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How to Think Several Thoughts at Once

Content Plurality in Mental Action[1]

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Abstract

Basic actions are those intentional actions performed not by doing any other kind of thing intentionally. Complex actions are performed by doing another kind of thing intentionally. There are both basic and complex contentful mental actions. Some contentful complex mental actions have a striking feature that has not been previously discussed: they are performed by way of another kind of action with a distinct content. In other words, a mental action with one content can be constituted by a mental action with a distinct content. This chapter introduces and explains this "content plurality" of certain complex mental actions. This chapter also argues for the philosophical significance of this feature. Content plurality offers a new explanation of transparent self-knowledge and suggests a new theory of inference. It also opens up a new conception of the relation between decisions to act and judgments about what ought to be done.

Some mental actions are intentional. Some of these are performed by way of performing another kind of intentional action (i.e. as a **constitutive means**). Just some of these have a striking and philosophically important feature: they have their own contents, but they are performed by way of mental actions with distinct contents. These mental actions have **content plurality**.

Here are a few examples. You can judge that *this laundry detergent is the cheapest* as a constitutive means to deciding *I'll buy this laundry detergent*. Similarly, the mental action of judging *25 + 34 = 59* can be your means of judging *my meal costs $59 in total*. Your calling the word *"phlogiston"* to mind can also constitute a decision that *"phlogiston" will be the treehouse password*. The latter action in each of these descriptions is a **complex mental action**: an intentional mental action executed by doing another kind of thing intentionally. But each such mental action also has a further important feature. Each is a mental action with some specific content performed by way of a mental action with a distinct content. In other words, each such complex mental action has **content plurality**.

The fact that mental actions can have content plurality has not previously been appreciated in philosophy. If it had been, several philosophical debates of the last few decades would have run considerably differently. The content plurality of mental actions transforms several debates: one about the epistemology of transparent self-knowledge; one about the relationship between doxastic judgments and practical decisions; and one about the nature of inference. In each such debate, the content plurality of mental actions opens up a new and attractive solution to a philosophical puzzle that has not been considered before.

Here is a brief outline of this chapter. In Section 2.1, I identify the kind of mental actions that have content plurality, and give some examples. In Section 2.2, I give five jointly sufficient conditions on a mental action's having content plurality, and I explain how it is possible to meet these conditions together. In Section 2.3, I use this model of content plurality in mental action to advance the three distinct philosophical debates I just mentioned. In Section 2.4, I respond to two objections to the view developed here.

2.1 Mental actions with content plurality

I'll start by identifying the kind of mental actions that have content plurality. I'll do that in a series of steps that narrows down mental actions into more and more restrictive categories.

Here are the steps in outline form:

(1) There are mental actions.
(2) Some of those are intentional mental actions.
(3) Some of those are intentional mental actions that have contents.
(4) Some mental actions are performed to satisfy more than one intention at once.
(5) Some of those are mental actions that **execute** several intentions at once.[2]
(6) Some of those mental actions execute several intentions with **content conditions**.
(7) Some of those execute one such intention by having one content, and execute another such intention in constituting another kind of action with a distinct content. Any such further action has **content plurality**.

Let's take each of these narrowing steps individually.

(1) There are mental actions.

A mental action is something you do in thought. You can do all sorts of things in thought. You can add 25 and 34. You can recall a recent party. You can rehearse a lecture you will give. You can imagine a firework show. You can do any of these things without putting a pen to paper, speaking, gesticulating, or even moving your body in any way. It's not necessary for you to sit completely still to do something mentally, but nor is it necessary to move your body at all.

(2) Some of those (mental actions) are intentional mental actions.

Some mental actions are intentional. You can do any of those I just mentioned intentionally. You can intentionally add 25 and 34. You can recall a recent party intentionally. You can intentionally rehearse a lecture, or intentionally imagine a firework show.

That does not mean that any kind of mental action you can perform is a kind of mental action you can perform intentionally. There are two relevant constraints. First, some descriptions of mental actions could not figure into an intention, so you cannot do something intentionally in thought under any such description. Second, there are mental actions you could try to do intentionally, but you will necessarily fail.

To illustrate this first constraint, here is an example of an intention you can't have. You cannot take some proposition you overtly take to be false – say, that 60 divided by 3 is 10 – and intend to make a judgment with its content. You cannot have that intention, because it would require using the concept JUDGMENT, and to have that concept is also to understand that judgment involves commitment to the truth of a proposition.[3] Not only can you not judge something you overtly take to be false; you also know you cannot do that. And knowing you cannot do something is incompatible with intending to do it. The point is not just that you will not succeed if you try to do it; it's that you cannot have the intention to do this at all.[4]

To illustrate the second constraint, here is an example of an intention you cannot successfully execute. You might act on an intention not to think about a polar bear, thereby trying not to think of a polar bear. But insofar as you are directly acting on that intention, you are thinking of what you are

doing under the same description under which it is intentional. That is, you're thinking of what you're doing as *not thinking about a polar bear*.[5] But to do that is to think about a polar bear.[6]

Due to these two constraints, you cannot perform just any kind of mental action intentionally. But there are many kinds you can and do perform intentionally.

There are difficult unsolved puzzles about what it is to act intentionally. I will not attempt to solve them here. The main claim of this chapter – that mental actions can have content plurality – does not hang on any one particular solution to these difficult puzzles.

What will be important is the fact that any intentional mental action is intentional *under a description*, and not every true description of a mental action is also a description under which that action is intentional.[7] Thus, in intentionally *adding 25 and 34*, you might in fact be doing precisely what your classmate is doing at the same time. While your *adding 25 and 34* is intentional under that very description, it is not also intentional under the description *doing what your classmate is now doing* – even though it is indeed an instance of doing just that.

(3) Some of those are intentional mental actions that have contents.

Some intentional mental actions have contents under the descriptions that characterize them as intentional. When you imagine a firework show intentionally, your imagining has firework show content – perhaps an imagistic content. When you intentionally recall a party, your recollection is of that party. When you intentionally rehearse a lecture you will give, you think of various sentences you will speak aloud. When you (correctly) add 25 and 34, you make a judgment with the propositional content *25 + 34 = 59*. Intentional mental actions can have all sorts of different kinds of content – at least imagistic, propositional, and linguistic contents.

It may sound odd to say that actions can have contents. And it is true that not all actions have contents. But you might think, additionally, that an action isn't the right kind of thing to have a content, and that there is a category error in statement (3) above.

To dispel this confusion, it is important to see that the category of action is a determinable category, of which there are many determinates. An action can be a kick, a heist, an election, or something else. A mental action can be a judgment, a decision, a recollection, and imagining, or something else. These more determinate categories of actions can clearly have contents. Take the category of judgment: a judgment must have a content to be a judgment at all. Similarly, each decision has a content, since each decision is a decision to do something.

To be most precise, you might insist that intentional mental actions have contents only under certain descriptions. But since these are descriptions that really do apply to these actions, it seems fair to say (as I will) that intentional mental actions themselves have contents.

I will also use another piece of terminology that will help us frame the issues of this chapter: an intentional mental action has content under one of its intentional descriptions just when the corresponding intention specifies a **content condition** to be met. For example, your intentional *imagining of a firework show* is a case in which you act on an intention that demands an episode of imagining with some firework show content. If you succeed at imagining one, your action meets the content condition specified by the intention on which you act.

There is an important caveat here. Even those intentions with content conditions do not always fully specify the most determinate content of the mental action to be performed. The opposite is usually

the case: the most determinate content of your action is more determinate than the content specified by the intention on which you act in performing that action.

For example, when you intentionally add 25 and 34, your intention is *to add 25 and 34*. In this case, you intend to judge, of some particular number (de dicto), that it is the sum of 25 and 34. What you do in order to execute this intention is to figure out which number that is. The ultimate content of the action that executes the intention with which you began is the proposition *25 + 34 = 59.* This content meets the content condition with which you began in part because it is more determinate than the specification built into the intention.

Take another example, this time from the practical domain: an example of intentionally deciding where to go for lunch. When you do this, you do not start with a specific restaurant in mind (de re); but the successful execution of this intention demands a specific restaurant (de re). This is another case in which the determinate content of your successful mental action is more determinate than was specified by the content condition built into your intention.

(4) Some mental actions are performed to satisfy more than one intention at once.

