far, I have simply prepared the way for the arguments to come by presenting cognitivism, DPA non-cognitivism, and a potential alternative theory, naive action theory. I have also explained how these views compare and contrast to the developmental theory.

The upshot of the previous chapter was that if, in the end, developmentalism is going to win the competition for best theory of intention, it must, at the very least, help us give an explanation of future-directed intention and acting with an intention without falling victim to the same problems as cognitivism and DPA non-cognitivism, while at the same time showing itself to be more attractive than naive action theory. In Chapter 4, I will argue that developmentalism is more attractive than naive action theory, and in Chapter 5, I will present developmentalist explanations of future-directed intention and acting with an intention and argue that these don’t fall victim to our two problems. But before I do this, I must explain these two problems.

In this chapter, I will present the first of these problems, which I call Grice’s Paradox. I will also look at cognitivist responses to the problem and some criticisms of those responses. Here’s how this exchange goes. The paradox is that if cognitivism is true and an intention is a belief, then ordinary cases of permissible intention formation look impermissible. This is because in such cases a belief is formed in the absence of sufficient prior evidence and out of a desire for its truth, which is (it would seem) an epistemically impermissible process of belief formation—namely, wishful thinking.
David Velleman (1989), a cognitivist, responds to the paradox by claiming that such a process is not always epistemically impermissible. In particular, when one’s belief is an intention and thus motivates action, its formation increases the likelihood of the belief coming true. Thus, prior to the formation of an intention-belief, one has the assurance that forming the belief will increase the likelihood of the belief coming true. In such cases, forming a belief in the absence of sufficient prior evidence and out of a desire for its truth is epistemically permissible, and hence there is no paradox.

Rae Langton (2004) replies that the assurance of a true belief does not suffice to make its formation epistemically permissible. In her counterexample, an agent, facing insufficient evidence for her belief, uses the formation of the belief as a means of bringing about its truth. Langton contends that this is an epistemically impermissible process of belief formation despite the fact that the agent is assured a true belief.

Kieran Setiya (2008), a cognitivist, agrees with Langton but responds to the paradox in a different way. He claims that there is no paradox because even though, in the relevant cases, one fails to have sufficient prior evidence and forms the belief out of a desire for its truth, one knows how to do what one intends. It is one’s know-how that makes it epistemically permissible for her to form the belief.

Sarah Paul (2009) replies that there are still paradoxical cases where forming an intention is permissible yet one does not have the requisite know-how. Further, she replies that even when one does have the know-how, this cannot suffice to make belief formation permissible in the relevant cases because often one’s choice of belief will be underdetermined by one’s know-how. In such cases, it looks epistemically impermissible to pick one belief over others out of a desire for that belief’s truth.

After looking at this exchange in some detail, we will see that although no response or criticism is decisive, the resultant picture of cognitivism is awfully strange. Forming an intention, for cognitivists, involves jumping to a conclusion and forming a be-
lief for its practical benefits. This, I will argue, is grounds for seeking an alternative theory without this strangeness.

1. The problem

1.1 The cognitivist explanation of future-directed intention

Recall that on a straightforward version of cognitivism, a future-directed intention to do A is a belief that one will do A. For instance, when it is Monday and you're at the office, not attending a concert, your intention to attend a concert on Saturday is (on this theory) a belief that you will attend the concert on Saturday. Consequently, to form a future-directed intention to do A is to form a belief that one will do A.

1.2 Grice’s paradox

According to Grice (1972), this picture of intention is problematic. In his words, it turns forming an intention into “licensed wishful thinking” (p. 8). This challenge has three components. First, Grice observes that we often decide to pursue ends we are unlikely to achieve. For instance, consider again your intention to attend the concert. Prior to deciding to attend the concert, it may be unlikely that you will in fact attend, especially given the fact that, at this moment, you have no intention to attend. But further, you may change your mind, be prevented from going, or be unsuccessful in procuring a ticket or finding the venue; or perhaps the concert will be cancelled. So, prior to deciding, you may have insufficient evidence to conclude that you will attend the concert, or even that you will attend once you decide to do so. Cases like this seem overwhelmingly common.

Second, it seems perfectly permissible in these cases, despite the lack of sufficient evidence, to decide (and thereby form the intention) to pursue one’s end. Normally,  

4 In fact, Grice is more concerned with expressions of intention and so his observation is, more precisely, that we often express the intention to do something when the “standard source of entitlement [namely, sufficient evidence]...is not available” (p. 9). The contemporary debate transposes Grice’s remarks into a parallel discussion of (the purely mental act of) forming an intention.
when one forms an intention to do something, one does so because one wants that thing and not because the evidence suggests its occurrence. In fact, we often decide to do things precisely because we think they won't get done unless we do them—as when one decides to clean up after a roommate. Intentions just are *characteristically* formed out of a desire for something and not on the basis of evidence. So prior to deciding to attend the concert, it is perfectly permissible for you to form the corresponding intention, even though there is insufficient evidence to conclude that you will, in fact, attend the concert. When you so decide, you form the intention out of a desire to attend the concert and not on the basis of evidence. This is a rather normal and mundane case of intention formation.

These two points are stage-setting and are assumed by all parties in what follows. The problem arises, according to Grice, when we consider what the cognitivist must say about the above case. According to the cognitivist, you form the belief that you will attend the concert despite the lack of evidence for this belief and because you want to attend the concert (Grice, 1972, p. 9). This looks like wishful thinking, and we ordinarily take wishful thinking to be, paradigmatically, epistemically impermissible. Consider an unrequited lover. He might, despite the lack of evidence, form the belief that the girl of his dreams will return his love someday, not because the evidence suggests this—it doesn't—but because he wants it to be true. This process of belief formation is epistemically impermissible, and it seems to be, in all relevant respects, precisely the same process that takes place in the cognitivist’s story of forming an intention in the absence of sufficient evidence. Thus, cognitivism leads us to a paradox: we want to say that forming the intention is perfectly permissible, but we also seem forced to say that forming the intention is impermissible. In other words, cognitivism puzzlingly makes forming the intention into a somehow licensed form of wishful thinking.

2. The leap of faith response
2.1 The proposal

Velleman (1989) responds that there is a relevant difference between forming an intention and wishful thinking. In the case of the unrequited lover, the belief that the girl will love him has no effect on whether she loves him or not. No matter how much the unrequited lover might believe that his love will be returned, the fact is she will not come around. And believing that someone will love you is simply no way to get her to do so. In the case of the concert, by contrast, the belief that you will attend the concert does have an effect on whether you will attend or not—that is, according to the cognitivist. Forming an intention to do something is a way of bringing about that thing, and under cognitivism, forming an intention is forming a belief. Thus, forming such an intention-belief will at least help bring about what’s believed. Wishful thoughts do no such thing. Therefore, for the cognitivist, the causal efficacy of forming intention-beliefs serves to distinguish the concert case from cases of wishful thinking.

Velleman exploits this difference to dissolve Grice’s paradox. For him, the special causal efficacy of intention-beliefs is what makes them permissible to form. It is impermissible to form the belief that someone will love you, when the evidence suggests she won’t, because that belief will have no effect on the facts. But it is permissible to form the belief that you will attend the concert, when the evidence suggests otherwise and when this belief is an intention, because that belief will have an effect on the facts. That belief will motivate you to bring about the events that will make it true. For instance, once you believe that the future will involve you attending the concert, you will be motivated to take the steps necessary to ensure that this will happen, like buying a ticket and driving to the venue. Thus, even though prior to the formation of the belief it is unlikely to be true, after you form the belief it will be considerably more likely. This is what licenses you to form it, even in the face of insufficient evidence.
As I understand him, Velleman’s response traces the following line of thought. Evidence permits you to form the belief that p on its basis because evidence gives you some kind of assurance that forming that belief will lead you to the truth. Absent sufficient evidence, you lack that assurance. However, the special causal efficacy of an intention-belief that p can give you assurance that forming it will lead you to the truth. As Velleman puts it, “[a]lthough the agent’s [intention] is a conclusion to which he jumps before the evidence is complete, he jumps with the assurance that the conclusion will achieve verity even as he lands” (p. 64). So in both cases you have the assurance of being led to the truth, and so in both cases you are permitted to form the belief.

2.2 The criticism

Langton (2004) is unsatisfied with Velleman’s response. She thinks that the special causal efficacy of intention-beliefs cannot suffice to license their formation. Modifying an example from Lloyd Humberstone (1992), she proposes the following counterexample. Suppose that an omnipotent, supernatural being decides it will make true any belief Jack has about the occurrence of his actions. Therefore, if Jack wants to marry Jill but she is uninterested, then he could form the belief that he will marry her—a belief about the occurrence of his actions—and the supernatural being would change the world, including Jill’s feelings, such as to make the belief true. In such a case, Jack lacks sufficient evidence for his belief (because prior to its formation it is unlikely that Jack will marry Jill) but has the assurance that forming it will lead him to the truth. Intuitively, Langton thinks, this assurance does not license Jack to form the belief. Thus, in general, Velleman’s response fails: such assurance does not suffice to license the formation of beliefs in the absence of sufficient evidence.

As I understand Langton’s criticism, she points out that sufficient evidence does more than provide the assurance that one will be led to the truth; it also provides the assurance that one will be led to a non-accidentally true belief. This is because suffi-
cient evidence provides an assurance not just of attaining the truth but of attaining knowledge. That’s why (ordinarily) in its absence one is not epistemically permitted to form the relevant belief: even if one ends up with a true belief, one will not possess knowledge. In Jack’s case, it is epistemically impermissible for him to form his belief because, even though he has the assurance that he will be led to the truth, he lacks the assurance that, once formed, it will be no accident that his belief is true.

To see this, we need to understand (at least roughly) what a non-accidentally true belief is. The key, I think, is in the idea that belief aims at the truth. More precisely, in forming a belief, one (characteristically) aims to form a belief with content that matches the facts. A non-accidentally true belief, then, is one with content that matches the facts because one was aiming to do just that. Consider an analogy. Suppose an archer aims his arrow at a target and fires. If all goes well and he hits the target, he hits the target because he was aiming to do just that. Suppose, by contrast, that he simply fires his arrow into the air and a fortuitous gust of wind steers it into the target. In this case, the archer hits his target but not because he was aiming to do so. Hitting the target was an accident. Similarly, one attains a non-accidentally true belief if the content of her belief matches the facts because she was aiming for that.

Now consider two different cases. First, an archer aims off of the target because he is leading the target—that is, he is aiming where the moving target will be by the time the arrow gets to it. Second, an archer aims off of the target with the assurance that wherever he aims the target will be moved to. Perhaps an omnipotent, supernatural being will arrange for the target to be wherever the arrow goes. Or closer to Velleman’s story, perhaps some highly sophisticated system of cameras, sensors, and machinery has been set up to detect the trajectory of the arrow and ensure that the target will be wherever the arrow is headed. Langton’s thought, I take it, is if the archer hits the target in the second case, he does not hit it because he was aiming at the target, despite the fact that he fires with the assurance that his arrow will hit the target. Hitting the target, in this case, is an accident in the sense that it is not a result of
aiming at the target. The arrow hits the target because the world has fortuitously been set up such that aiming anywhere will result in hitting the target.

Similarly, for Velleman, an agent is set up such that forming a belief about her future actions will result in a belief that matches the facts. However, Langton thinks, if an agent forms a belief with this assurance alone, she is not assured of a non-accidentally true belief. And without that assurance, she is not assured knowledge and thus it is epistemically impermissible for her to form the belief. When an agent forms a belief about the future on the basis of sufficient evidence, on the other hand, she is leading her target. She is using the evidence to determine where the facts will be. She has the assurance, therefore, that the contents of her belief will match the facts because she was aiming to do that. In the absence of sufficient evidence, an agent lacks this assurance and thus it is epistemically impermissible for her to form a belief, even if it has the special causal efficacy of Velleman’s intention-beliefs. Therefore, Langton concludes, the special causal efficacy of intention-beliefs does not suffice to license the formation of them in the absence of sufficient evidence. There must be (at least) the further assurance of non-accidentality.