An action can be performed to satisfy more than one intention at once.[8] This is the case when you intentionally *Φ in order to Ψ*, for two action types Φ and Ψ.[9] To do this is (inter alia) to take Φ-ing as at least a partial means to Ψ-ing. For instance, when you intentionally *turn on the oven in order to make dinner*, you take *turning on the oven* to be part of *making dinner*. Your turning on the oven is, in this case, intentional under the description *turning on the oven*; it is done intentionally under that description in order to *make dinner* intentionally under that further description; and if all goes well, your intentional action of *turning on the oven* will partially constitute your intentionally *making dinner*. Here, your intentionally *turning on the oven* is a **partial means** to *making dinner*. Your intentionally *making dinner* here is a **complex action**, one performed by means of doing other kinds of things intentionally (including, but not limited to, your turning on the oven).

There are also cases like these involving mental action instead of bodily action.

When you intentionally *Φ in order to Ψ*, Φ-ing is sometimes only a partial means to Ψ-ing. Here is an example of a mental action like that. You might *imagine the taste of the fettucine dish in order to choose an entrée.* In this case, your imagining of the taste of the fettucine dish is intentional under that very description. It is intentional under the description *imagining the taste of the fettucine dish*; you do that intentionally in order to *choose an entrée* intentionally under that further description; and if all goes well, your intentional action of *imagining the taste of the fettucine dish* will partially constitute your intentionally *choosing an entrée*. It only partially constitutes that further intentional action because just imagining one dish is not clearly sufficient for fully choosing an entrée. It might be only one step along the way to your choice. Here, as before, your intentionally *imagining the taste of the fettucine dish* is a partial means to *choosing an entrée*. Your intentionally *choosing an entrée* is a complex action, one performed by means of doing other kinds of things intentionally (including, but not limited to, your *imagining the taste of the fettucine dish*).

Here is another example, this time with a mental action with propositional content. You can intentionally *suppose that p* [for some determinate *p*] *in order to figure out whether p only if q* [for some determinate *q*]. Your action is intentional under the description *supposing that p*; you do that intentionally in order to *figure out whether p only if q* intentionally under that further description; and if all goes well, your intentional action of *supposing that p* will partially constitute your intentionally *figuring out whether p only if q*. It only partially constitutes that further action because just supposing that *p* is not, alone, a way of *figuring out whether p only if q*. After supposing that *p*, you have more left to do in order to figure out whether *p only if q*.

(5) Some of those are mental actions that **execute** several intentions at once.

Sometimes, you execute two or more intentions in just one token mental action. In some cases when you intentionally *Φ in order to Ψ*, your Φ-ing is not just one of many steps on the way to Ψ-ing. Instead, your Φ-ing can also fully constitute your Ψ-ing. In such a case, your Φ-ing intentionally is a **constitutive means** to your Ψ-ing intentionally. Your Ψ-ing is a complex action performed just by Φ-ing intentionally.

In such cases, you execute your intention to *Φ* and your intention to *Ψ* all at once. You **execute** an intention to *Φ* just when you Φ intentionally in acting on that very intention. We can also say that an action is the **execution** of an intention just when that action is itself a Φ-ing performed intentionally in acting on that intention.

Let's look at some examples to make all of this more concrete.

First, for comparison, here is a bodily action that executes more than one intention at once. I can intentionally *knit a scarf in order to make a gift for my brother*. If I succeed in knitting the scarf intentionally (in acting on this very intention), I also thereby succeed in making a gift for my brother. Here, I intentionally *knit a scarf*, under that description; I do that intentionally in order to *make a gift for my brother*; and that successful intentional *knitting a scarf* also fully constitutes an intentional *making of a gift for my brother*. This time, the intentional action of *knitting a scarf* executes the intention to *knit a scarf* as well as the intention to *make a gift for my brother*. I can execute all these intentions at once because there is no more I need to do to make a gift for my brother other than *knit the scarf* in these circumstances. (I am here assuming that gift wrap and a card are supererogatory.)

That was an example in the domain of bodily action. More importantly for our purposes, there are also mental actions that execute more than one intention at once. Here is an example. If the teacher of a meditation class asks you to attend to the sound in the room, you might form an intention to *attend to the sound in order to do what the meditation teacher asked*. If you then go on to attend to the sound, that intentional mental action can execute your several intentions at once: your intention to *attend to the sound* as well as your intention to *do what the meditation teacher asked*. Attending to the sound can execute all that at once because there is nothing more you need to do – over and above attending to the sound – in order to do what your meditation teacher asked in these circumstances.

(6) Some of those mental actions execute several intentions with **content conditions**.

We can now combine point (3) above – the point that there are intentional mental actions that have contents – with the point that a mental action can execute several intentions at once.

I'll say that an intention has a **content condition** just if any action that executes it must have a certain kind of content.

We have already considered an example of a mental action intentional under one description that also partially constitutes an intentional action of another kind. In this example, the relevant intentions involved content conditions. This was the example of *supposing that p in order to figure out whether p only if q*. But this is not a case in which you execute, all at once, several intentions that have content conditions. That is because supposing that *p* is not, by itself, a fully constitutive means of figuring out whether *p only if q*.

Now consider a case in which one action executes several intentions with content conditions – indeed with distinct content conditions. If you want to meet your friend Ben for dinner out, you can intentionally *choose a restaurant in order to choose a place to meet Ben*. If you successfully *choose*

a restaurant while acting on this intention, there is nothing left to do to choose a place to meet Ben. Your intentional action of *choosing a restaurant* also fully constitutes your intentional action of *choosing a place to meet Ben*. (How this can be so is a question left for the next section of this chapter.)

This is a case in which one mental action executes several intentions at once, each of which builds in a content condition. In other words, it is a case of a complex contentful mental action performed via some constitutive means which is itself a contentful mental action. However, this complex action is not yet a case of a mental action with content plurality. It does not have content plurality because the action that is the constitutive means has the same content as the further complex action. Your intentional *choosing of a restaurant* has a specific content – let's say, the local restaurant Taïm. Your intentional *choosing of a place to meet Ben* also has the content Taïm. The restaurant you choose is Taïm, and the place you choose to meet Ben is Taïm. This is a case in which two intentions with distinct content conditions – one demanding a restaurant as such, one demanding a place to meet Ben as such – can both be executed at once because the content of the action that is your constitutive means is one and the same as the content of your further action.

(7) Some of those execute one such intention by having one content, and execute another such intention in constituting another kind of action with a distinct content. Any such further action has **content plurality**.

In some cases, you execute several intentions with distinct content conditions at once, by using distinct contents to meet those conditions. You can do that when you intentionally perform one kind of contentful mental action as a constitutive means to another, in such a way that the means action has a content distinct from that further complex action it constitutes. Such complex actions just are mental actions with **content plurality**.

Here is an example. Say you have just enjoyed a meal consisting of a $25 appetizer and a $34 entrée. In this context, you can intentionally *add 25 and 34 in order to determine the total cost of the meal*. When you successfully *add 25 and 34*, you make a judgment with the content *25 + 34 = 59*. When you successfully *determine the total cost of the meal*, you make a judgment with the content *the total cost of the meal is $59*. You can execute both intentions at once. Your intentional action of *adding 25 and 34* has the content *25 +34 = 59*. In context, used as a constitutive means to *determining the total cost of the meal*, that intentional action also constitutes an intentional action of that further type. That is, it also constitutes a mental action of *determining that the total cost of the meal is $59*. That complex mental action has a different total content than that of the constitutive means; it has the content *the total cost of the meal is $59*. Since it was performed by way of performing another kind of intentional mental action with a distinct content, that action of *determining the total cost of the meal* has content plurality.

To give a preview of the next section: the reason that you can execute both of these intentions at once is that you already understood, in entering into this mental activity, that the total cost of the meal in dollars would be the sum of the cost of the appetizer and the cost of the entrée, i.e., the sum of 25 and 34. Although the content conditions built into the intentions on which you are acting are themselves distinct – one intention demands just a mathematical judgment, and another intention demands a judgment about your meal – your background understanding relates them in a way that makes them executable at once.

Here is another example. Say you and your life partner build a treehouse in the backyard, and you need to set a password for entry to the treehouse. One way to do this is just to *call a word to mind in order to decide on a treehouse password*. This is another case in which you can execute both your intentions at once, although each intention sets a distinct demand on the content of the mental action

that would execute it. You can execute both intentions at once because when you intentionally *call a word to mind*, there is no more you need to do to *decide on a treehouse password*. One mental action can both execute your intention to *call any word to mind* by having a linguistic content, e.g., "phlogiston" (the word), and also execute your intention to *decide on a treehouse password* by having the content *"phlogiston" will be the treehouse password*. These are contents of distinct kinds. One is linguistic ("phlogiston") and one is propositional (*"phlogiston" will be the treehouse password*). Your password decision here is performed by way of your performing another kind of mental action with a distinct content—the kind of simple linguistic content that couldn't even in principle be the content of a decision. Your password decision thus has content plurality.

Let's take stock. So far I have simply identified mental actions with content plurality among the more general class of mental action. I have provided a few different examples.

However, I haven't explained how such mental actions are possible. That is the next task.

2.2 How content plurality is possible

What does it take for a mental action to have content plurality? In this section, I'll state jointly sufficient conditions for that, and then explain how it is possible to meet these conditions.[11]

2.2.1 Jointly sufficient conditions

Here are jointly sufficient conditions on performing a mental action with content plurality.

For two distinct types of contentful mental action Φ and Ψ, if

(i) you think that Φ-ing is a way to Ψ in your circumstances, because Φ-ing bears a certain relation *r* to Ψ-ing in your circumstances;
(ii) you act on an intention to *Φ in order to Ψ*, led by this conception of Φ-ing;
(iii) all it takes to Ψ in your circumstances is to think of a token Φ-ing of yours as bearing that same relation *r* to Ψ-ing, and
(iv) you execute both intentions (to *Φ* and to *Ψ*) just by Φ-ing intentionally in such a way that
(v) the content of your Φ-ing is qualitatively distinct from the content of your Ψ-ing,

then your Ψ-ing has content plurality.

For an example of a mental action that meets all these conditions, return to the restaurant math case. Let Φ be *adding 25 and 34* and Ψ be *determining the total cost of the meal*. In this case,

(i) you think of *adding 25 and 34* as a way to *determine the total cost of the meal* in your circumstances, because the result of adding 25 and 34 is the total cost of the meal;
(ii) you act on an intention to *add 25 and 34 in order to determine the total cost of the meal*, led by the aforementioned conception of those actions;
(iii) all it takes to *determine the total cost of the meal* in your circumstances is to think, of the result of *adding 25 and 34*, that it is the total cost of the meal (as indeed it is); and
(iv) you execute both intentions (to *add 25 and 34*, and to *determine the total cost of the meal*) just by adding 25 and 34 intentionally in such a way that
(v) the content of your *adding 25 and 34*—that is, the propositional content *25 + 34 = 59*—is qualitatively distinct from the content of your *determining the total cost of the meal*, which is the propositional content *the total cost of the meal is $59*.

Here, your intentional action of determining the cost of the meal has content plurality.

2.2.2 An explanation of content plurality

To accept (i) – (v) as jointly sufficient conditions on a mental action's having content plurality, however, is not yet to accept that there really are mental actions with content plurality. To accept that, we need to see how it is possible to meet conditions (i) – (v) together.

Here's how I'll go about explaining that. I'll work backwards from the end. First I'll establish that the conclusion—that the complex mental action Ψ-ing—follows from (i) – (v). I'll do that by assuming (i) – (v) and establishing the conclusion.

In the following step, I'll assume (i) – (iv), and show that (v) is possible given these. If so, this makes content plurality possible as well. Then I'll assume just (i) – (iii) and show it's possible to meet the other conditions; then do the same starting just with (i) and (ii), and then just (i). In the end, our sole remaining task will be to show that meeting (i) is possible. Altogether, establishing these points will establish that it is possible to meet (i) – (v) together.

First, let's establish that if (i) – (v) hold for two action types Φ and Ψ, then Ψ-ing has content plurality. Note that your Φ-ing executes both relevant intentions (to *Φ* and to *Ψ*) at once, as given by (iv). That means that your Φ-ing also constitutes a Ψ-ing. Since (v) tells us that your Φ-ing has a qualitatively distinct content from your Ψ-ing, your Ψ-ing is a mental action with content plurality: the constitutive means by which it is performed has a content qualitatively distinct from its own content. This establishes that your Ψ-ing's having content plurality follows from conditions (i) – (v), since it is assumed that there is nothing special about *A*.

Now let's see how it is possible to meet all these jointly sufficient conditions together.

Given that conditions (i) – (iv) can be met, can (v) be met as well? We have already seen that one action of *adding of 25 and 34* can also constitute an action of *determining the total cost of the meal*. But one of those is just a judgment about the sum of 25 and 34, and the other is a judgment about the total cost of the meal. As such, then, they must have distinct contents. If they can be executed all at once—as condition (iv) stipulates—then that action must have content plurality. Other examples from the first part of this chapter give ample illustration of the ways in which condition (v) can be met given that (i) – (iv) are met.

Given that conditions (i) – (iii) can be met, can (iv) be met as well? This is the trickiest point to see. Explaining this point will take some time, and use several principles from the philosophy of action more generally. I will take the explanation step by step.

Condition (iv) stipulates that you execute several distinct intentions – to *Φ*, to *Ψ*, and to *Φ in order to Ψ* – all at once, in one token mental action. How can this be?

Consider conditions (i) and (ii) first. Condition (ii) stipulates that you act on a pair of intentions that relates Φ-ing and Ψ-ing as means to end. Here, you are trying to *Φ in order to Ψ*. Sometimes when you act on a complex intention like this, you see Φ-ing as only a partial means to Ψ-ing. But (i) gives us more than that. It stipulates that you see Φ-ing as a way to Ψ in your circumstances. By that, I meant that you consider Φ-ing to be a sufficient means to Ψ-ing in your circumstances. In acting on this intention, you think that in Φ-ing, you will also Ψ. You think this because you think Φ-ing bears some particular (de re) relation *r* to Ψ-ing in your circumstances.

Now we need some further principles about action more broadly. First, acting on an intention to *Φ* necessarily involves having *Φ-ing* as such in mind. The way this point is traditionally put is like this: in acting on an intention to *Φ*, you have in mind what you're doing under a description – the same one under which your acting is intentional.

To say you have this in mind is to say that your conception of what you're doing is present for you in an immediate way. It's not just that you have some standing belief about your current action. What you have in mind in this way has been called "practical knowledge" by Anscombe.[12] I will call it a "practical conception," thereby not yet committing to the truth or warrant of this conception of what you are doing.[13]

Having any such practical conception in mind involves thinking that what you are now doing is a certain sort of activity – namely, *Φ-ing*. This is a form of doxastic commitment.[14] A practical conception present in intentional action involves the same attitudinal aspect as a standing belief or an occurrent judgment. But having a practical conception in mind while you act is neither just to have a belief (because it is by definition immediately present to mind) nor just to make a judgment (because your having this conception in mind extends over time).

In the case of complex actions—cases in which you act on an intention to *Φ in order to Ψ*—the practical conception you have in mind is even richer than that. In such cases, your practical conception involves having in mind: *I am Φ-ing in order to Ψ*. To think this is also to think that Φ-ing is at least a partial means of Ψ-ing, and sometimes—as when condition (i) holds—also to think that Φ-ing is a way, or a sufficient means, of Ψ-ing. (If you didn't think Φ-ing was at least a partial means of Ψ-ing, you wouldn't be *Φ-ing in order to Ψ* at all.)

This understanding of Φ-ing as a way of Ψ-ing doesn't come from nowhere. Whenever you act on a complex intention to *Φ in order to Ψ*, your practical conception also enfolds a more determinate relation *r* between Φ-ing and Ψ-ing—a relation between these two types of action which explains why one is a means to the other, at least in your current circumstances.

For an illustration of this fact, let's return once again to the restaurant math example. As Φ-ing here is *adding 25 and 34*, and Ψ-ing is *determining the total cost of the meal*, then acting on an intention to *Φ in order to Ψ* involves commitment to Φ-ing's being a way of Ψ-ing because the result of adding 25 and 34 is the total cost of the meal in dollars. This is just one example of a more determinate relation that explains your thinking that Φ-ing is a way of Ψ-ing in your circumstances. The particular relation between Φ-ing and Ψ-ing that you have in mind as part of your practical conception—the one which explains why Φ-ing is a way of Ψ-ing in your circumstances—will vary from case to case, of course.

Now we can put these points to work to answer the question at hand. We are asking: given conditions (i) – (iii), how is it possible for (iv) to be met too?

If it is possible to Φ at all—as indeed in some cases it will be—it is possible to execute the intention to Φ in one mental action. Let's assume that you do that.