Therefore, if Langton is right, Velleman’s response has not saved cognitivism from Grice’s paradox. It is still puzzling how, under cognitivism, it can be epistemically permissible to form intentions in the absence of sufficient prior evidence.

3. The know-how response

3.1 The proposal

Setiya (2008) agrees with Langton, but he doesn’t think this dooms cognitivism. He attempts to defend cognitivism with a different solution to Grice’s paradox. Like Velleman, Setiya thinks that there is a relevant difference between forming an intention and wishful thinking, but it is not the one that Velleman suggests. Instead, form-

\footnote{This is not exactly how she puts it, but it is my most charitable understanding of her argument.}
ing an intention, when it is permissible in the absence of evidence, is permissible because the agent *knows how* to do what’s intended. For Setiya, knowing how to do something is, roughly, having the *skills* needed to do it. This is different from simply knowing the means. One knows how to do A, in the relevant sense, when one knows how to ride a bike, or play the guitar, or touch-type in the way one does through repeated practice and a second-nature-like mastery. This is different from, say, reading about how something is done or deducing required means from one’s knowledge of cause and effect. This skill-like kind of know-how, Setiya claims, is the key to dissolving Grice’s paradox.

Consider our examples again. Setiya would say that it is permissible for you to form the belief that you will attend the concert, despite the lack of evidence, because, even prior to forming this belief, you know how to attend the concert. That is, you have the skills needed to do it. The unrequited lover, by contrast, is not permitted because he doesn’t know how to bring it about that he’s loved. Setiya even has an explanation for why Jack shouldn’t form the belief that he will marry Jill: because he doesn’t have the skills needed to change the world such that he will marry Jill. The supernatural being has such skills, but *Jack* does not. So Setiya, he thinks, can distinguish forming intention-beliefs, on the one hand, from wishful thinking and leaps like Jack’s, on the other, and explain why the former is permitted (when it is) while the others are not.

As I understand him, Setiya’s response traces the following line of thought. Sufficient evidence permits you to form the belief that p on its basis because forming a belief on the basis of sufficient evidence puts you in a position that rules out epistemic luck—that is, if the evidence leads you to the belief that p, then its truth (if p turns out to be true) will be no accident. For Setiya, it’s not that sufficient evidence gives you some kind of assurance but rather that following it *is a way* to attain a non-accidentally true belief. For instance, if you form the belief that it will rain tomorrow on the basis of the best meteorological models and it turns out that your belief is true, it is
no accident that your belief is true. Following your evidence, the best meteorological models, puts you in a position that rules out epistemic luck.

Absent sufficient evidence, you are vulnerable to epistemic luck. Had you formed the same belief on the basis of a grey sky the evening before and indeed it rained, the truth of your belief might have been an accident. The grey sky might have been a completely independent weather system and you just got lucky. For Setiya, it is the invulnerability to epistemic luck and not the assurance of being led to the truth or being led to a non-accidentally true belief that gives sufficient evidence its licensing power. Thus, absent sufficient evidence, you are absent its license.

However, know-how can also put you in a position that rules out epistemic luck, according to Setiya. If you know how to do A and form the intention-belief that you will do A, Setiya claims, then the truth of that belief (if it turns out to be true) will be no accident. For example, if you know how to play Hey Jude on the guitar and form the intention-belief that you will do so, and it turns out that you in fact successfully play Hey Jude on the guitar, then it is no accident that your belief is true. Having the relevant know-how puts you in a position that rules out epistemic luck by giving you the skills needed to successfully execute your intention. Your belief is not a lucky guess, as it would be if you didn't know how to play the guitar and managed by some miracle to strum the song's exact sequence of chords. Therefore, for Setiya, both in cases where you have sufficient evidence and where you have the relevant know-how, you are in a position that rules out epistemic luck.

Bringing this back to our central examples, we can see why Setiya thinks the concert case and unrequited lover case are different. In the former, prior to forming the belief that you will attend the concert, you know how to attend the concert. And thus even if you fail to have sufficient evidence, you are still in a position that rules out epistemic luck. If you form the belief and it turns out that you in fact successfully attend the concert, your belief is no lucky guess. In the latter case, were his belief
that the girl will love him to turn out true, this would be a mere accident. There is neither sufficient evidence nor does he possess the skills needed to make her love him. Therefore, you are permitted to form the belief, despite the lack of evidence, while the unrequited lover is not.

We can also see why Setiya thinks the concert case and Langton’s case are different. In the latter, were Jack’s belief that he will marry Jill to turn out true, this would be an accident: his belief would not be true because he was aiming to match the contents of his belief to the world. Rather, his belief would be true because the supernatural being changed the world to match his belief. By contrast, in the concert case, you know how to change the world to match your belief. It is no accident that an archer hits his target when he aims at it because he knows how to hit the target. Similarly, it is no accident your belief is true when you form it because you know how to make your belief true. Thus, you, but not Jack, are epistemically permitted to form your belief in the absence of sufficient evidence.

3.2 The criticism

Paul (2009) is unsatisfied with Setiya’s response. First, know-how doesn’t seem necessary to license forming an intention. It is permissible for one to form the intention to dance the tango on her wedding day, even when she doesn’t know how to dance the tango. Forming the intention is precisely what will motivate her to learn how to dance the tango. So the paradox remains, straightforwardly, in such cases: it is permissible for her to form the intention yet not to form the corresponding belief.6

Second, even when know-how is present, it does not suffice to license forming a belief out of a desire for its truth. An essential feature of the problematic cases is that the agent forms the belief that she will do A because she wants that state of affairs to

6 It is worth noting that Setiya (2009, p. 136) simply denies this: he thinks it is not permissible to form the intention to dance the tango. Rather, it is only permissible for her to form the intention to learn how to dance the tango. That strikes me as false.
come about. Velleman and Setiya focus on how to license forming a belief in the absence of sufficient evidence. Given the lack of evidence, they search for something else that could license the leap to an as-yet unsupported conclusion. However, this completely neglects the fact, Paul thinks, that the agent is also driven to her belief by her desires, which is typically something one is not permitted to do. When you decide to attend the concert, on the cognitivist’s picture, not only are you forming the belief that you will attend the concert, even though this is unlikely, but also forming it because it represents the future you want. What could license being led by one’s desires in this way? Not know-how, according to Paul.

She gives the following counterexample. Suppose that prior to forming the intention to attend the concert, you also have many other options open to you, such as to stay at home and watch TV, to catch a movie, to take a walk in the park, or to count sheep. This is not an uncommon situation. Nor would it be uncommon for you to know how to do many of these. According to the cognitivist, in the face of so many options, each of which are as-yet unlikely to occur and each of which you know how to do, you simply pick the outcome you most want to occur. However, it seems epistemically impermissible to pick your beliefs. The desire for an outcome shouldn’t drive you to think it will really happen. And the presence of know-how can’t help license any one particular pick, since any pick is one you know how to do. Your know how does not suffice to license the additional process of selecting a specific outcome because it’s what you want to happen. This is still wishful thinking.

As I understand it, this counterexample challenges Setiya’s general explanation of permissible belief formation. In the example, your know-how of each option puts you in a position that rules out epistemic luck for each, yet it is still impermissible for you to pick just one out of a desire for its truth. For each belief you could form (e.g., that you will attend the concert or that you will catch a movie or that you will take a walk in the park), it may be true that if you form it and it turns out true, it will be no lucky guess—since you have the skills needed to make it true. However, this
does nothing to make it permissible for you to follow your desires into one particular conclusion. So such a position is not enough to fully license that kind of belief formation.

Paul doesn’t say why it is impermissible to follow your desires into one particular conclusion, but there is, I think, an answer. Again the key is in the idea that belief aims at the truth. Following your desires undermines the aim of belief. In forming a belief, one (characteristically) aims to form a belief with content that matches the facts. Following sufficient evidence is a way (if all goes well) of forming a belief with content that matches the facts. Desire, however, is indifferent to the facts. Following your desires is no way at all of forming a belief with content that matches the facts. So if your aim is to form a belief with content that matches the facts, which it must be when you’re aiming to form a belief, then you shouldn’t follow your desires because following your desires is no way to do that. Following your desires undermines your aim to form a true belief. So in a situation where you know how to do numerous incompatible options, you shouldn’t follow your desires to a belief about which option you will perform.

Therefore, if Paul is right, Setiya’s response has not saved cognitivism from Grice’s Paradox. It is still puzzling how, under cognitivism, it can be permissible to form an intention to do A out of a desire to do A.

4. Abandoning cognitivism

What should we conclude from the above exchange? It is clear that the problems stem from cognitivism itself: cognitivism entails that in forming an intention, one aims at matching the content of the intention (a belief) to the facts. Given this aim, it would be an accident if the content of the intention matched the facts but not because one was aiming for that. Setiya claims that if one knew how to change the facts to match one’s intention, then it would not be an accident. Despite this, the characteristic aim of belief is still problematic; for given that aim, it is epistemically imper-
missible to form a belief out of a desire that the facts match its content. Thus, in many cases where it is perfectly permissible to form an intention, cognitivists seem committed to saying that it is impermissible to form the intention. This should make us suspicious of cognitivism.

In the bigger picture, cognitivism's chief attraction is its explanation of practical knowledge. When one comes to have practical knowledge, one characteristically comes to have knowledge about what she will do in a way distinct from theoretical knowledge about what she will do. With theoretical knowledge, one comes to know about what she will do on the basis of evidence and by aiming to match the **content** of one's mind to the facts. With practical knowledge, by contrast, one comes to know about what she will do **not** on the basis of evidence but by aiming to match the **facts** to the content of one's mind. Cognitivists can explain this by saying that an intention is a belief and that practical knowledge is embodied by such a belief, which (being an intention) is not characteristically formed on the basis of evidence. Practical knowledge is a special sort of knowledge embodied by an intention. As such, it is attained by forming an intention, i.e. by deciding. This explains (at least in part) why one comes to have practical knowledge not on the basis of evidence but by deciding: one forms a belief not on the basis on evidence but by deciding. Further, in deciding and hence forming an intention, one characteristically aims to match the facts to the content of one's mind, to act as one intends. Thus, when one comes to have practical knowledge, embodied by an intention, one comes to have it by **aiming to match the facts to the content of one's mind**.

However, given the above problems, this explanation doesn't look as elegant as it first appeared. The problem, I think, is that in the effort to explain practical knowledge in this seemingly elegant way, cognitivists fail to appreciate the demands that the aim of belief places on the formation of an intention. By making an intention a belief, cognitivists make the aim of intention, in part, to match its content to the facts. But this
aim gives rise to the problems we saw above. Cognitivists want intention to have this aim in order to explain why practical knowledge is knowledge.

Their line of thought goes like this. Practical knowledge is practical because it is achieved through action—that is, by aiming to match the facts to one's mind. Practical knowledge is knowledge because it is achieved through belief—that is, by aiming to match one's mind to the facts. If intention were a special sort of belief that not only aimed at matching one's mind to the facts but also the facts to one's mind, this would explain both dimensions of practical knowledge. Practical knowledge would be both practical and knowledge because it is achieved through intention—that is, by aiming both to match the facts to one's mind and to match one's mind to the facts.

The problem is that the aim of matching one's mind to the facts, characteristic of belief, brings certain standards to bear on intention formation. These standards, however, are too restrictive. Thus the chief attraction of cognitivism doesn't look attractive after all.

This suggests that we should seek an alternative non-cognitivist theory, if only to formulate it and balance its attractiveness against cognitivism's. But if our motivation here is to avoid Grice’s Paradox, we should reject only that which is needed to do so. This, as we saw, is the claim that forming an intention involves aiming to match the content of the intention to the facts. In order to reject this, we must reject that an intention is a belief—that is, cognitivism. We need not, however, reject that an intention is a state. If an intention were, for instance, a desire, then forming it would not involve aiming to match its content to the facts; for desire is indifferent to the facts.

This means that we can avoid Grice’s paradox without rejecting the claim that an intention is a state. There are many mental states and other states of an agent that do not aim at truth. Thus, in an effort to remain theoretically conservative and seek only the precise alternative that is motivated by the problem, we should seek a theory according to which an intention is a state but not a state that aims at the truth. The
ready and popular alternative is DPA non-cognitivism, according to which an intention is a *sui generis* mental state distinct from belief and desire. DPA non-cognitivists deny that, in forming an intention, one aims to match its content to the facts. This is precisely what makes them *non-cognitivist*. Instead, for them, an intention has a distinctive aim. As Bratman (2009) suggests, for instance, “each intention aims at making its content true as a part of a *coordinated* realization of one’s planning system, in the world as one believes it to be.” In other words, an intention is distinct from belief because, in forming it, one aims to change the facts to match its content (among other things and as a part of some wider effort) and not the other way around. Thus, DPA non-cognitivism is a theory of intention according to which an intention does not aim at the truth, and therefore the standards that derive from such an aim do not bear on the formation of an intention. Hence, DPA non-cognitivism will not lead to Grice’s paradox.

However, in the next chapter, I will argue that DPA non-cognitivism, and conservatism more generally, faces its own problem.

**Conclusion**

Cognitivism has a disadvantage in the overall competition for best theory of intention: it must solve Grice’s Paradox. We looked at two proposed solutions and each was unattractive in its own way. Velleman proposes that the assurance of a true belief makes forming an intention epistemically permissible, but this makes too many kinds of belief formation *epistemically* permissible. Setiya proposes that know-how makes forming an intention epistemically permissible, but this too permits too much and doesn't fully solve the paradox. These considerations have sent us in the direction of DPA non-cognitivism.

In Chapter 5, after we've seen a disadvantage for DPA non-cognitivism and I've presented the developmental theory, I will show how this theory avoids Grice’s Paradox. Similar to DPA non-cognitivism, it will be because, according to developmentalism,
forming a future-directed intention does not involve jumping to a conclusion or com-
ing to a conclusion out a desire for its truth. To flesh this out, however, I will first
have to formulate the developmental theory, which will happen in Chapter 4. But
even before this, we must contend with DPA non-cognitivism—the topic of the next
chapter.
CHAPTER 3

Introduction

The principal aim of this dissertation is to show that developmentalism is a viable theory of intention that avoids two well-known problems for such theories. The first afflicts cognitivism, and the second afflicts DPA non-cognitivism and conservative theories generally. So far, we have looked at the first problem; now we turn to the second.

In the last chapter, we saw that if we claim that an intention is a belief, then we face Grice’s Paradox and must provide a solution. However, we also saw that we can deny that an intention is a belief without moving to some radical position. We can deny that an intention aims at the truth yet maintain that it is some kind of mental state. This would be enough to avoid Grice’s Paradox.

Such a conservative theory, however, would still maintain that an intention is a state. In this chapter, I will argue that this claim is problematic. If an intention is a state, then the natural explanation of acting with an intention is in terms of causation. Roughly, to act with an intention is for the action to be caused by the intention. However, this causalist explanation, in its most straightforward form, faces a devastating counterexample that shows that causation is not sufficient. In response, we can try to fix the explanation by supplementing it with further conditions, but this, as we shall see, looks futile. On the other hand, we can try to abandon the causalist explanation and try to explain acting an intention in terms of some irreducibly non-causal explanatory relation, but this, as we shall see, threatens to be an embarrassing move. In particular, to do it, we must introduce an inelegant, unfamiliar relation into our ontology and only because causalism is a failure. Thus, conservatism leaves us with no attractive course of action.
The good news, however, is that we don’t have to be conservative. In fact, if we reject that an intention is a state and instead accept a radical theory, according to which an intention is a process, we can formulate a theory of intention with a more attractive explanation of acting with an intention. Or so I shall argue. This is the motivation for naive action theory.

With this in mind, this chapter will proceed as follows. In Section 1, I will present the problem of causal deviance. Here I will explain how this problem arises for a causal theory of acting with an intention—one of the key phenomena we want to explain. In Sections 2 and 3, I will present some causalist solutions to the problem and the corresponding anti-causalist responses. The upshot of all this will be that causalists have more work to do to make their position look promising. In Section 4, I consider a non-causalist alternative and explain why it threatens to look embarrassing. In Sections 5 and 6, I argue that we can avoid this debate altogether by rejecting the assumption that an intention is a state. This will also give some motivation for accepting that an intention is a process.

1. The problem

1.1 The conservative explanation of acting with an intention

Recall that we want a theory of intention to help us give an explanation of acting with an intention. What exactly needs to be explained here? Principally, it is the difference between acting with an intention and merely acting while also having an intention. Suppose Norman has the intention to build a chair, but he also has the intention to build a table. And let’s suppose further that he is now buying wood, but he means to use the wood for chair legs and not for building a table. In this case, the intention to build a chair is the intention with which Norman is buying wood, and the intention to build a table is not. Although Norman is acting—he is buying wood—and has the intention to build a table, we do not want to say that this is the intention
with which he acts. One can have an intention, act, and yet the intention is not the intention with which he acts. We want an explanation of this ‘with’-connection.

The first thing to notice is that this ‘with’-connection is an explanatory connection. The difference between acting with an intention and merely acting while also having an intention is that, in the former case, one acts because one has the intention. For instance, when Norman is buying wood with the intention to build a chair, he is buying wood because he intends to build a chair. His intention to build a table does not help explain why he is buying wood. Thus, we want an explanation of this explanatory connection.

According to a conservative, then, acting with an intention is an explanatory connection between an action and a state. When Norman is buying wood with the intention to build a chair, he is in some state (his intention) and this state explains why he is buying wood. This picture naturally leads to a causal theory of acting with an intention.

1.2 The causal theory and deviant causal chains

The natural thought is that the explanatory connection between act and intention is causation. More precisely,

\[(CTWi) \text{ To do } A \text{ with the intention to do } B \text{ is for an intention to do } B \text{ to cause an action of type } A.\]

So, for instance, Norman's intention to build a chair is the intention with which he is buying wood because that intention is causing his wood-buying. The explanatory connection between act and intention is thus of the same kind as familiar physical explanations. For instance, we might wonder why some water is boiling and provide an explanation by saying, “the water is boiling because its temperature is 100 degrees C.” An internal state of the water—its temperature—explains the water’s boiling. Similarly, we might wonder why Norman is buying wood and provide an explanation
by saying, “Norman is buying wood because he intends to build a chair.” In this case, as the one before, an internal state of Norman—his intention—explains Norman’s wood-buying. In both cases, a state is causing (at least in part) an event or process. This is the causal theory of acting with an intention.

The problem is that the characterization given in CTW₁ cannot be sufficient. To see this, suppose Nelly had the intention to distract a police officer by knocking over a glass of water. However, being in this state makes her so nervous and agitated that her arm shakes and she knocks over the glass. Although Nelly had the intention to distract the police officer and this intention caused her to knock over the glass, it is not true that Nelly knocked over the glass with the intention to distract the police officer. That explanatory connection is not there, despite the fact that her intention caused, and thereby explains in some way, her action. Causation alone doesn’t suffice to connect act and intention together as acting with an intention.

In the face of this problem, a causalists might attempt to supplement CTW₁ with further conditions. One natural suggestion is that CTW₁ is missing the agent’s plan. The suggestion amounts to this:

(CTW₂) To do A with the intention to do B is for the given agent to have a plan and for her intention to do B to cause an action of type A according to that plan.

A plan might consist of further intentions, an instrumental belief, or anything else with representational content. The important thing is that everything must go according to plan. Under CTW₂, the above example (henceforth, Nervous Nelly) involves a deviant causal chain because Nelly had a plan for how to distract the police officer and this (presumably) did not include getting agitated and shaking her hand into the glass. The causal chain from intention to action deviated from her plan. If her knocking of the glass had been caused without agitation as Nelly planned, then it would have been done with the relevant intention.

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7 I take this example, slightly modified, from Mele (1992, p. 182).
Solving the problem will not be this easy however. First, CTW2 now looks too strong. We rarely have detailed plans for how our intentions should be executed. In all the many cases where one's plan lacks detail, the causal chain from intention to action will not accord with it. Yet many of these cases will be perfectly ordinary cases of acting with an intention.

Second, and more importantly, CTW2 is still too weak. Suppose we alter the Nervous Nelly case slightly and this time build the agitation and shaking into her plan. In this modified case, Nelly has the intention to distract the police officer, and her plan is to use this intention to make herself nervous, get agitated, start shaking, and knock over the glass. (Perhaps she knows she wouldn't have the will to do it otherwise.) However, in this case, it seems the plan she has is precisely to not act with the intention—to form the intention as a way making herself into the first Nervous Nelly, as it were. So if she forms the intention and everything goes according to plan, she will satisfy the conditions of CTW2 yet still not knock over the glass with the intention to distract the police officer. Thus even if the causal chain from intention to action accords with one’s plan, this is not enough to connect the intention and action together as acting with an intention.8

The causalist needs to work harder if he is going to solve the problem of causal deviance and save some version of the causal theory of acting with an intention.

2. The proximal cause response

Alfred Mele (1992), a causalist, attempts a different proposal:

\(\text{(CTW}_3\)\) To do A with the intention to do B is for an intention to do B to proximately cause an action of type A.

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8 Something like CTW2 and the objections to it can be found in Wilson (1989, p. 184–185).
In other words, there is a direct causal connection between the intention and the action and not one that traces through intermediate events. Under CTW3, Nervous Nelly is deviant because the agitation and shaking are intermediate events, and the intention and action are thus distally related. If the intention to distract the police officer had proximately caused the knocking of the glass without first causing the agitation that in turn caused the knocking, then the knocking would have been done with the relevant intention.

As Scott Sehon (1997) claims, CTW3 is too strong. In most, if not all cases of human action, there are physiological events between the envisaged mental state and the action. For instance, these days, many philosophers agree that, in humans, mental states are realized in the brain. So at least with humans, an intention realized in the brain will typically cause events in the nervous system, which will in turn cause events in muscles, which will in turn cause bodily movements. Thus, CTW3 implies that in all these cases, the action is not done with the intention.

Mele attempts to avoid this implication with a compatible theory of action. We should, he suggests, conceive of the action as beginning in the brain (p. 202). Therefore, the physiological events that typically occur between an overt behaviour, like knocking a glass, and an intention are not intermediate events between the intention and the action but part of the action. The action proper includes the behaviour and the physiological events leading up to it. Thus, in a typical human case of acting with an intention, the intention will proximately cause an event in the nervous system (perhaps) but that event is part of the beginning of the action, so the intention will proximately cause the action.

However, this theory of action makes it less clear how CTW3 is supposed to solve the problem of causal deviance. If the physiological events leading up to overt behaviour should be included in the action proper, shouldn't we include Nelly's agitation in her action? If we do so, however, then Nelly's intention *does* proximately cause
her action, and thus CTW₃, like CTW₁, is too weak. An explanation of acting with an intention should tell us why the agitation should not be included in Nelly’s action. Without an answer, CTW₃ is no improvement on CTW₁.

3. The sensitivity response

Another causalist proposal—suggested and ultimately rejected by Sehon—adds a sensitivity condition:

(CTW₄) To do A with the intention to do B is for an intention to do B to cause an action of type A in a way that is sensitive to the intention’s content.

In other words, variations in the content of the intention must translate to variations in action. Under CTW₄, Nervous Nelly is deviant because, although Nelly’s intention to distract the police officer caused her to knock over the glass, she would have knocked over the glass in other circumstances where she was equally agitated but had a different intention. So the action was not sensitive to the content of her intention but merely caused by it by way of the agitation. Were the action sensitive, then even if the agitation was an unplanned but intermediate event, the action would have been done with the intention.