We have just seen that when you do that you already have in mind, as part of your practical conception of what you are doing, that Φ-ing in your circumstances bears that relation *r* to Ψ-ing, and (because of this) that Φ-ing is a way of Ψ-ing in your circumstances. Your practical conception involves relating a Φ-ing in your circumstances (de dicto) to a Ψ-ing in your circumstances (de dicto). When you actually Φ, this practical conception is enriched into a conception of your actual token Φ-ing, de re. Thus, in Φ-ing, you think that your Φ-ing (now de re) is related to Ψ-ing in the way built into your practical conception of what you are doing. But that just is to think of a token Φ-

ing of yours in precisely the way that makes it into a Ψ-ing as well, as stipulated by condition (iii). Condition (iii) says that all it actually takes to Ψ in your circumstances is to think (de re) of some token Φ-ing you perform as bearing that same relation *r* to Ψ-ing that is built into your practical conception. Thus, your actual token Φ-ing also constitutes a Ψ-ing in these circumstances, by condition (iii). If you have acted intentionally, and non-deviantly, keeping in mind this practical conception all along, then condition (iv) is fulfilled too. Thus, it is possible to meet condition (iv) when conditions (i) – (iii) are met.

To illustrate all this, let's return yet again to your math in the restaurant. In *adding 25 and 34 in order to determine the total cost of your meal*, you have in mind a practical conception of what you're doing under that very description. In having this conception in mind, you think that *adding 25 and 34* is a way of *determining the total cost of your meal* – here, because the result of adding 25 (the cost of your appetizer in dollars) and 34 (the cost of your entrée in dollars) will simply be the total cost in dollars of the meal that you want to figure out.

In summary, you have in mind, as part of your practical conception of what you are doing, that *25 + 34 is the total cost of your meal in dollars*. This simplification looks just like a relation between certain contents, but it's crucial that this relation on the content level is being used by you in thought to perform actions with the relevant contents. You think of the result of your addition to be performed as the total cost of the meal in dollars to be figured out.

Now we can see what happens when you successfully add 25 and 34—which is indeed possible to do—and come to recognize that *25 + 34 = 59*. When you do this, you are already thinking that the sum in this content is *the total cost of the meal in dollars*. This is not a matter of merely entertaining a relationship between the two; you are doxastically committed to this relation. And this is not some standing or unconscious belief you have to call to mind to use. This relationship is present in your practical conception; it makes sense of what you are doing as *adding 25 and 34 in order to figure out the total cost of your meal*. Because your thought that *(25 + 34)* is *the total cost of your meal in dollars* is present to mind in this way—and, as stated in condition (iii), there's nothing more to *figuring out the total cost of the meal* than thinking of this sum in this way—your adding *25 and 34* to get *59* just is also a judgment that *the total cost of your meal is $59*. There is nothing extra you have to do to make that second judgment here.

We have now seen that, given (i) – (iii), it is possible to meet condition (iv) as well. That is not guaranteed; after all, you could simply get distracted, or otherwise fail to execute any of the intentions on which you are acting. But it is certainly possible, and that is all we need.

Given (i) – (ii), is it possible for (iii) to be met? Here, once again, we can refer back to the examples from Section 2.1. There are certainly mental actions Φ and Ψ such that all it takes to Ψ, in some circumstances, is to Φ while thinking of your token Φ-ing in a particular way. All it takes to *decide on a treehouse password* is to *call any word to mind* if you have committed, ahead of time, to making whatever word you call to mind the treehouse password. All it takes to *choose a place to meet Ben* is to *choose a restaurant* and think that the restaurant is the place to meet Ben. That can all be part of your practical conception of what you are doing in choosing a place to meet Ben. These examples demonstrate that it is possible for (iii) to hold while (i) and (ii) do.

Note that it's possible to meet (iii) even when Ψ-ing as such is factive. This is the case with the restaurant math example. All it takes to *determine the total cost of the meal*—that is, to make a true judgment of that cost – is to *add 25 and 34* and to think of that action in a particular way while you do so. That's because *adding 25 and 34* is also factive.

However, it is not true for any pair of contentful mental action types Φ and Ψ that all it takes to Ψ is to Φ while thinking of your Φ-ing in a particular way. For example: even if you think of *imagining a blue unicorn* as a way of *finding a cure for cancer*, and you act on an intention to *imagine a blue unicorn in order to find a cure for cancer*, it is not sufficient in these circumstances to *imagine a blue unicorn*, and think of it in all the implicated ways, in order to actually *find a cure for cancer*. In short, condition (iii) is placing a substantive constraint here.

Now, given just (i) is it possible for (ii) to be met? It certainly seems so. Condition (i) stipulates that you think of Φ as a way to Ψ. If you think that, it should certainly be possible to form and act on an intention to Φ in order to Ψ, led by this conception. There is nothing particularly remarkable about acting on a complex intention to *Φ in order to Ψ* when you think that Φ-ing is a way of Ψ-ing in your circumstances. This is common sense.

All that remains to do now is to show that it is possible to meet condition (i). Is it possible to think of Φ-ing as a way to Ψ in your circumstances, because Φ-ing bears some particular relation *r* to Ψ-ing in your circumstances?

Given the examples discussed above, it might seem obvious that this is possible. You can certainly use a relation between Φ-ing and Ψ-ing in your circumstances to come to think that Φ-ing is a way to Ψ in your circumstances. The examples of content plurality in mental action given above often recruit contingent features of your environment that rationalize connecting these actions in this way. The sum of 25 and 34 just was the total cost of your meal in dollars, and you get to pick the treehouse password, so any word you consider is one you can pick.

On the other hand, it might seem as though there is an additional problem to be solved here. It can seem as though something spooky is going on, because thinking of Φ-ing as a way of Ψ-ing here is part of what makes your eventual Φ-ing also constitute a Ψ-ing. For your *adding 25 and 34* to constitute an action of *determining the total cost of the meal*, you needed to think doing the former was a way of doing the latter. In order for your *calling a word to mind* to also be a *choice of a treehouse password*, you needed to think doing the former was a way of doing the latter. Now that we've seen the connection between the way you think of your action, and what your action becomes, meeting condition (i) can seem mysterious. Meeting (i) seems to put into play an odd self-fulfilling prophecy. How can you think of Φ-ing as a way of Ψ-ing, if thinking of Φ-ing as a way of Ψ-ing is part of what is needed to make your ultimate Φ-ing into a Ψ-ing after all?

To see that it is not impossible to meet (i), let's take a look at a broader pattern in the philosophy of action. Your practical conception of what you are doing does affect what it is that you actually do, in many circumstances. In many cases of complex action, your thinking of what you are doing as Φ-ing in order to Ψ is necessary for making your Φ-ing constitute a Ψ-ing at all. But that does not keep you from seeing Φ-ing as a way Ψ-ing from the outset.

Let's return to another past example. You can think of *knitting a scarf* as a way of *making your brother a gift* even though your *making your brother a gift* just in *knitting a scarf* depends on your already thinking of your action in that way. When you are acting on the intention to *knit a scarf in order to make your brother a gift*, you have in mind a practical conception of what you are doing. This practical conception includes a relation between *knitting a scarf* in this context and *making your brother a gift*. Simply stated, this practical conception just involves a commitment to the scarf that is to be knit *as* a gift for your brother. You wouldn't be *knitting a scarf in order to make a gift for your brother* without having this relation in mind.

Now consider what happens when you finish knitting the scarf. You already think of the scarf as a gift for your brother; that much is contained in your practical conception of what you are doing. But

then to finish the scarf is to finish an item you are already committed to giving to your brother. Since all it takes to make this scarf a gift is to think of it in this way, you have finished making the gift for your brother just by finishing knitting the scarf. (As above: gift wrap and a card are non-essential.)

This example should help us see that there is no additional puzzle to be solved about how you could see *knitting a scarf* as a way of *making a gift for your brother* from the outset. You have in mind a local relation that connects these two actions: you think of a scarf (yet to be made) as a gift (yet to be made). What's more, the fact that one action can execute both intentions—to *knit a scarf* and to *make a gift for your brother*—only when you intend them all at once, in this structured way, does not keep you from having and acting on some such structured intention. On the contrary, the fact that doing all that at once is within your control partly explains your ability to form this intention in the first place.

The more general phenomenon in action theory is one in which your practical conception of what you are doing – e.g., as *Φ-ing in order to Ψ* – affects the nature of what you actually do by Φ-ing. It may well be that having that practical conception of what you are doing, as a result of acting on an intention to *Φ in order to Ψ*, is required for your Φ-ing to constitute a Ψ-ing as well. But that does not preclude you from having the antecedent belief that Φ-ing is a way of Ψ-ing in your circumstances. On the contrary, it gives that antecedent belief its warrant: it is within your control to Ψ just in Φ-ing, by thinking of your action in that way. This is what makes sense of your antecedent belief that Φ-ing is indeed a way of Ψ-ing.