Sehon rejects CTW₄ for two reasons. First, the proposal is too strong. Sometimes an action cannot be sensitive to the content of an intention, yet the action is still done with the intention. Suppose a student pitcher has the intention to pitch a ball at 100 km/h, yet his arm is incapable of pitching any faster. And let us suppose that this intention causes him to swing his arm. It appears that the swinging of his arm cannot be sensitive to its content, since a variation in the content would not translate to a variation in action—for example, were the content to pitch a ball at 101 or 102 km/h, the swinging of his arm would be precisely the same. However, we still want to say that he swung his arm with the intention to pitch a ball at 100 km/h. If the causalists’
response is that the action is sensitive despite this lack of co-variation, then causalists need a more precise account of this sensitivity.

Second, and more importantly, the proposal is, again, too weak. Nervous Nelly can be reconstructed such that variations in the content of Nelly’s intention translate to variations in action. For instance, we can suppose that all the relevant variations of Nelly’s intention translate to variations in the agitation and, as a result, the degree of shakiness and the trajectory of the hand, leading to different ways of knocking over the glass or perhaps missing the glass all together. It seems, then, that the knocking that does actually occur was sensitive to the content of the intention in some sense yet not in a sense that makes it done with that intention.

And here is where I think we reach the deepest challenge to causalism. I suspect that the attractiveness of any purported solution to the problem of causal deviance will come from inadvertent circularity. For instance, as we just saw, adding a sensitivity condition (in some sense of ‘sensitivity’) seemed like an attractive way to solve causal deviance, yet once we pressed on the notion, there seemed to be a sense of ‘sensitivity’ that couldn’t do the job. This, I suspect, is because when the sensitivity condition was proposed, it seemed attractive because there’s a sense of ‘sensitivity’ that presupposes the characteristic explanatory connection involved in acting with an intention, namely the kind of sensitivity one’s actions have to one’s intention when those actions are guided and controlled by one’s intention. And guidance and control again presuppose acting with an intention, i.e. an intention guides and controls when the action is done with the intention. But when the causalists supplant the circular sense with a non-circular sense of ‘sensitivity’, their proposals look much less attractive. My worry is that any attempt to solve causal deviance will commit the same error.

4. The teleological response

4.1 The proposal
One famous response to the causal deviance problem is to reject that the explanatory connection involved in acting with an intention is causal. In doing this, one is no longer subject to Nervous Nelly-like counterexamples. However, we still need an explanation of acting with an intention. Thus, if we choose to respond this way, we need an explanation of acting with an intention according to which the explanatory connection involved is non-causal.

George Wilson (1989) proposes the following account:

(TTW) To do A with the intention to do B is to do A in order to carry out an intention to do B.

Wilson calls this the teleological theory. The idea behind it is that the act and intention stand in a special ‘teleological’ relation that is distinct from and irreducible to causation. And this teleological relation is explanatory. When one is doing A in order to carry out one’s intention to do B, it is not merely that one is doing A and one has the intention to do B but that one is doing A because one has that intention: one does A as a means to carrying out that intention or with the aim of making the content of that intention a reality. According to Wilson, the act is explained by “a purpose or a function which a certain process or activity is said to have had” and not a “causal factor” (p. 143-144). Thus, when one is doing A with the intention to do B, it is not merely that one does A and one has the intention to do B, nor is it that one’s intention to do B causes one’s action of doing A (though this might happen); rather, one’s action of doing A has a certain purpose or function, namely to carrying out one’s intention to do B.

Wilson claims that this teleological explanatory connection is found not only between acts and intentions but also in biological and functional systems. He gives the following example: “His heart pumped blood in order to supply oxygen to his body” (p. 144). Here, the thought is that the heart’s pumping of blood, for a particular stretch of time, has a certain purpose or function—namely, to supply oxygen to its
possessor's body. When we say that the heart is pumping blood (on a particular occasion) because its possessor needs oxygen, we are explaining the heart’s act of blood pumping by the function this blood pumping has and not by a cause of the blood pumping. The possessor's need for oxygen does not cause the blood pumping. Rather, the possessor's need for oxygen is that which the blood pumping is servicing. Analogously, when we say that Norman is buying wood because he has the intention to build a chair, we are explaining Norman's act of wood-buying by the function this wood-buying has and not by a cause of the wood-buying. Norman's intention is that which the wood-buying is servicing. Where the blood pumping services the need for oxygen, the wood-buying services the intention to build a chair. Hence, the wood-buying's function is to carry out, to help make real, Norman's intention to build a chair. When we cite this function of the wood-buying as an explanation of it, we explain it *teleologically*, not causally, just as when we cite the need for oxygen as an explanation of the blood pumping.

Wilson's view avoids the problem of causal deviance by not explaining acting with an intention in terms of causation. On any causal theory, the action is caused, in some specified way, by the intention with which it is done. This makes any causal theory vulnerable to counterexamples where the action is caused, in the specified way, by the intention, yet the action is not done with that intention—as when Nervous Nelly's intention causes her to knock over the glass, yet she doesn’t do it with that intention. By contrast, on the teleological theory, one is doing A with the intention to do B because one's doing of A has a certain function, namely to carry out one's intention to do B. And although it is eminently plausible that, in the case envisaged, Nervous Nelly's intention does in fact cause her to knock over the glass—no one is denying that—it is not at all plausible that she knocks over the glass in order to carry out her intention, that her knocking has the function of helping to make real her intention to distract the police officer. Rather, her knocking services nothing. It is a mere effect of
her nervousness. Thus, Nervous Nelly is not a counterexample to the teleological theory.

### 4.2 The criticism

This account faces numerous problems. First, the teleological theory stipulates that teleological explanation is irreducible to causal explanation, but this is far from obvious. The stipulation is somewhat plausible, on the face of it, given that a function is not a cause and therefore if teleological explanation is explanation in terms of a function, then such explanation is not explanation in terms of a cause. However, even if it is true that a function is not a cause, it might still be the case that the deeper ground of an action's function is its cause. That is to say, if we ask ‘what makes it the case that S’s doing of A has the function to carry out S’s intention to do B?’, the answer might be that S’s doing of A is caused by that intention. If this is true, Nervous Nelly is still a counterexample.

Second, even if we accept that teleological explanation is irreducible, TTW is too strong. This is because one can do A in order to carry out one’s intention to do B without having the intention to do B, just as a heart can pump blood in order to satisfy its possessor’s need for oxygen in the absence of any such need. Suppose Jerry decided to go to a party on Saturday but changed his mind and decided to stay home to study instead. Later that day, forgetting he had changed his mind, Jerry gases up his car in order to have enough fuel to drive to the party. In such a case, it seems that Jerry gases up his car in order to carry out his intention to go to the party, yet he doesn't have the intention to go to the party, since he changed his mind. According to TTW, Jerry gases up his car with the intention to go to the party, yet Jerry doesn’t have that intention. However, acting with an intention involves, at the very least, having the intention. So the Jerry case is a counterexample to TTW.

The third problem with the teleological theory is one expressed by Wilson himself:
It is claimed [by opponents of causalism] that there exists a ‘non-causal connection’ between action and [intention] and this special connection generates explanations of actions which are irreducibly teleological in character. But, without some more positive identification of the putatively non-causal connection in question, the nature of this linking remains mysterious. (p. 139)

His thought, I take it, is that if our theoretical aim is to explain acting with an intention, and we refuse to countenance a causal theory, then we must give some alternative explanation. To claim that the connection is irreducibly teleological without some more positive characterization is to claim little more than that the connection is the characteristic non-causal connection involved in acting with an intention, which is no explanation at all. Wilson raises this problem because he thinks that he has done substantial work toward solving it by characterizing the connection as an instance of a more general teleological relation. My worry is that this is not enough. If we refuse to countenance a causal theory of teleological explanation in general, then we must give some alternative explanation of that more general relation, and Wilson has not done that. So, claiming that acting with an intention is an instance of this more general, as-yet uncharacterized relation is still to give no explanation at all.

In the light of these problems, the teleological response looks overly reactionary. Causalism is faced with the problem of causal deviance, so hoping to avoid this problem, the teleologist posits a special explanatory relation distinct from causation. This looks however—adapting a phrase from Davidson (1978, p. 88)—like adding an embarrassing entity to the world’s furniture. The teleologist posits an additional explanatory relation, over and above causation, that still needs explaining in order to avoid the problem of causal deviance. But it is not clear whether this should be preferred over simply working to solve the problem of causal deviance without introducing anything itself mysterious.

5. The conservative assumption
The problems we’ve seen so far stem from the assumption that an intention is a state. Under this assumption, acting with an intention involves an explanatory connection between two wholly distinct things. This is because acting is a process and thus in a distinct metaphysical category from a state. And two things from distinct metaphysical categories cannot be numerically identical or proper parts of each other. In other words, they must be wholly distinct. Therefore, if one is doing A with the intention to do B and conservatism is true, then

(1) one is doing A,
(2) one has the intention to do B,
(3) one is doing A because one has the intention to do B,
(4) and one’s doing of A is wholly distinct from one’s intention to do B.

In other words, acting with an intention involves an explanatory connection between two wholly distinct things.

From this conservative perspective, causalism is the most natural theory of acting with an intention, because causation is a familiar and ordinary explanatory connection that ubiquitously connects distinct things. In particular, it ubiquitously connects states and processes. For instance, a certain mass of a star will trigger the process of its collapse. The fragility of a vase will causally contribute to the process of its shattering, if (all else being equal) it is dropped from a certain height. Thus, on the conservative picture, it is elegantly straightforward to suggest that acting with an intention is simply a specific instance of this more general phenomenon of one thing being caused by another. This leads to the problem of causal deviance.

Further, from the conservative perspective, it is the teleologist who adds an embarrassing entity to the world’s furniture. The causal theory makes reference to a relation—causation—that we are already willing to embrace as an element of any true ontology for reasons independent of explaining acting with an intention. The teleological theory, by contrast, asks us to add a seemingly new element to our ontology,
and the sole reason for this seems to be that we need it to explain acting with an intention. From this perspective, it seems preferable to work to solve the problem of causal deviance.

Wilson, as I understand him, attempts to make the teleological theory less embarrassing by making reference to a relation that we are already willing to embrace as an element of any true ontology and for reasons independent of explaining acting with an intention. Any true ontology, Wilson thinks, will include processes and processes with functions and the characteristic non-causal relation between processes with functions and the states they serve (e.g., the relation between pumping blood and the need for oxygen). And these entities will be included not just to explain acting with an intention but functional systems in general. The problem is that it is not obvious that processes with functions and some characteristic non-causal relation need to be included in order to explain functional systems in general. Rather, the most natural explanation of such systems seems to be in terms of simply states, processes, and causation. So Wilson has done little to convince us that we need to add an irreducibly non-causal relation to our ontology.

Further, Wilson’s proposal has its own difficulties, which also stem from the conservative assumption. Given that, on this assumption, an intention is state, the irreducibly teleological relation between acting and intending must be a relation between a process and a state. This leads Wilson to characterize the teleological alternative as TTW, according to which the teleological relation between acting and intending is a kind of servicing what’s specified by a state: the state of intention specifies certain satisfaction conditions and the action’s function is to realize some of those conditions. However, TTW is too strong. As we will see shortly, this result can be avoided by rejecting the conservative assumption.

6. Naive action theory
All this suggests that the conservative assumption is leading us into problems. Let us explore, then, the consequences of rejecting the assumption.

We start with the negative claim that an intention is not a state. But if an intention is not a state, then what is it? There are two reasons for suggesting that intention is a process. First, this suggestion does not add any embarrassing entities to the world’s furniture. It is common ground that any true ontology will include states and processes, since without processes there would be no such thing as non-instantaneous changes of state. Second, this suggestion allows us to avoid the implication that an action and the intention with which it is done must be wholly distinct, since if an intention is a process, then it is in the same metaphysical category as action. And this is the implication, as I argued in the previous section, that leads conservatism into problems.

The ready theory is naive action theory (NAT). According to NAT, to intend to do B is to be doing B. Thus, for instance, to intend to distract the police officer is to be distracting the police officer. On this theory, an intention to do B is a process and, in particular, it is an action of type B in progress. With this theory, we can give the following explanation of acting with an intention:

\[(NTW) \text{To do } A \text{ with the intention to do } B \text{ is to be doing } B \text{ and for an action of type } A \text{ to be a sub-action of this doing of } B.\]

The idea is simply that processes resolves into sub-processes, and since an action is a process, actions resolve into sub-actions. When a stone rolls down from the top of a hill to the bottom, the stone undergoes a non-instantaneous change of state from being at the top of the hill to being at the bottom. This process resolves into sub-processes, such as rolling halfway down the hill and rolling from 2 metres down to 3 metres down. Similarly, when a cherry tree fruits, the tree undergoes a non-instantaneous change of state from being flowerless to bearing fruit. This process resolves into sub-processes, such as growing buds, blooming, and ripening. And finally, the
explanation goes, when an agent bakes bread (for instance), the agent undergoes (among other things) a non-instantaneous change of state from not having baked bread to having baked bread. This process resolves into sub-processes, such as mixing the ingredients, kneading the dough, and placing the dough in the oven. In general, an action resolves into sub-actions, actions that amount to a partial unfolding or phase of the wider action.

According to NAT, the intention to do B is a doing of B. So, the intention to do B is an action and, as such, resolves into sub-actions. According to NTW, an action of type A is done with the intention to do B because that action of type A is a sub-action of a doing of B (i.e., the intention to do B). Thus, for instance, when Martha is kneading dough with the intention to bake bread, this is because her dough-kneading is a sub-action of her bread-baking, which is her intention. Acting with an intention is simply sub-acting.

The initial appeal of NTW is that it is perfectly straightforward without, itself, adding entities to the world’s furniture. It does not posit, over and above causation, some irreducibly non-causal relation between two distinct things. Rather, it refers only to processes and the relation of proper parthood. It is highly plausible that proper parthood will be included in any true ontology and that processes admit of proper parts. Such proper parts are sub-processes. NTW straightforwardly claims that acting with an intention is simply an instance of the more general phenomenon of being a sub-process.

Further, from this perspective—the perspective of NAT and NTW—it is the conservative who adds an embarrassing entity to the world’s furniture. For he claims that in order to explain acting with an intention, we need a special state characteristic of acting with an intention that is irreducible to the processes already involved—namely, a ‘state of intending’. In contrast, the NAT theorist needs no such special entity. The

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intention involved in acting with an intention is nothing more than the wider action of which the given action is a proper part. From this perspective, it seems that the conservative must make a case for positing a state of intending irreducible to the processes already involved.

And since NTW explains acting with an intention in terms of sub-acting and not causation nor teleology, it avoids the Nervous Nelly counterexample to CTW₁ and the Jerry counterexample to TTW. Thus, rejecting conservatism helps us to avoid the problem of causal deviance and the problems with Wilson’s teleological response. This gives, at the very least, a prima facie case for seeking a non-conservative theory of intention.

**Conclusion**

Conservatism has a disadvantage in the overall competition for best theory of intention: it forces us to solve the problem of causal deviance or posit a non-causal explanatory relation. We looked at two proposed solutions to the problem of causal deviance and each was unattractive in its own way. Mele proposed that S does A with the intention to do B just in case S’s intention to do B proximately causes S to do A, but this looks too strong, making many (if not all) human actions done without an intention. A different proposal is that S does A with the intention to do B just in case S’s intention to do B causes S to do A in a way that is sensitive to the intention’s content, but this looks both too strong and too weak. More importantly, the anti-causalist challenge here highlights a general challenge for any causal theory: the causal theorist must characterize non-deviant causation in a way that is not tacitly circular. These considerations suggested that causalists have more work to do to solve the problem. On the other hand, anti-causalists hope to avoid the problem by denying that the explanatory connection involved in acting with an intention is causal. Consequently, they must provide some positive characterization of this distinctively non-causal, ex-
plenary connection. It is hard to see how this can be accomplished without adding an embarrassing entity to the world’s furniture.

A ready alternative, naive action theory, can give us an explanation of acting with an intention without all of these problems by rejecting that an intention is a state and claiming instead that an intention is a process. This does involve being less conservative than we had hoped but the above problems suggest that we should at least consider an alternative.

In sum, Chapter 2 showed us a disadvantage for cognitivist theories, and this chapter showed us a disadvantage for conservative theories. This is enough, I think, for us to consider a non-cognitivist, non-conservative theory—that is, to formulate one, assess its viability, and evaluate whether its explanations of future-directed intention and acting with an intention are more attractive than the one’s we’ve considered so far. In the next chapter, I will formulate a non-cognitivist, non-conservative theory according to which an intention is a process. I will argue for its viability primarily by showing how it overcomes some serious objections to naive action theory, a more familiar non-conservative theory. In the last chapter, I will argue that developmentalist explanations of future-directed intention and acting with an intention look more attractive than cognitivist and conservative explanations.
CHAPTER 4

Introduction

In the previous two chapters, we looked at two problems. The first afflicts cognitivism, according to which an intention is a belief. We saw that if we maintain that an intention is a belief, then we must explain how one can permissibly form an intention in the absence of sufficient evidence and out of a desire for its truth. To avoid this mystery, we can drop the cognitivist claim and, without giving up too much, maintain that an intention is some other kind of mental state. However, the second problem we looked at was a problem for this position. We saw that if we maintain that an intention is a state, then we must contend with deviant causal chain counterexamples or be satisfied with a circular or *sui generis* account of acting with an intention. We can side-step this whole issue by denying that an intention is a state. Instead, we can claim that an intention is a process.

In this chapter, I formulate a developmental theory of intention, according to which an intention is an action under development (a kind of process). I argue that this theory can explain prospective intention, pure intention, and dramatic failures better than a more familiar process theory—naive action theory (NAT), according to which to intend to do A is to be doing A. In what follows, I present three problems for the latter view. The first is the problem of explaining how one can prepare to do A, when such cases involve intending to do A but not yet doing A. The second is the problem of explaining how one can intend to do A without doing anything at all. And the third is the problem of explaining how one can intend to do A, when doing A is impossible. NAT, I argue, is not equipped to solve these problems, but the developmental theory is. The solution to all three, in short, is to claim that one is doing A only if that action is *mature* or *highly-developed*. 
In Section 1, I will present the problems in more detail, and in Section 2, I will explain the developmental theory. Then, in Sections 3, 4, and 5, I will tackle each problem in turn.

1. Problems for NAT

The first problem for NAT can be illustrated with the following example. Suppose Sarah is booking a flight to Nepal with the intention to climb Mt. Everest. Sarah, therefore, intends to climb Mt. Everest. According to NAT, to intend to do A is to be doing A. Thus, since Sarah 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.10

This counterexample is devastating to NAT because it 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, NAT 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 NAT can be illustrated with another counterexample. Don, 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.11 On Monday, Don intends to build a squirrel house, but this inten-

10 Paul (2014) makes this criticism.
11 The term comes from Donald Davidson (1980).
tion 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 NAT, since Don intends to build a squirrel house, he is building a squirrel house. The problem is not simply that it seems obvious that, on Monday, Don is not building a squirrel house. Rather, the problem is that there is *nothing* that Don is doing that is connected to this intention. Thus, it is meant to show that one can intend to do A without doing anything at all, which is impossible under NAT.

This counterexample is, perhaps, not as devastating as the previous one, since it is a fringe case. However, the overwhelming plausibility of the possibility of pure intending puts much pressure on NAT to address the problem.

The third problem for NAT can be illustrated with a further counterexample. Suppose Kevin is running around a track with the intention to (here and now) run a mile in four minutes. However, Kevin is in no shape to run a mile that quickly and, besides, unbeknownst to him, he already past the four-minute mark. Therefore, Kevin intends to run a mile in four minutes, but he is not running a mile in four minutes because it’s *impossible* for him to be doing that. According to NAT, since Kevin intends to run a mile in four minutes, he is running a mile in four minutes, but that’s impossible.\(^\text{12}\)

Again, the overwhelming plausibility of dramatic failures like Kevin’s puts much pressure on NAT to address the problem. If Kevin is not running a mile in four minutes, then NAT is false. If Kevin is, despite appearances, we need an explanation of how this could be.

2. **Developmentalism**

\(^{12}\) Paul (2013) makes this criticism.
Both NAT and developmentalism are radical theories, according to which an intention is a process. However, I shall argue, developmentalism has the resources to overcome the above problems, while NAT does not.

The central idea behind developmentalism is that actions develop. And development admits of degrees and stages. Thus, a particular action at any moment will be developed to some degree and at some stage in its development. There’s an analogy here with other things that develop. A human being, for instance, develops, moving through the stages of infant, child, and adult (a mature human being). Also, a tree develops, moving through the stages of sprout, sapling and mature tree. A developing thing moves through developmental stages characteristic to it and, as development increases, moves from immaturity to maturity. The developmentalist about intention suggests that actions share this feature. There are mature actions and immature ones, and there are characteristic stages of action-development.

This observation allows the developmentalist to make a distinction and guard against a potential ambiguity in the word ‘action’. On the one hand, we can talk about ‘an action’ in the broad sense. This is the thing that develops. It is the particular thing under various degrees of development at different stages of its existence. Thus, the action in the broad sense may be slightly-developed or highly-developed or fully-developed, immature or mature. On the other hand, we can talk about ‘an action’ in the narrow sense. This is the action (in the broad sense) at a mature level of development. This distinction is paralleled with other developing things. For instance, a sprout is a slightly-developed tree. Here we mean ‘tree’ in the broad sense, the thing that develops from sprout to sapling to adult. But there is also a narrow sense of ‘tree’ that we would not apply to the sprout or sapling. Here we mean ‘mature tree’: the sense of ‘tree’ that applies to those things with leaves and branches and bark and fruit. In the narrow sense, it would be false to say that the sprout is a tree, since the sprout is not a mature tree. However, in the broad sense, it is perfectly true to say that a sprout is a tree. Similarly, we can talk about ‘an action’ in the narrow sense, meaning ‘a mature
action’, and ‘an action’ in the broad sense, meaning the action that is under development whatever the stage.

To avoid the ambiguity, let us use ‘an action’ only in the broad sense. And to mark the distinction, let us call an action (in the broad sense, remember) at some level of development ‘an action under development’ and an action at a mature level of development ‘a mature action’.

It is important to see that, for the developmentalist, the action under development is the analogue to the tree and not the process of the tree’s development. True, an action under development is a process, and also true, the development of a tree from seed to mature tree is a process. But the developmentalist is not pointing out this rather trivial fact. Instead, the developmentalist is pointing out that just as a tree develops from a seed into a mature tree, an action (in the broad sense) develops from an undeveloped action into a mature action. That is, a process—a non-instantaneous change—can itself change. A change can change. An action under development is a process, and as such it is constituted by a change from one state to another. But that change also develops. For example, a table-building under development is a process, constituted by a change from there being no completed table-building to there being a table-building (i.e., from the fact that the agent did not build a table to the fact that the agent did build a table). But that change can develop just like a tree. Early on, the table-building may not just be incomplete but also underdeveloped, not just in the midst of unfolding but also at some degree of development. The action itself is under development. It is not merely the development of something.

Now let us formulate The Developmental Theory:

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13 See Helen Steward (2012) for more on how processes can change.
An intention to do A is an action of type A under development.¹⁴

In other words, an intention is an action (in the broad sense) at some level of development. It is the thing that moves through characteristic developmental stages and matures into an action in the narrow sense. What these developmental stages are will come into view as we consider the problems below, but to foreshadow slightly, there is at least (at a fairly general level) preparation and production. In the preparation stage, parts are put in place for the production stage, where those parts are put to the service of bringing the action to completion. For example, buying wood is part of the preparation stage and hammering a nail part of the production stage of building a table. Both buying wood and hammering a nail contribute to a process that terminates in the existence of a table, and in someone’s having built that table. But the buying of wood is at an immature level of development for the whole process. Very few parts are in place for ‘real’ building to begin, for the table itself to begin production.