This structure is ubiquitous in complex intentional action. It is familiar in the philosophy of action from Aquinas's point, famously quoted by Anscombe, that practical knowledge is the *cause of what it understands* – that is, a formal, not (only) efficient, cause of that.[15] To adapt this point to our own discussion: a complex practical conception partly makes your means constitute your complex action as the kind of intentional action that it is.

Let's pause and take stock. In the first part of this section, I presented sufficient conditions on a mental action's having content plurality. In the next part, I explained how it was possible to meet these conditions together. First, I showed that they are the sufficient conditions they presume to be. Then I showed it was possible: to meet (v) when (i) – (iv) hold; to meet (iv) when (i) – (iii) hold; to meet (iii) when (i) and (ii) hold; to meet (ii) when (i) holds; and, finally, to meet (i). In sum, this demonstrates that it is possible to perform a mental action that has one content by performing another mental action that has a qualitatively distinct content. That is, it's possible to perform a complex mental action with content plurality.

2.3 The philosophical importance of content plurality

Mental actions can have content plurality in part because an agent's Φ-ing can also constitute a Ψ-ing. A constitution relation between a token Φ-ing and a token Ψ-ing does not imply that all Φ-ings constitute Ψ-ings, and it does not require the agent of a mental action with content plurality to accept any more general constitution relationship between Φ-ings and Ψ-ings outside of her context.

This is why the model of mental actions with content plurality I have developed here is a powerful tool of philosophical explanation. It allows us to thread the needle between (a) implausible type-level constitution claims of two distinct action types and (b) implausible dissociation between two token actions which need to be more closely related for some local explanatory purpose. Threading this needle allows us to sew up several holes in distinct philosophical debates.

In this section, I'll apply this tool to three philosophical questions: a question about transparent self-knowledge of belief and intention; a question about the relation between theoretical judgments and

practical decisions; and a question about the nature of inference. In each case, we will see that a token contentful mental action's constituting another token mental action with distinct content without a type-level constitution relation can help clear up philosophical confusion.

2.3.1 Transparent self-knowledge

You can come to know whether you believe that *p* in part by figuring out whether *p* is true. Similarly, you can come to know whether you intend to Φ by determining whether to Φ. Self-attributions of beliefs and intentions are thus thought to be 'transparent' in a particular sense: the question of what you believe is 'transparent' to the question of what is true, and the question of what you intend is 'transparent' to the question of what to do.[16]

Importantly, this transparency of one question to another is thought to be a special feature of the first-personal perspective. Epistemologists working on this topic often take it that explaining how you can transparently self-attribute beliefs and intentions will illuminate the other special features of the first-personal perspective each of us has on her own beliefs and intentions—including the authority and epistemic privilege of this position.

Why does it make sense, from the first-personal perspective, to trade questions in this remarkable way? In the belief case, we can ask: how could my judgment that *p* contribute to my judging that *I believe that p*? In the intention case, we can ask: how could a decision to *Φ* contribute to my judging that *I intend to Φ*? In neither case does there seem to be a justificatory relationship between the contents of the relevant mental actions. Thus, it doesn't help to interpret transparent self-attribution as inferential in either the belief or the intention case.[17]

It does help to see transparent self-attributions of beliefs and intentions as mental actions with content plurality. This shifts the burden of explanation away from a general relationship of inferential support between contents and towards a local understanding of how an agent could do two particular things at once in thought. In the belief case, we can come to see how an agent could judge that *p* and judge that she believes that *p* all at once. In the intention case, we can come to see how an agent could decide to Φ and judge that she intends to Φ all at once.

Elsewhere I have given a sustained explanation of transparent self-knowledge of belief.[18] Here I will give the explanation of transparent self-knowledge of intention.

Let's see how conditions (i) – (v) can be met in transparent self-attribution of intention. You can make a decision and make a judgment about what you intend to do all at once when:

(i) you think that *deciding whether to Φ* is a way to *figure out whether you intend to Φ* in your circumstances because you intend to do what you decide to do;
(ii) you act on an intention to *decide whether to Φ in order to figure out whether you intend to Φ*, led by the conception of these actions mentioned in (i);
(iii) all it takes in your circumstances to figure out whether you intend to Φ is to think of the content of a token decision whether to Φ as what you intend to do; and
(iv) you execute both intentions (to *decide whether to Φ* and to *figure out whether you intend to Φ*) just by *deciding whether to Φ* intentionally in such a way that
(v) the content of your *deciding whether to Φ* as such is qualitatively distinct from the content of your *figuring out of whether you intend to Φ*.

Let's take a case in which you do decide to Φ, and in so doing you figure out that you intend to Φ. In this case, there is one token mental action that both executes the intention to *decide whether to Φ* and the intention to *figure out whether you intend to Φ*. It executes the former as a decision to Φ. It

executes the latter by also constituting a judgment that *you intend to Φ*. In this case, your *figuring out whether you intend to Φ* has content plurality.

What relation *r* between *deciding whether to Φ* and *figuring out whether you intend to Φ* informs your mental activity in this case? This relation, or rather your understanding of it, is crucial to the content plurality of your ultimate mental action. This relation makes it into your practical conception of what you are doing and makes it the case that your *decision to Φ* is also a *judgment that you intend to Φ*. Why does it make sense to structure your activity in this way?

The relationship is one between what you decide and what you intend. Insofar as you understand that what you decide to do just is what you intend to do (at least for this very moment), you can use this procedure to self-attribute intentions.

So transparent self-attribution of intention involves performing a mental action with content plurality. Why does this help us understand the epistemology of this self-knowledge?

This model of transparent self-attribution provides a strong explanation of the epistemic credentials of such attributions. Any self-attribution of intention made in this way will be true, as making a decision to Φ is sufficient for (contemporaneously) intending to Φ.[19] The self-attribution is warranted as a self-attribution of an intention because you know what kind of thing you are doing in thought – namely, *deciding whether to Φ* – and that doing that sort of thing is sufficient for figuring out what you intend to do.[20] It is warranted as an attribution of intention to yourself in particular because this procedure requires no identification of yourself among others; it is thus immune to error through misidentification.[21] Finally, it is warranted as a self-attribution of an intention to *Φ*, in particular, by the consciousness of the content of your decision to *Φ*.[22]

There are two key advantages of this account of transparent self-knowledge of intention.

First, the account specifies a plausible relation between a token decision to *Φ* and a judgment that *you intend to Φ*. The former can constitute the latter. The account explains how that can be the case even though not all decisions constitute judgments about what you intend.

Second, it allows for a remarkably secure form of warrant in at least one respect. Since the self-attribution of an intention is made at precisely the same moment as a decision to *Φ*—by way of this one token mental action—and a decision to *Φ* is sufficient for at least contemporaneous temporary intention to *Φ*, this kind of self-attribution of intention cannot err by way of a temporal mismatch between decision and self-attribution.[23]

There are certainly more questions to be answered about this account of transparent self-attribution of intention. I set these aside to save space. What is most important to see here is just that content plurality in mental action transforms our inquiry into such self-attribution. Instead of asking about the relationship between two temporally distinct mental actions, this model of content plurality in mental action allows us to consider another strong explanation of the epistemology of transparent self-attributions.

2.3.2 Judgments and decisions

This understanding of mental actions with content plurality also generates a subtle new interpretation of practical reasoning that involves both judgments and decisions.

There is a longstanding debate about how your judgments with contents of the form *I ought to Φ* or *Φ-ing is the thing to do* relate to decisions to *Φ*. At first, these sorts of mental events seem to belong

to two different categories, the 'theoretical' and the 'practical': any judgment is a doxastic acceptance of a truth-evaluable content, whereas a decision *to Φ* is directed at action, and thus takes a fundamentally action-guiding attitude towards its content. On further reflection, though, some particular 'theoretical' judgments seem to have immediate and not merely causal impact on my plans, or even on my actions themselves.[24] Settling what I ought to do, or settling what the thing to do is, can simply settle for me what I'll do.

Partly to close the uncomfortable gap between a judgment that *Φ-ing is the thing to do* and a decision to *Φ*, Alan Gibbard has influentially argued that making that sort of judgment just is deciding to *Φ*.[25] Proposing this perfectly general connection between judgments of this form and decisions allows Gibbard to develop a systematic explanation of practical reasoning, modeled on certain central key features of 'theoretical' reasoning.

But Gibbard's proposal faces a simple problem of extensional inadequacy. It is usually but not always the case that a judgment with content like *Φ-ing is the thing to do* counts as a decision to *Φ*. One way to see this is to consider certain cases of 'weakness of the will' in which an agent takes some action Φ to be unequivocally *the thing to do*, but does not thereby decide to *Φ*.[26] This kind of situation can seem painfully familiar. And if it is so much as possible, then Gibbardian expressivism must fail in its full generality.