These stages are analogous to the budding-to-pollination stage, on the one hand, and fertilization-to-ripening stage, on the other, of fruiting. The budding and flowering stages of fruiting are immature fruitings. Budding and flowering serve the production of a fruit by producing the parts needed for fertilization-to-ripening (namely, buds and flowers). In the latter stage, the fruit forms and matures. The stage itself, particularly the ripening, is a mature or highly-developed fruiting. Analogously, sanding a table is a mature or highly-developed table-building. On the developmental theory, the intention to build a table is the table-building in the broad sense, the table-building under development. That action under development, when it is a wood-buying, is immature or slightly-developed. It is a preparatory step. When it is a table-top-sand-

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¹⁴ 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 a developmentalist, an action under development is not a partially existing action but a fully existing, incomplete, developing action. This will make John Bishop (2011) happy.
ing, it is a mature or highly-developed table-building—a productive step. That’s the general picture.

In what follows, we shall see that the developmental theory avoids the three problems for NAT because the developmental theory does not entail NAT.

3. Prospective Intention

The first problem for NAT came from the following example. Suppose Sarah is booking a flight to Nepal with the intention to climb Mt. Everest. Sarah, therefore, intends to climb Mt. Everest. According to NAT, to intend to do A is to be doing A. Thus, since Sarah 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 counterexample is devastating to NAT because it 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, NAT makes preparation, and prospective intention more generally, impossible. Yet these are two central phenomena that any theory of intention should explain.

Developmentalism, however, has the resources to avoid this problem. With it, we can say that Sarah has the intention to climb Mt. Everest, and that this intention is an action of climbing Mt. Everest under development. Therefore, an action of climbing Mt. Everest (in the broad sense) exists. However, this existent action is only slightly developed. It is not a mature climbing of Mt. Everest. Thus, an action of climbing Mt. Everest, in the narrow sense, does not exist. This, I think, is the intuition behind the problem. When a tree is a sprout, there is a sense in which it is not yet a tree. It is not yet a mature tree—the thing with leaves and branches and bark and fruit. With Sarah, we notice that something analogous does not exist. A mature climbing of Mt. Everest does not exist—the thing that involves being on the mountain and making
certain bodily movements. This mature action is prospective. As Sarah books her flight, her climbing of Mt. Everest (in the broad sense) is a sprout, a slightly-developed 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 Sarah’s action of climbing Mt. Everest exists at all, then Sarah is climbing Mt. Everest (even if this process is at a very early stage in its 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: Sarah 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 nominals of the latter.) The difficulty with recognizing this, I think, is that the concept of doing itself may very well be restricted to the narrow sense, and so the suggestion that there is a ‘doing’ in the broad sense may be incoherent. But the developmentalist can side-step 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). In place of ‘doing’ in the broad sense, he can 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 or highly-developed action is a kind of action. By contrast, if an action is not mature, then it is not being done; rather it is merely being developed. Thus, since Sarah’s climbing of Mt. Everest, as she books her

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15 I expect Keiran Setiya (2011) would have this response.
flight, is not mature, she is not climbing Mt. Everest but merely developing that action. Sarah is preparing to climb Mt. Everest, and preparing, claims the developmentalist, is also a kind of developing. Preparation is a characteristic developmental stage of actions.

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 imply that the relevant agent is doing it. Rather, the action is merely slightly developed, and thus the agent is merely developing it, or more specifically, preparing to do it. As the action’s degree of development increases, 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, this does not conflict with the intuition that, in such cases, the action in the narrow sense does not exist or the intuition that the relevant agent is not doing it. Ordinary cases of preparation do not prove that developmentalism is false. Such cases do, however, prove that NAT is false, since according to NAT, to intend to do A is to be doing A and, in such cases, the agent intends to do A yet is not doing A.

4. Pure intention

The second problem for NAT came from the following counterexample. Don, 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, Don 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 NAT, since Don intends to build a squirrel house, he is building a squirrel house. The problem is not simply that it seems obvious that, on Monday, Don is not building a squirrel house. Rather, the problem is that there is nothing that Don is doing that is connected to this intention. Thus one can intend to do A without doing anything at all, which is impossible under NAT.

Some, like Martin Stone and Richard Moran (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 ‘Ron was building a squirrel house’ or ‘Ron is building one’, do not entail corresponding statements with perfective aspect, like ‘Ron 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, Ron 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 advancement. The statement ‘Ron is building a squirrel house’, for instance, does not entail that for any x, there is an x such that x is advancing Ron’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 unfolding. The action may be in hiatus, we might say. For instance, it may be true that Ron 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.¹⁶

Stone and Moran use these two metaphysical points about action to respond to the pure intending problem. They claim that, on Monday while at work sitting at his desk, Don is building a squirrel house. However, his action is both incomplete and in hiatus. Therefore, even though all Don has done is form the intention to build the

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squirrel house, his action is in progress. Yet, nothing right now constitutes its unfold-
ing; so it is in progress but only in the way that actions in hiatus are. And, by hypoth-
esis, the action never completes, since Don 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 unsettling aspect of this response is that it insists that Don is building a squirrel
house, but this is counterintuitive. The developmentalist can remedy this by claiming
that Don is not building a squirrel house (because, although the action exists, it is
only slightly-developed, and an agent is doing A only if the given action is mature).
But in doing so, the developmentalist seems to saddle himself with the pure intend-
ing problem, since the metaphysical points about action are about an action being
done, but the developmentalist denies that the action is being done.

Contrary to how it may seem, developmentalism can incorporate the metaphysical
insights of Stone and Moran. To see this, it is important to see that, like Stone and
Moran, the developmentalist claims that an action, even an action under develop-
ment, is a process. So for the developmentalist, an intention is a process too. In other
words, whenever an action exists, even if it is only slightly-developed, a change from
one state to another is occurring. 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 an intention, is in progress. He is merely denying
that an action, when it is an 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 slightly-developed. Thus,
the developmentalist can accept the metaphysical points 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, slightly-developed action.
Therefore, on Monday, Don’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, however, it is in hiatus.

5. Dramatic failure

The third problem for NAT came from the following counterexample. Suppose Kevin is running around a track with the intention to (here and now) run a mile in four minutes. However, Kevin is in no shape to run a mile that quickly and, besides, unbeknownst to him, he is already past the four-minute mark. Therefore, Kevin intends to run a mile in four minutes, but he is not running a mile in four minutes because it’s impossible for him to be doing that. According to NAT, since Kevin intends to run a mile in four minutes, he is running a mile in four minutes, but that’s impossible.

If the NAT theorist tries to claim that Kevin is, despite appearances, running a mile in four minutes, we need an explanation of how this could be. The NAT theorist might try to point to the fact that an action can be in progress even if it never completes and claim that Kevin’s case is an extreme instance of this. Kevin’s running of a mile in four minutes will never complete because it’s impossible, after the four-minute mark, for it to complete.

The problem with this response is that Kevin’s running of a mile in four minutes doesn’t seem to be in progress at all after the four-minute mark. Perhaps before this, he was running a mile in four minutes, and so we can say that his action was in progress then. But after the four-minute mark, because it is impossible for him to advance that action any further, there seems to be no sense in which it is in progress. His running of a mile in four minutes is over and fails to complete at the four-minute mark, yet he still intends to (here and now) run a mile in four minutes, after that mark.
Without the developmentalist’s resources, it seems implausible to say that Kevin’s running of a mile in four minutes is in progress. This is because it’s impossible for him to advance a mature running of a mile in four minutes any further. Clearly, however, Kevin is running. With every step, the developmentalist can say, Kevin is developing a running of a mile in four minutes, and this is plausible. The action is under development, even if it is impossible for the action to become more developed. Thus, an immature running of a mile in four minutes is in progress. But this immature action, after the four-minute mark, will never develop into a mature action.

**Conclusion**

Using developmentalism, we can explain pure and prospective intention and dramatic failures without the problems faced by NAT. An initially pure intention is the seed of action. At the beginning of its life, the intention is in progress but only in a hiatus-like way: nothing right now constitutes its unfolding. The intention is pure. Once some subordinate action, perhaps a preparatory step, constitutes its unfolding, the intention begins to develop. As long as its degree of development is low, the mature action it will become (if all goes well) remains prospective. Eventually, when all does go well, the intention develops into a mature action, at which point it is true to say that the agent is doing it. Then the mature action develops into a fully-developed action and completes, evaporating into the past. This is the life of an action.

Now we have a viable non-conservative theory. All that’s left to do is to use developmentalism to explain future-directed intention and acting with an intention. We have already seen that by the very fact that developmentalism is a non-cognitivist, non-conservative theory, it will avoid the problems of Chapters 2 and 3. Now we want to see what the developmental explanations are. This will at least put us in a position to evaluate these explanations against the explanations provided by cognitivism and DPA non-cognitivism.
CHAPTER 5

The purpose of this chapter is to put the developmental theory to work. We have seen that cognitivism has the benefit of straightforwardly explaining practical knowledge but suffers the cost of leading to Grice’s paradox. We have also seen that DPA non-cognitivism has the benefit of straightforwardly explaining the distinctive role of intention in human lives but the cost of leading to the problem of causal deviance. In this chapter, I will show that the developmental theory has all these benefits without the costs. Before I do this, I consider an objection that threatens to undermine the theory. The response to the objection will help us to flesh out the theory even more. With this more detailed theory in hand, I will show how it explains future-directed intention without leading to Grice’s paradox and how it explains acting with an intention without leading to the problem of causal deviance. In the final sections, I will sketch some promising ways that a developmentalist might explain the distinctive role of intention and practical knowledge.

1. An objection

Before explaining future-directed intention and acting with an intention, we must confront an objection that threatens to make any radical theory of intention a non-starter. The objection goes like this. A process is some sort of non-instantaneous change. Such a thing has certain features that derive from its very nature—features it, by its very nature, must have. For instance, a process initiates, unfolds over time, moves through phases, and moves closer to completion and further away from initiation. As Moran & Stone (2011) put it, processes “involve a diminishing future and a swelling past” of phases. A state, by contrast, persists through time but doesn’t unfold.

Given this, we will want to say that being 170 lbs is a state and not a process. An object can be 170 lbs for a time but an object cannot move closer to completing being
170 lbs and further away from the start of being 170 lbs. There are no phases of being 170 lbs to move through, putting some in the past while diminishing the number in the future. On the other hand, we will want to say that dissolving is a process and not a state. This is because an object can move closer to completing dissolving (as one gets closer to being incorporated into a solution) and further away from the start of dissolving, where the object was unincorporated. So on the face of it, being 170 lbs is a state and dissolving is a process.

What about an action and an intention? On the face of it, we want to say that an action is a process and not a state. Because an agent can move closer to completing an action and further away from the start of one. An action moves through phases. So it looks like an action has features that a process, by its very nature, must have. On the other hand—and here’s the objection to any radical theory of intention—an agent can’t move closer to completing an intention or further away from the start of one. An intention looks more like being 170 lbs. An agent has an intention for a time but the intention does not unfold or move through phases. An intention merely persists through time, like a state. Thus, an intention lacks features that a process, by its very nature, must have. Therefore, an intention is not a process, and hence any radical theory must be false.

2. The response

This objection relies on the premise that an intention does not unfold or move through phases, but this premise is ambiguous. 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 premise 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 premise means that the object of an agent’s token intention does not unfold or move through phases.

On the latter interpretation, the premise 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 any radical theory is false. This is because a radical theory of intention is about token intentions, not the objects of token intentions. According to a radical theory, a token intention is a token process. Thus, the claim that the object of an intention does not unfold or move through phases is consistent with any radical theory.

On the other interpretation, the objection is about token intentions and thus its conclusion is that a token intention is not a token process. If this objection were sound, it would straightforwardly follow that any radical theory is false. However, on this interpretation, the central premise is that *a token intention* does not unfold or move through phases, yet this is not at all obvious.

The initial attraction of the premise, 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 premise comes from a prior commitment to conservatism, then the objection begs the question. So, we are left to wonder why we should think the premise is true.

Further, there is an independent argument that suggests the premise is false. It goes like this. Given the way that token intentions figure in a certain sort of explanation of action, they seem to have the same process-like structure as a token action. Notice that

‘I am doing A because I want to do B’,

‘I am doing A because I intend to do B’,

‘I am doing A because I am trying to do B’,

and ‘I am doing A because I am doing B’,

under a certain reading of the ‘because’, can each entail ‘I am doing A in order to do B’. This strongly suggests that, when one of these statements is true and it entails ‘I am doing A in order to do B’, the same kind of explanatory relation holds between the action of doing A and whatever is referred to on the right side of the ‘because’. In other words, an action can be explained, in the very same way, by four different kinds of thing: a want, an intention, an attempt, and a doing.

In the case of ‘I am doing A because I am doing B’, an action is explained by another action. In this case, it is eminently plausible to give the following account of the explanatory relation:

what makes it the case that S is doing A because S is doing B is that S’s doing of A is a sub-action of S’s doing of B.
This case makes it plausible that the kind of explanatory relation involved is a relation between a process and one of its sub-processes. Further, the explanans is a process in progress: S is doing B; S has not yet completed it, so it is not the case that S did B.

Now notice this. Although ‘I did A’ can figure on the left side of the ‘because’, it cannot figure on the right. In other words, a completed action—a completed process—can be explained by another action in the relevant way, but a completed action cannot explain another action in that same way. It is possible that S did A because S is doing B (or was doing B). But it is not possible that S is doing A because S did B, where this entails that S is doing A in order to do B. The explanans is always either ‘S is doing B’ or ‘S was doing B’—an action in progress. This suggests that the kind of explanatory relation involved cannot be one between a completed process and its sub-processes but is, characteristically, a relation between an incomplete process and its sub-processes.

Given this and given the fact that a want, an intention, and an attempt can figure as an explanans (where this entails that S is doing A in order to B), it seems that a want, an intention, and an attempt are also incomplete processes. The kind of explanatory relation involved when an agent is doing A in order to B is an explanatory connection such that a process in progress explains its sub-processes. The relevant process in progress may be a want, an intention, an attempt, or a doing. This makes it look like a token intention is a process after all, since it can explain an action in the same way a doing does—namely, by identifying the action as one of its sub-processes.\footnote{See Thompson (2008, p. 97–134) for a more detailed version of this argument.}

All this makes trouble for the thought that it’s obvious that a token intention does not unfold or move through phases. On the contrary, developmentalism and, with it, the claim that a token intention is a token process can give us an elegant explanation of the above kind of explanatory connection. Consider the resultant picture:\footnote{Compare with Thompson (2008, p. 99).}
Each statement in the table entails a corresponding ‘in order to’ statement: ‘S... A in order to do B’. According to the wider developmentalist picture, this is because the explanatory connection in every case is a relation between an action in progress (the explanans) and one of its sub-actions (the explanandum). Thus a want, an intention, an attempt, and a doing are all actions in progress.

Further, and this is the characteristically developmentalist claim, each type of explanans (designated by a column) is an action under development at a *different* developmental stage. The rightmost column designates a mature action under development—the adult form of an action, as it were. The mature action is in progress and thus is ‘a doing’ (i.e., the agent is doing A). The leftmost column designates an action under development in its first, immature developmental stage—the seed of an action. Moving right, the action under development enters its next characteristic developmental stage. The life of an action involves developing from a want (a seed) to an intention (a sprout) to an attempt (an adolescent) to a doing (an adult). The explanatory relation in every case is a dependancy relation between an action under development and in progress and at a certain developmental stage and one of its sub-actions,
which may also be under development, in progress, and at a certain developmental stage.

We can see then how the developmental theory of intention and with it the claim that an intention is a process naturally arises from the wider developmental picture. An intention is an action under development at one of an action’s characteristic developmental stages. This helps us to see that, after all, an intention does unfold and move through phases. Look at the second column: doings, attempts, further intentions, and wants can be sub-parts, sub-processes, of an intention. As these sub-processes develop and complete, the intention unfolds and moves through phases.

Far from its being obvious that an intention does not unfold, the unity of the explanatory connection that runs throughout the above table suggests that it does unfold.

There is one complication we must deal with before moving on. Just as ‘an action’ admits of a potentially confusing ambiguity, so does each developmental stage. We noticed before that ‘an action’ could be used in two senses. It may broadly refer to an action under development, something that might be a want, intention, attempt, or doing and thus figure everywhere in our table. Or ‘an action’ may narrowly refer to a mature action or doing and thus figure only in the rightmost column and bottom row. Similarly, ‘a want’, ‘an intention’, and ‘an attempt’ admit of a potentially confusing ambiguity: each have broad and narrow senses. Therefore, most relevantly, ‘an intention’ may broadly refer to an action under development or narrowly refer to that which is an explanans in the second column and explanandum in the second row. In the former sense, we might say, for example, that a doing of A is a matured intention to do A as we might say that a tree is a matured sprout. In the latter sense, by contrast, we would talk about an intention strictly as an action under development that has developed beyond the wanting stage but that has not developed into an attempt.
or doing. In what follows, I will always use ‘an intention’ in the broad sense and signal when I am using it in the narrow sense.

3. Avoiding Grice’s Paradox

A future-directed intention to do A is an immature action of type A under development. When an intention to do A is immature, it has not yet developed into a mature action—a doing of A. Thus, the doing of A is, in a sense, in the future. It is in the future in the sense that if all goes well—that is, if the action develops as actions of its type characteristically do—then the action under development (at this stage, an intention) will develop into a doing. For an intention to be future-directed, then, is for it to be a type of thing that develops into a mature action (or doing) but to not yet be so developed. It is on its way to becoming a mature action of type A.

A so-called ‘present-directed’ intention to do A is nothing more than a mature action of type A. Once an intention to do A develops to maturity, the doing of A is no longer in the future; rather, the intention has become the doing. Thus, the doing is in the present. It is odd, however, to say that the intention is directed at this present doing, since it simply is this present doing. A better term for this kind of intention, in contrast to future-directed intention, might be ‘arrived’ intention; for the doing at which the future-directed intention was directed has arrived.

To illustrate, a future-directed intention to build a table is an immature table-building under development. When Tom buys wood with the intention to build a table, his intention to build a table is immature and thus it has not yet developed into a mature table-building (i.e., Tom is not yet building a table). The mature table-building is in the future. If the table-building develops as table-buildings characteristically do, then the current, immature table-building under development (the intention to build a table) will develop into a mature table-building and Tom will be building a table. For the intention to build a table to be future-directed is for it to be a type of thing
that develops into a mature table-building but to not yet be so developed. It is on its way to becoming a mature table-building.

An arrived intention to build a table is nothing more than a mature table-building. When Tom starts hammering pieces of wood together with the intention to build a table (the very same intention he had before), his intention to build a table has developed to maturity. It is no longer developing into a mature table-building but has become one (i.e. Tom is building a table).

Notice how this differs from the cognitivist explanation future- and present-directed intention. Given that for cognitivists an intention is a belief, when one forms an intention, one aims to match the content of the intention to the facts. A future-directed intention is a belief about the future, and a present-directed intention is a belief about the present. In forming a future-directed intention, then, one aims to match a representation of the future to the future facts, and in forming a present-directed intention, one aims to match a representation of the present to the present facts. Thus, for instance, on the straightforward view, Tom's future-directed intention would be the belief that he will build a table and his present-directed intention would be the belief that he is building a table.

This is what gives rise to Grice’s Paradox. For cognitivists, when Tom forms the intention to build a table, he must form a belief that he will build a table. But prior to forming the intention to build a table, there is insufficient evidence that he will get around to it. So he must form the belief in the face of insufficient evidence for it, which is epistemically impermissible. Yet it seems perfectly permissible for Tom to form the intention. Thus, cognitivism leads to a paradoxical judgment about the permissibility of forming an intention: it is both permissible and impermissible.

Developmentalism does not lead to this paradoxical judgment. According to it, when Tom forms the intention to build a table, he forms a table-building under development. That is, Tom initiates the development of a table-building. In initiating an ac-
tion, one does not aim to match one’s mind to the facts; rather, one aims to match the facts to one’s mind (e.g. to change the facts such that a table-building matures and completes). Thus, it is the standards that derive from that aim that come to bear on Tom’s initiation of a table-building under development. And that aim would permit Tom’s initiation even in the face of insufficient evidence that he will build a table. So there’s no paradox. For the developmentalist, it is permissible to form an intention to do A in the absence of sufficient evidence that one will do A because it is permissible to initiate an action of type A under development in those circumstances.

Cognitivism leads to paradox because by identifying an intention with a belief, the cognitivist brings the standards of permissible belief formation to bear on intention formation. The developmentalist does not. Rather, the developmentalist brings the standards of permissible action initiation to bear on intention formation. It is permissible to form an intention to do A just in case it is permissible to initiate an action of type A—that is, an action of type A in the broad sense (i.e., an action of type A under development). This does not lead us into paradox.

4. Avoiding the problem of causal deviance

The developmentalist explanation of acting with an intention flows from the wider picture. To do A with the intention to do B is to do A because one is doing B, where this entails that one is doing A in order to B. Thus, the explanatory connection between the intention and the action done with it is a dependancy relation between an action under development (and in progress and at a certain developmental stage) and one of its sub-actions. In other words,

(DTW) To do A with the intention to do B is (i) to be developing B, (ii) for this action of type B under development to have developed beyond the mere wanting stage, and (iii) for an action of type A to be a sub-action of this action of type B under development.
So for example, when Martha is kneading dough with the intention to bake bread, this is because her dough-kneading is a sub-action of her bread-baking under development. At this stage, her bread-baking under development has developed beyond the mere wanting stage and even beyond the mere intending stage: her bread-baking under development is mature and thus an arrived (so-called ‘present-directed’) intention. Therefore, her dough-kneading is a sub-action of a mature bread-baking under development. Thus, she is kneading dough with the arrived intention to bake bread. She is baking bread, and her dough-kneading is a sub-action of that.

When Sarah is booking a flight with the intention to climb Mt. Everest, this is because her flight-booking is a sub-action of her Mt. Everest-climbing under development. At this stage, her Mt. Everest-climbing under development has developed beyond the mere wanting stage but not beyond the mere intending stage. Her Mt. Everest-climbing under development is immature and is thus a future-directed intention. Therefore, her flight-booking is a sub-action of an immature Mt. Everest-climbing under development. Thus, she is booking a flight with the future-directed intention to climb Mt. Everest. She is not yet climbing Mt. Everest, but that action is under development. And her flight-booking is a sub-action of that action under development.

Now recall the problem for causal theories of acting with an intention. They were faced with a counterexample. Nervous Nelly’s intention to distract the police officer causes her to knock over a glass, yet she doesn’t knock over the glass with the intention to distract the police officer. Therefore, if the explanatory connection involved in acting with an intention is causation, the causal theorist needs to explain the difference between Nervous Nelly and a genuine case of acting with an intention. Such an explanation does not seem forthcoming.

Developmentalists, by contrast, do not face the counterexample and can give an explanation of the difference. They do not face the counterexample because develop-
mentalists do not explain acting with an intention in terms of causation, so they are not committed to saying that, because Nelly’s knocking is caused by her intention to distract the police officer, she is acting with an intention. And developmentalists can give an explanation of the difference between Nelly’s case and a genuine case by saying that, although Nelly’s knocking is caused by her intention to distract, it is not a sub-action of her distracting under development. Allow me to elaborate.