A better picture of the relationship between such judgments and decisions to act would allow for certain judgments to constitute decisions without implying that all judgments constitute such decisions. This is precisely what content plurality in mental action allows. Some judgments that *Φ-ing is the thing to do* also constitute decisions to *Φ*, but some do not.

Let's consider how a judgment that *Φ-ing is the thing to do* can also constitute a decision to *Φ*. In some cases, you are already committed—in the distinctively practical sense in which decisions and intentions are commitments—to doing whatever is *the thing to do*. If so, you can use this practical commitment to structure your thought. That is, you can see *figuring out the thing to do* as a way to *decide what to do*. Acting on an intention to *figure out the thing to do in order to decide what to do* will set up a context in which one and the same mental action can execute both these intentions at once. Consider a case where

(i) you think that *figuring out the thing to do* is a way to *decide what to do* in your circumstances because you commit to doing *the thing to do* (de dicto);
(ii) you act on an intention to *figure out the thing to do in order to decide what to do*, led by the conception mentioned in (i);
(iii) all it takes to decide what to do in your circumstances is to commit to doing that which you figure out is the thing to do; and
(iv) you execute both intentions (to *figure out the thing to do* and to *decide what to do*) just by *figuring out the thing to do* intentionally in such a way that
(v) the content of your *figuring out the thing to do* is qualitatively distinct from the content of your *deciding what to do*.

In this case, your decision has content plurality. It has the content of a decision to Φ (say), but it is constituted by a judgment with the distinct content that *Φ-ing is the thing to do*.

In cases like these, there is a tight, non-accidental constitution relation between such judgments and their related decisions. However, it is not a general connection that holds on the level of types of mental actions. Understanding this connection in some circumstances does not require us to say that any specific kinds of judgments necessarily, or even universally, constitute decisions to act as well. It does not require any significant revision of the typology of mental actions. For that reason, allowing

cases like this does not implausibly rule out certain kinds of weakness-of-will cases, in which you fail to decide to do that which you think is the thing to do.

Content plurality in mental action also lets us see how judgments of other forms can constitute decisions in certain contexts. You might, on Saturdays, be committed to doing whatever is most fun. In this case, you might see *figuring out what is most fun to do* as a way to *decide what to do*. If you then act on an intention to *figure out what is most fun to do in order to decide what to do*, and you execute the relevant intentions in one mental action, that action will be a judgment with the content *Φ-ing is most fun to do* that also constitutes a decision to *Φ*.

I do not mean to imply that the explanatory power of content plurality in mental action rivals the full power of Gibbardian expressivism. It should nonetheless be an attraction of the picture I have developed here that it allows us to see how certain judgments are also decisions without committing to a full expressivist picture with all its (apparently) revisionary implications. Content plurality reshapes the debate about judgments and decisions by opening up new view on which certain token judgments constitute token decisions although no such constitution relation holds at the type level.

2.3.3 Inference

The structure of content plurality in mental action also helps solve a problem in another philosophical debate: the debate about the nature of inference.

It is usually thought that inferring—e.g., inferring *q* from *p*—is a form of mental action. It is also usually thought that inference from *p* to *q* involves a movement in thought from a judgment that *p* to a distinct judgment that *q*.[27] This second assumption implies that a kind of transition between distinct mental actions constitutes inference.

This gives rise to recalcitrant problems for theories of inference. There are many ways of moving from one judgment to another in thought, not all of which constitute inferential transitions. To make an inference between two distinct judgments, the first judgment must be one in which the first judgment is taken to warrant the second. As Gottlob Frege famously put it, "to make a judgment because we are cognisant of other truths as providing a justification for it is known as inferring."[28] Paul Boghossian has influentially framed this constraint as the "(Taking Condition): Inferring necessarily involves the thinker taking his premises to support his conclusion and drawing his conclusion because of that fact."[29] The next task is to say what this 'taking' comes to, and how it enters into any inference.

Not everyone accepts the Taking Condition, in part because its acceptance seems to lead to regress or deviant causal chains in an account of inference.[30] I'll briefly summarize why.

We can understand the inferrer's taking as either an occurrent mental event—like a judgment—or as a belief, as a standing state. If the inferrer's taking some premise to support his conclusion is a judgment, then we can ask how it modulates a transition from a judgment that *p* to a judgment that *q* to make the transition itself into an inferential one.

Lewis Carroll's famous parable of the tortoise and Achilles has clarified that this taking judgment could not act as just another premise judgment in the course of the transition, on pain of regress.[31] If you needed to judge *if p then q* between a judgment that *p* and a judgment that *q* in order to make the whole move a transition, then surely you would also need to judge *if p and (if p then q), then q* somewhere in the middle to make the transitions among the three judgments a form of inference. And so on.

We might try to bridge the gap between a judgment that *p* and a judgment that *q* by suggesting that the judgment that *p* needs, additionally, to cause the judgment that *q*. But there are many deviant—and thus non-inferential—ways for a judgment that *p* to cause a judgment that *q*. A judgment that *I'm about to fall off this cliff* might cause me to faint, and my fainting might cause me to judge (after I wake up) that *I have fainted*. This is a case in which, by transitivity of causation, my judgment that *I'm about to fall off this cliff* causes (downstream) a judgment that *I have fainted*, but it is certainly not an inference from one to the other.

We might instead interpret the inferrer's taking the first judgment to support the second one as a standing belief about the justificatory relationship between the contents *p* and *q*. But you can have this standing belief without using it in a transition from a judgment that *p* to a judgment that *q*. In that case, the transition would still not count as an inference.

There are other ways to understand the taking involved in the Taking Condition.[32] But none seems particularly well suited to explain how taking ensures an inferential transition.

This leaves us at an impasse. Some have tried to escape it by rejecting the Taking Condition. But the main problem for theories of inference is not the Taking Condition. Theories of inference have been significantly weakened by the assumption that any inference must be executed in transition from one judgment to another. The availability of content plurality in mental action can help us see why this assumption is not necessary. That is because you can make an inference all at once. One token mental action can be a judgment that *p* that also constitutes a judgment (therefore) that *q*.

The easiest case to understand is a case in which you take there to be a biconditional relationship between *p* and *q*. If you believe that *p iff q*, then you can see that *figuring out whether p* is a way of *figuring out whether q*. Here's how conditions (i) – (v) are met here:

(i) you think that *figuring out whether p* is a way to *figure out whether q* in your circumstances because *p* has the same truth value as *q*;
(ii) you act on an intention to *figure out whether p in order to figure out whether q*;
(iii) all it takes to figure out whether *q* in your circumstances is to think of the truth value of the content of a token judgment whether *p* as the truth value of *q*; and
(iv) you execute both intentions (to *figure out whether p* and to *figure out whether q*) just by intentionally *figuring out whether p* in such a way that
(v) the content of your *figuring out whether p* is qualitatively distinct from the content of your *figuring out whether q*.

In this case, let's say you execute both intentions in a judgment that *p* which also constitutes a judgment that *q*. As the former, it executes the intention to *figure out whether p* (assuming, as we can for the time being, that *p* is true). Since it constitutes the latter, it also executes the intention to *figure out whether q*. You can do all this at once because acting on an intention to *figure out whether p in order to figure out whether q* involves having in mind a practical conception of what you are doing that incorporates an understanding that *p* has the same truth value as *q*. Your having this practical conception in mind makes your judgment that *p* into a judgment that *q* as well.

It is important to see that there is no room for deviant causation here. Your taking *p* to support *q* is not just one cause among many, nor just one judgment between others, nor a background commitment that may or may not get used in occurrent thought. Your taking *p* to support *q* makes your judgment that *p* also a judgment that *q* in this particular context.

Might there nonetheless be deviance in the way that you come to execute your several intentions? Not while we understand an execution of an intention in the way I have defined it. You execute an

intention to *Φ* just when you do in fact Φ intentionally in acting on this very intention to *Φ*. What's more, Φ-ing intentionally rules out deviance.[33]

Just recognizing the possibility of making an inference all at once may not yet give us a complete theory of inference. But it rejects a received assumption in the philosophical discussion about inference and thus significantly reshapes the discussion.

2.4 Objections

Here I will address two objections to content plurality in mental action.

2.4.1 Overcrowding

You might feel that mental actions with content plurality are simply too crowded.[34] You can't fit all that content in there. This objection is more intuitive than precise, but it's worth addressing it in order to see how it stems from a misunderstanding.