Consider a parallel case. Suppose we live in a world much like our own but where ‘replicators’ exists. Replicators are the devices depicted in the television show Star Trek: The Next Generation. They can, at the request of an operator, produce physical objects by combining atoms together in the appropriate way. So for instance one might request an Earl Grey tea and the device will combine atoms together to produce an Earl Grey tea. The tea will be, right down to its atomic structure, precisely a real, authentic Earl Grey tea. Now suppose that installed on one of these replicators is a switch, much like a light switch, that when flipped up signals the replicator to produce an oak tree. And suppose that this replicator was placed next to an emerging sprout growing naturally out of the ground. One day when the sprout is tall enough, it manages to grow upwards with enough pressure to throw the switch, and the replicator produces, atom by atom and instantaneously, an oak tree. In this case, the sprout caused the oak tree to come to be, but it did not develop into the oak and so is not identical to the oak tree. There are two oak trees: the sprout, an oak tree under development, and the mature oak tree produced by the replicator. This, developmentalists claim, is parallel to so-called deviant causation.

Return to the Nervous Nelly case. In it, Nelly has the intention to distract the police officer, and this intention causes her to knock over the glass. Yet, intuitively, she did not knock over the glass with that intention. And this appears to be so because of the way her intention caused the action. In particular, her intention caused her to get agitated, which caused her arm to shake and strike the glass. In the end, the knock-
ing over of the glass distracts the police officer but not by way of her knocking over the glass with that intention.

In this case, say developmentalists, the intention causes the action just as the sprout causes the oak tree above. Thus, in this case, there are in fact two distractings: Nelly’s intention to distract the police officer, a distracting under development, and the mature distracting produced by Nelly’s agitation. In the non-deviant case, there is only one distracting. It starts its life as a distracting under development and develops into a mature distracting. The intention and the distracting are one and the same, and the knocking is a sub-action of it. In the deviant case, the mature distracting is wholly distinct from Nelly’s distracting under development (her intention), and the latter never develops into the former. Her intention remains, the entire time, a distracting in the mere intending stage of development just as the sprout above remains an oak tree in the mere sprout stage of development. That distracting in the mere intending stage causes Nelly to get agitated (presumably through her awareness of it). This is like the sprout flipping the switch on the replicator. Nelly’s intention has an effect on her nervous system and her nervous system produces a mature distracting. But this mature distracting is a new, additional distracting, which is not identical to Nelly’s intention.

Developmentalists can now say this. Nelly’s intention to distract the police officer is not the intention with which she knocks over the glass because that knocking is not a sub-action of that intention (i.e., Nelly’s distracting under development). In this case, Nelly’s distracting never develops into a mature distracting. We will fail to see this if we conflate Nelly’s distracting under development with the distracting she causes by knocking over the glass. Her distracting under development indeed causes the knocking. But causing an action is not what makes an intention the intention with which the action is done. For that, the action must be a sub-action of the intention, and in this case the knocking is not. So our developmental account of acting with an
intention gives us an explanation of why this case is not a genuine instance of acting with an intention.

In general, a process can cause another process. A heating can cause a cooking. A watering can cause a dissolving. But a process can also have sub-processes—processes not that it causes but that constitute narrower segments of its unfolding. A photosynthesizing may constitute a narrower segment of a growing, for instance. In a so-called deviant case, an action causes another action, but the latter is not a narrower segment of the former’s unfolding and thus the former fails to develop. In a genuine case, an action doesn’t cause another action at all. An action simply develops, with another action constituting a narrower segment of it.

So, the developmentalist avoids the problem of causal deviance by not explaining acting with an intention in terms of causation. One acts with an intention not because the intention causes the action but because the action is a sub-action of the intention (i.e., an action under development). Nervous Nelly is not a counterexample to DTW because condition iii is not met: her knocking is not a sub-action of her distracting under development. For there to be a parallel problem with DTW, we would need an example where condition iii is met yet intuitively the agent is not doing A with the intention to do B. Such an example does not seem forthcoming. (And if the developmentalist is right, such an example will never come.)

5. The distinctive role of intention

A chief attraction of DPA non-cognitivism is the explanation it can give of the distinctive role of intention. When one has an intention to do A, one has certain characteristic tendencies. Namely, one has the tendencies to reason about how to do A, to form the further intentions given by this reasoning, and to (at least) attempt to do A by executing these further intentions (whatever they will be). In this way, intention is unlike desire and belief. When one has a desire to do A, one does not, typically, have these tendencies. When one has a desire to drink a glass of milk, for instance,
we do not think of such a person as, paradigmatically or normally, highly likely to rea-
son about how to get a glass of milk and drink it, to form the further desires to get
up, go to the kitchen, and grab a glass (for instance), or to attempt these things. De-
sire is, in its most paradigmatic sense, an uncommitted aspiring. Similarly, when one
merely believes that she will do A (without desiring to do it), one does not typically
have the tendencies to reason about how to do it, to form further intentions, or to
attempt to do it. Belief is, in its most paradigmatic sense, without motivation to do
anything. Thus, intention is associated with tendencies distinct from both desire and
belief.

DPA non-cognitivists can explain this by saying that one has these tendencies be-
cause an intention is a *sui generis* motivational state. To have an intention to do A is to
be in a certain motivational state with respect to doing A. It is (among other things)
to be motivated to reason about how to do A, to form the further intentions given by
this reasoning, and to (at least) attempt to do A. The tendencies associated with in-
tention are grounded in its nature as a motivational state. Since it is a motivational
state, it is unlike belief, and what it characteristically motivates is unlike what desire
characteristically motivates. In this way, DPA non-cognitivism explains the distinc-
tive tendencies of intention.

Developmentalists can also explain these distinctive tendencies. In short, reasoning
about how to do A, forming the further intentions given by this reasoning, and ad-
vancing toward the attempt to do A are characteristic of the intending stage of an
action under development (i.e., an intention in the narrow sense). When one has the
intention to do A and is not yet attempting to do A or doing A, one has the above
tendencies because one is developing A and that action under development is at a
certain developmental stage—namely, the intending stage, the stage after wanting
and before attempt.
Those tendencies are characteristic of the intending stage for the following reason. The mark of a developmental stage (for any developing thing) is the putting in place of the proper parts needed for the next stage, and the mark of entering the next stage is having enough of those parts in place to put in place the proper parts needed for the further stage (or, if it the last, completion). In the case of action, this means that characteristic of the intending stage is the putting in place of sub-actions (e.g., further wants, intentions, attempts, or doings) needed for the trying stage. This involves reasoning about how to do A, forming the further intentions given by this reasoning, and in doing so advancing toward having enough of those sub-actions in place to start trying, thereby advancing toward the attempt to do A. The wanting stage does not, paradigmatically, involve this because characteristic of the wanting stage is the putting in place of the sub-actions needed for this.

This is why intending (in the narrow sense) is distinct from wanting. But intending is also distinct from believing because belief aims at the truth. That is, in forming and maintaining a belief, one aims to match the content of one’s belief to the facts. In forming an intention (initiating it) and maintaining (advancing) it, one aims at changing the facts to match one’s mind. In particular (but not exhaustively), one initiates and advances a process, a non-instantaneous change, in accordance with some wider action she is developing.

This developmentalist explanation of the distinctive role of intention is very rough and sketchy, but the point of presenting it is not to give a full explanation, or to significantly advance our understanding of intention. Rather it is to show that there is a promising developmentalist explanation to give. Now that we have seen that developmentalism can overcome problems that plague cognitivism, state theories, and naive action theory and we have a reasonably clear picture of the theory, we should like to see how it can advance our understanding of the distinctive role of intention. An avenue has been opened for future research.
6. Practical knowledge

A chief attraction of cognitivism is the explanation it can give of practical knowledge. When one comes to have practical knowledge, one characteristically comes to have knowledge about what she will do in a way distinct from theoretical knowledge about what she will do. With theoretical knowledge, one comes to know about what she will do on the basis of evidence and by aiming to match the content of one’s mind to the facts. With practical knowledge, by contrast, one comes to know about what she will do not on the basis of evidence and by aiming to match the facts to the content of one’s mind. Consider the difference, for instance, between the boxer who comes to know that he will go down in the third round, on the one hand, by considering the strength of himself and his opponent and thus the likelihood of being knocked out in the third round, and on the other hand, by deciding to throw the fight by letting his opponent beat him. These are often thought to be two distinct ways of coming to know about what one will do, although the latter is mysterious and in need of explanation.

Cognitivists can explain practical knowledge and dispel the mystery by saying that an intention is a belief and that practical knowledge is embodied by such a belief, which (being an intention) is not characteristically formed on the basis of evidence. Practical knowledge is a special sort of knowledge embodied by an intention. As such, it is attained by forming an intention, i.e. by deciding. This explains (at least in part) why one comes to have practical knowledge not on the basis of evidence but by deciding. One forms a belief not on the basis on evidence but by deciding. Further, in deciding and hence forming an intention, one aims not only at the truth but to match the facts to the content of one’s mind. Thus, when one comes to have practical knowledge, one comes to have it by aiming to match the facts to the content of one’s mind. The claim that intention is a belief, then, can help us to understand practical knowledge.
Or so cognitivists claim. We have seen that this conception of practical knowledge is problematic and so we should remain suspicious about whether the cognitivist explanation of practical knowledge is the right way to dispel the mystery.

Fortunately, developmentalists can explain practical knowledge and dispel the mystery too, albeit in a different way. They can say that cognitivists were on the right track in thinking that practical knowledge is embodied by intention but wrong to think that an intention is a belief. Instead, under developmentalism, since intention is an action under development, practical knowledge is embodied by an action under development. This opens up an entirely new way of understanding practical knowledge. Knowledge in general is a mental achievement of obtaining a match between one’s mind and the facts. Theoretical knowledge is the mental achievement of matching the content of one’s mind to the facts. This is why its embodiment is in belief. In forming a belief, one aims to match its content to the facts. When one achieves that aim (by aiming at it), one attains theoretical knowledge. Practical knowledge, on the other hand, is the mental achievement of matching the facts to the content of one’s mind. What developmentalism allows us to see is that that content is not always the content of a state. Sometimes it is an action under development. To match the facts to an action under development is to change the facts such that the action develops. One attains practical knowledge, when one achieves success in developing and especially fully developing (i.e., completing) the action. Simply put, practical knowledge is success in action, where action is understood as something that can be under development and something that reasoning can often help develop. This will be missed and practical knowledge will look mysterious, if we think that knowledge is always embodied by a state, a static representation of the facts to which the facts must match. Instead, there is a mental achievement in developing one’s wants and intentions, understood as actions under development, into completed actions.
Again, this developmentalist explanation of practical knowledge is very rough and sketchy, but the point of presenting it is not to give a full explanation or significantly advance our understanding of practical knowledge. Rather it is to show that there is a promising developmentalist explanation to give. Now that we have seen that developmentalism can overcome problems that plague cognitivism, state theories, and naive action theory and we have a reasonably clear picture of the theory, we should like to see how it can advance our understanding of practical knowledge. An avenue has been opened for future research.
CONCLUSION

I have argued that developmentalism has the promise of explanatory power while avoiding some costs of cognitivism and DPA non-cognitivism. In particular, it looks like it can explain the distinctive role of intention and practical knowledge while avoiding Grice’s Paradox and the problem of causal deviance.

I have not argued that cognitivism is hopeless or that DPA non-cognitivism is hopeless or that developmentalism has the best explanation of future-directed intention and acting with an intention. These conclusions would require much stronger and decisive arguments, canvassing all the best possible responses and positions. My aim has been much more modest. At the outset we thought that, given the radical nature of the claim that an intention is a process, it is not clear why we should even consider it, especially when the familiar theory that advances it—naive action theory—faces serious objections and when the claim that an intention is a state has proved to be explanatorily powerful. We can now see, I hope, that the popular conservative views have their flaws and that a better radical theory—developmentalism—does not face those objections. Moreover, it shows promise of doing explanatory work. Therefore, we should consider it.

That thesis I hope to have adequately defended. Having said that, I think the picture of intention sketched throughout is quite attractive, and that it is now in a position to be developed into a serious contender for best explanation of intention.
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