By explaining how one mental action can execute more than one intention at once, in part by constituting an action of another kind as well, I mean to have located room for mental actions to have more than one content at once. I have used no ad hoc stipulations to motivate this model; I have instead relied on more general claims about action in order to explain how content plurality in mental action is possible.

It is also important to note that I do not mean to suggest that mental actions can have endless content plurality. There are limits on the total number of things you can do at once in thought, and these limits may derive primarily from limits on working memory. Even though it is possible to, say, *think of a sentence in order to think of something Harry might say to Ron*, it does not seem possible to *think of a sentence of English that is easily translatable into Russian in order to think of something Harry might say to Ron in order to tell my editor how to replace the twelfth sentence on p. 97…* all at once. Even though there might, in principle, be one mental action that executes all the many intentions implicated in this multiply complex intention, it does not seem possible for an agent to act on all those intentions at once, while having in mind the practical conception that doing all that at once would require.

However, the impossibility of acting on such intentions does not imply the impossibility of acting on smaller combinations. If we restrict our consideration to a reasonable amount of content plurality, we have no need to feel spooked by its very possibility.

This objection does not seriously threaten the proposal developed here. But I will venture a diagnosis of its source nonetheless. It is easy to slip into thinking of mental actions – and indeed all thoughts, active or passive – as 'internal' utterances of sentences. Because it's hard to see how a *sentence* could have content plurality, this understanding of thought might make mental actions with content plurality look particularly crowded. But there are already good independent reasons not to think of thoughts as 'internal' utterances of sentences. One of the most important reasons not to do this has to do with the attitudinal aspects of thought. For example: if a judgment could only consist in an 'internal' utterance of a sentence, it is not clear why judging that *p* would ever constitute the doxastic commitment that judging that *p* really does constitute. Utterances can always be sincere or insincere, but there is no such thing as a sincere or insincere judgment. Recognizing the normative commitments involved in occurrent thoughts already recommends against any model on which thoughts are 'internal' utterances at all.

2.4.2 Complex contents

Another way to resist the content plurality of mental actions is to insist that each putative example of content plurality is really an example of content unity, where the content in question is logically complex. A mental action that I identify as a judgment that *p* which constitutes a judgment that *q* might be re-interpreted as a judgment that *p and q*, and so on.

There is a simple reason that this re-interpretation cannot work in full generality. Some cases of content plurality are cases in which one action with a certain content is constituted by an action with another kind of content—one with which its own content cannot be logically concatenated. To recall an example from above: the content of a *calling a word to mind* is a linguistic item—here, a word—and the content of a *decision on a treehouse password* is plausibly propositional. These contents cannot be conjoined into a meaningful complex content. At least we cannot use truth-functional connectives to concatenate a word and a proposition in such a way as to get just one logically complex content.

In some cases of mental action with content plurality, this re-interpretation looks better. In particular, it looks better when one judgment constitutes another. Even in these cases, though, the reinterpretation would eliminate the explanatory power of the tool that emerges from the model of content plurality I have developed here.

Consider transparent self-attribution of belief. It would not help us see how you can judge *I believe that p* by judging *p* if we thought that a logically complex content—*p and I believe that p*—is judged in transparent self-attribution of belief. Similarly, we could not use the structure of intentional action to solve any deviance problems for inference if an inference from *p* to *q* executed all at once simply had the content *p and q*. Instead, the etiology of that logically complex judgment itself would have to be explained—perhaps by yet another inference.

Conclusion

There are mental actions with content plurality. These are complex mental actions with certain contents that are constituted by mental actions with qualitatively distinct contents.

For two distinct types of contentful mental action Φ and Ψ, if

(i) you think that Φ-ing is a way to Ψ in your circumstances, because Φ-ing bears a certain relation *r* to Ψ-ing in your circumstances;
(ii) you act on an intention to *Φ in order to Ψ*, led by this conception of Φ-ing;
(iii) all it takes to Ψ in your circumstances is to think of a token Φ-ing of yours as bearing that same relation *r* to Ψ-ing, and
(iv) you execute both intentions (to *Φ* and to *Ψ*) just by Φ-ing intentionally in such a way that
(v) the content of your Φ-ing is qualitatively distinct from the content of your Ψ-ing,

then your Ψ-ing has content plurality.

A mental action of Φ-ing can also constitute a Ψ-ing because you are thinking of what you are doing in a certain way. Your practical conception can make your Φ-ing constitute a Ψ-ing too.

On this model of content plurality in mental action, a token Φ-ing can constitute a token Ψ-ing even though there is no more general constitution relationship at the type level. This local token constitution without implausible type constitution allows us to use content plurality as a tool of

philosophical explanation in several distinct debates. Content plurality in mental action helps to explain transparent self-knowledge of intention and of belief. It gives us a new way of understanding the relationship between 'theoretical' judgments and practical decisions. And it urges us away from a traditional assumption that an inference must be a transition between temporally separate judgments.

There is no general way to understand mental actions with content plurality as single actions with single, logically complex contents. But this does not mean that mental actions with content plurality are illicitly overcrowded in any way. In order to see how a mental action can have content plurality, we need to move away from the independently problematic, though natural, understanding of thoughts as internal utterances.

Notes

References

Anscombe, G. E. M. (1957). *Intention*. Oxford: Basil Blackwell.

Barnett, D. J. (2015). Inferential justification and the transparency of belief. *Noûs, 50*(1), 1–29.

Boghossian, P. (2014). What is inference? *Philosophical Studies, 169*, 1–18.

Broome, J. (2014a). Normativity in reasoning. *Pacific Philosophical Quarterly, 95*, 622–633.

Broome, J. (2014b). Comments on Boghossian. *Philosophical Studies, 169*, 19–25.

Byrne, A. (2011). Self-knowledge and transparency I: Transparency, belief, intention. *Proceedings of the Aristotelian Society*, *LXXXV*, 201–221.

Carroll, L. (1895). What the tortoise said to Achilles. *Mind, 4*(14), 278–280.

Cassam, Q. (2014). *Self-knowledge for humans*. Oxford: Oxford University Press.

Davidson, D. (1963/2001). Actions, reasons, and causes. In *Essays on actions and events* (pp. 3–20). Oxford: Clarendon Press.

Davidson, D. (1967/2001). The logical form of action sentences. In *Essays on actions and events* (pp. 105–121). Oxford: Clarendon Press.

Davidson, D. (1971/2001). Agency. In *Essays on actions and events* (pp. 43–62). Oxford: Clarendon Press.

Davidson, D. (1978/2001). Intending. In *Essays on actions and events* (pp. 83–101). Oxford: Clarendon Press.

Descartes, R., Cottingham, J., Stoothof, R., & Murdoch, D. (Trans.). (1988). *Selected philosophical writings*. Cambridge: Cambridge University Press.

Edgley, R. (1969). *Reason in theory and practice*. London: Hutchinson.

Evans, G. (1982). *The varieties of reference*. New York: Oxford University Press.

Ford, A., Hornsby, J., & Stoutland, F. (Eds.). (2014). *Essays on Anscombe's intention*. Cambridge, MA: Harvard University Press.

Frege, G. (1979). Logic. In H. Hermes, F. Kambartel, & F. Kaulbach (Eds.), & Long, P., & White, R., (Trans.). *Posthumous writings* (pp. 1–8). Oxford: Basil Blackwell.

Frost, K. (2019). A metaphysics for practical knowledge. *Canadian Journal of Philosophy, 49*(3), 314–340.

Gibbard, A. (2003). *Thinking how to live*. Cambridge, MA: Harvard University Press.

Haddock, A. (2014). The knowledge that a man has of his intentional actions. In A. Ford, J. Hornsby, & F. Stoutland (Eds.), *Essays on Anscombe's intention* (pp. 147‑169). Cambridge, MA: Harvard University Press.

Hampshire, S. (1959). *Thought and action*. Notre Dame, IN: University of Notre Dame Press.

McHugh, C., & Way, J. (2016). Against the taking condition. *Philosophical Issues, 26*(1), 314–331.

McHugh, C., & Way, J. (2018). What *is reasoning*? *Mind, 127*(505), 167–196.

Mele, A. (2009). Mental action: A case study. In L. O'Brien, & M. Soteriou (Eds.), *Mental actions* (pp. 17–37). New York: Oxford University Press.

Moran, R. (2001). *Authority and estrangement: An essay on self-knowledge*. Princeton, NJ: Princeton University Press.

Moran, R. (2004). Anscombe on 'practical knowledge.' In J. Hyman, & H. Steward (Eds.), *Royal institute of philosophy supplement* (pp. 43–68). Cambridge: Cambridge University Press.

Neta, R. (2013). What is an inference? *Philosophical Issues, 23*(1), 388–407.

O'Brien, L., & Soteriou, M. (Eds.). (2009). *Mental actions*. New York: Oxford University Press.

Paul, S. K. (2012). How we know what we intend. *Philosophical Studies, 161*, 327–346.

Peacocke, A. (2017). Embedded mental action in self-attribution of belief. *Philosophical Studies, 174*(2), 353–377.

Peacocke, C. (2008). *Truly understood*. New York: Oxford University Press.

Pryor, J. (1999). Immunity to error through misidentification. *Philosophical Topics, 26*(1), 271–304.

Ryle, G. (1971a). A puzzling element in the notion of thinking. In *Collected papers*, *volume II: Collected essays 1929–1968* (pp. 391–406). London: Hutchinson.

Ryle, G. (1971b). Thinking and reflecting. In *Collected papers*, *volume II: Collected essays 1929–1968* (pp. 465–479). London: Hutchinson.

Ryle, G. (1971c). The thinking of thoughts: What is 'Le Penseur' doing? In *Collected papers*, *volume II: Collected essays* 1929–1968 (pp. 480–496). London: Hutchinson.

Schwenkler, J. (2015). Understanding practical knowledge. *Philosopher's Imprint, 15*(15).

Schwenkler, J. (2012). Non-observational knowledge of action. *Philosophy Compass, 7*(10), 731–740.

Setiya, K. (2008). Practical knowledge. *Ethics, 118*, 388–409.

Setiya, K. (2016a). Anscombe on practical knowledge. In *Practical knowledge: Selected essays* (pp. 156–170). New York: Oxford University Press.

Setiya, K. (2016b). *Practical knowledge: Selected essays*. New York: Oxford University Press.

Shah, N., & Velleman, D. (2005). Doxastic deliberation. *The Philosophical Review, 114*(4), 497–534.

Shoemaker, S. (1968). Self-reference and self-awareness. *The Journal of Philosophy, LXV*, 556–579.

Siegel, S. (2019). Inference without reckoning. In B. Balcerak Jackson, & M. Balcerak Jackson (Eds.), *Reasoning: New essays on theoretical and practical thinking* (pp. 15–31). New York: Oxford University Press.

Smith, C. S. (1991). *The parameter of aspect*. Dordrecht: Springer Science + Business Media.

Soteriou, M. (2013). *The mind's construction: The ontology of mind and mental action*. New York: Oxford University Press.

Velleman, D. (2007). What good is a will? In A. Leist (Ed.), *Action in context* (pp. 193–215). Berlin: Walter de Gruyter.

Wallace, R. J. (2001). Normativity, commitment, and instrumental reason. *Philosopher's Imprint*, *1*(3), 1–26.

Wallace, R. J. (2014). Practical reason. In E.N. Zalta (Ed.). Stanford Encyclopedia of Philosophy. Retrieved from https://plato.stanford.edu/entries/practical-reason/, October 28, 2019.

Way, J. (2007). Self-knowledge and the limits of transparency. *Analysis, 67*(3), 223–230.

Wedgwood, R. (2006). The normative force of reasoning. *Noûs, 40*(4), 660–686.

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[1] For extensive feedback, I'm grateful to Michael Brent, Christopher Peacocke, and an anonymous reviewer for this volume. I'm also indebted to audiences at the University of Warwick, CUNY Graduate Center, the City College of New York, and New York University. Thanks, everyone.

[2] Words in bold indicate technical terms to be defined.

[3] Small capital letters denote concepts. Note that judgment is the mental event with propositional content that is normatively and descriptively governed by truth. I borrow this formulation from Shah and Velleman (2005) and apply it here to individuate judgments among mental events.

[4] For more on non-voluntarism, see Shah and Velleman (2005), Williams (1976) and A. Peacocke (2017).

[5] Italics throughout do not indicate emphasis. Rather, italics identify intensional descriptions of actions that capture the contents of an agent's thoughts or intentions.

[6] You can, of course, do all sorts of other things in order to indirectly bring it about that you do not think about a polar bear. For more on this kind of extended mental action, see Mele (2009).

[7] Compare Anscombe (1957), Davidson (1967/2001, 1968/2001). It is better to say that actions are intentional under aspects, not descriptions, as there is nothing essentially linguistic about the understanding you must have here. Nonetheless, I follow convention in using the term "description."
[8] Anscombe (1957, p. 34ff.) and Davidson (1963/2001, 1971/2001, 1978/2001). They both put the point in terms of one action's being intentional under several descriptions at once. I favor instead the metaphysics of constitution here: one action intentional under one specific description can constitute an action intentional under another description.
[9] Action variables (Φ, Ψ) used in these italicized intensional contexts do not refer to letters, but to the actions to which they refer. The italicized portions of this chapter are thus a form of Quine quotation.
[11] I do not yet want to claim that these jointly sufficient conditions are also individually necessary conditions on a mental action's having content plurality, although I don't want to rule this out, either.
[12] Anscombe (1957, p. 67ff); cf. Hampshire (1959). Anscombe defines "practical knowledge" in two ways, as knowledge of what happens in a particular instance of action and then later as a kind of capacity to do something, like know-how. The connection between these two is a matter of some discussion; see, e.g., Frost (2019). It's only the first of these two senses of "practical knowledge" that I mean to target here, with no commitment concerning the relationship between the two senses. On practical knowledge as knowledge, see Ford, Hornsby, and Stoutland (2014), Haddock (2014), Moran (2004), Schwenkler (2012, 2015), and Velleman (2007).
[13] Cf. Schwenkler (2015).
[14] Pace Davidson's (1978/2001) discussion of the carbon copies. See Setiya (2008) for a discussion. Even if practical conception did not necessarily involve doxastic commitment, there would be cases in which doxastic commitment is involved in practical conceptions, and some of the mental actions in question would be examples. This would be enough for our purposes.
[15] Anscombe (1957). Compare Schwenkler (2015) on the role of formal cause in this discussion. Setiya (2016a) powerfully argues that this is a restricted claim in Anscombe. The restriction he endorses does allow application to the cases of complex intentional action considered here.
[16] The most famous formulation of transparency of belief is found in Evans (1982), although as Moran (2001) notes, a clear formulation was also in Edgley (1969). For discussions of transparent self-knowledge, see also Barnett (2015), Byrne (2011), Cassam (2014), Paul (2012), and Way (2007).
[17] See Byrne (2011) for the view that transparent self-attribution is inferential, and see Barnett (2015) and my (2017) for criticism of this view.
[18] A. Peacocke (2017).
[19] But see Paul (2012) for an argument that decision isn't sufficient for even contemporaneous intention.
[20] Here it matters that a practical conception can indeed amount to knowledge of what you are doing. Practical conceptions that amount to knowledge do so because the agent is acting in a way she controls. So, it also matters here that you control the kind of thing you are doing in thought. I think this control condition is fulfilled in this context. For more on the connection between control and practical knowledge, see e.g., Velleman (2007).
[21] Pryor (1999), Shoemaker (1968).
[22] These explanatory features exactly mirror those presented in A. Peacocke (2017). Further (analogous) explanation of each point can be found there.
[23] This last point suggests a further application of content plurality in mental action as well. Content plurality in mental action can be used to formulate a new model of Descartes's (1988) *cogito*. You can, at any point, perform *any* mental action in order to ensure certainty of your existence. One and the same mental action can be both a *Φ*-ing (for any mental action type Φ) and a judgment that you exist.
[24] See the debate between internalism and externalism about practical reason, e.g., Wallace (2001, 2014).
[25] See Gibbard (2003). It is key that Gibbardian expressivism is in the first instance a theory about *judgments* – and only derivatively about speech acts like assertions (p.76).
[26] I do not here mean to imply that all cases of weakness of the will are structured in this way. Some cases of weakness of the will simply involve failure to act on a pre-existing decision to act.
[27] See Boghossian (2014), Broome (2014-comment), Wedgwood (2006), Wright (2014-comment), McHugh and Way (2016, 2018). Neta (2013) is a refreshing exception.
[28] Frege (1979, p. 3), quoted in Boghossian (2014, p. 4).
[29] Boghossian (2014, p. 5).
[30] See, e.g., McHugh and Way (2016) and Siegel (2019).
[31] Carroll (1895).
[32] See Sections 7 ("An intuitional construal of taking") and 9-12 (on rule-following) of Boghossian (2014).
[33] This creates its own deviance problem for definitions of action, as Davidson (1978/2001) discussed.
[34] I'm grateful to Brie Gertler for raising a version of this thought in personal correspondence.