

The Practicality of Practical Inference

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The assumption of a mirror image connexion between practical and theoretical reasoning must be qualified. And a comprehensive account of the soundness of a practical inference should draw on the requirements of the intrinsic teleology of practical reason.

—Anselm W. Müller¹

What is practical about practical reasoning (or practical inference, or the practical syllogism)? In *Intention*, G. E. M. Anscombe complains that practical reasoning

is commonly supposed to be ordinary reasoning leading to such a conclusion as: ‘I ought to do such-and-such’. By ‘ordinary reasoning’ I mean the only reasoning ordinarily considered in philosophy: reasoning towards the truth of a proposition, which is supposedly shewn to be true by the premises.²

So conceived, practical reasoning (inference, syllogism) is practical by virtue of its *content* or *subject matter*: it is ordinary reasoning about practical matters that is properly contrasted with, e.g. historical, economic, and biological reasoning (i.e. reasoning towards the truth of historical, economic, and biological propositions). Anscombe complains that this view leads to practical reasoning’s ‘true character’ being ‘obscured’.³ She allows that practical reasoning has a distinctive subject matter, but denies ‘that this subject matter is enough to make reasoning about it practical’; there is, she contends, ‘a difference of *form* between reasoning leading to action [i.e. practical reasoning] and reasoning for the truth of a conclusion [i.e. theoretical reasoning]’.⁴

Returning to the topic in the 1970s,⁵ however, Anscombe seems to change her mind:

¹ Anselm W. Müller, ‘How Theoretical Is Practical Reason?’ in *Intention and Intentionality: Essays for G. E. M. Anscombe*, ed. Cora Diamond and Jenny Teichman (Ithaca, NY: Cornell University Press, 1979), pp. 91–108, p. 105.

² G. E. M. Anscombe, *Intention*, 2nd ed. (Oxford: Basil Blackwell, 1963), §33, p. 58.

³ Anscombe, *Intention*, §33, p. 58.

⁴ Anscombe, *Intention*, §33, p. 60.

⁵ Anscombe’s essay on practical inference was written in 1974 and originally published as ‘Von Wright on Practical Inference’, in *The Philosophy of Georg Henrik von Wright*, ed. Lewis Edwin Hahn and Paul Arthur Schilpp (La Salle, IL: Open Court, 1989), pp. 377–404; it is reprinted as ‘Practical Inference’, in *Human Life, Action and Ethics: Essays by G.E.M. Anscombe*, ed. Mary Geach and Luke Gormally (Exeter: Imprint Academic, 2005), pp. 109–47, to which citations here refer.

The considerations [i.e. the premises] and their logical relations are just the same whether the inference is practical or theoretical. ... The difference between practical and theoretical is mainly a difference in the service to which these considerations get put. ... I must therefore make amends to Aristotle, whom I formerly blamed for speaking of practical inference as 'just the same', as theoretical. I wanted to say it was a completely different form.⁶

Or does she?:

There is, however, a distinct 'form' of practical inference, if all we mean by the 'form' is (1) the casting of certain propositions in a quasi-imperative form, and (2) how the matters are arranged. ... If the common characteristics of [the] patterns are recognized, and it is also clear wherein they differ, then it seems a matter of indifference whether we speak of different kinds of inference or not.⁷

The above remarks do not settle whether, and to what extent, Anscombe changed her mind about the nature of practical reasoning.⁸ But they do show that she came to see as inadequate a philosophical characterization of its practicality in terms of a contrast between form and content—a position I'll call *Formalism*. From her later vantage point, it 'seems a matter of indifference' whether we say that practical and theoretical reasoning have a different form; the more significant difference lies in 'the service to which [the premises] get put' in the two kinds of reasoning. Anscombe now adopts what I'll call a *Teleological* view; she says that the practicality of practical reasoning resides in its distinctively practical *use* or *function*.⁹

I aim to show that Anscombe is right to locate the practicality of practical reasoning in its use. But just as denying that its practicality is explained by its distinctive subject matter does not entail that practical reasoning doesn't have a distinctive subject matter, so locating its practicality in its use is consistent with its having a distinctive form. Practical reasoning has a distinctive subject matter and a distinctive form, but these are both explained by its distinctive use. When the teleology of practical reasoning is properly thought through, we see that it is not at all a matter of indifference whether we say that practical reasoning has a different form from theoretical reasoning; indeed, the formal differences are more significant than Anscombe recognizes. Most importantly, the conditional premises of practical reasoning turn out to be themselves distinctively practical thoughts; comprehending this reveals the internality of perception, skill, and the first person to practical reasoning.

⁶ Anscombe, 'Practical Inference', p. 132.

⁷ Anscombe, 'Practical Inference', pp. 133–34, my emphasis.

⁸ Anscombe's two discussions are read as expressing a uniform position by Candace Vogler, 'Anscombe on Practical Inference', in *Varieties of Practical Reasoning*, ed. Elijah Millgram (Cambridge, MA: MIT Press, 2001), pp. 437–64 and Rachael Wiseman, *Routledge Philosophy Guidebook to Anscombe's Intention* (London: Routledge, 2016), pp. 138–45.

⁹ Teleological conceptions of practicality are also found in Müller, 'How Theoretical Is Practical Reason?'; 'Mental Teleology', *Proceedings of the Aristotelian Society* 92 (1992): pp. 161–83; and Anthony W. Price, *Contextuality in Practical Reason* (Oxford: Oxford University Press, 2008).

1 Formalism

Some still maintain that practical reasoning is simply ‘ordinary’ reasoning that aims to establish the truth of conclusions such as ‘I ought to do such-and-such’.¹⁰ But many philosophers would now want to say that practical reasoning has a different form from theoretical reasoning. Yet different things may be meant by ‘different form’. There is a formal difference between Barbara and Celarent, but these different syllogistic figures do not constitute differences in forms of reasoning in the sense at issue here. What might a philosopher have in mind by saying that practical reasoning has a different form from theoretical reasoning? And what did the Anscombe of *Intention* mean by this?

1.1 Formalism: some possibilities

In paradigmatic cases of successful theoretical reasoning, a reasoner advances to a new belief (a conclusion) because what she thereby believes is shown to be true by considerations she already believes (the premises).¹¹ For instance, she reasons: ‘Given that all that humans are mortal, since Socrates is human, Socrates is mortal’. She comes to believe that Socrates is mortal on the basis of other things she believes (that all humans are mortal, and that Socrates is human: the ‘given’ and ‘since’ in the imagined monologue express her believing these things). This bit of reasoning is successful in two respects: the reasoning reaches a conclusion (the reasoner is not interrupted, and doesn’t give up or otherwise run aground, before reaching it), and she is justified in believing the conclusion on the basis of the premises. In good deductive reasoning, the reasoner is justified in believing the conclusion on the basis of the premises because it is entailed by them. In good non-deductive theoretical reasoning, she is justified in believing the conclusion because, even though the premises don’t entail the conclusion, their truth provides a sufficient degree of support for it.

The bit of reasoning imagined above exemplifies Frege’s conception of inference: ‘Judging, in the consciousness of other truths as justifying grounds, is called inferring’.¹² It is now typical to distinguish between, on the one hand, the reasoner’s reasoning, comprising her beliefs, and, on the other, the propositions she believes and the logical (or otherwise evidential) relations

¹⁰ E.g. Joseph Raz, ‘Normativity: The Place of Reasoning’, *Philosophical Issues* 25, no. 1 (2015): pp. 144–64. For a compelling argument against this view, see Patricio A. Fernandez, ‘Practical Reasoning: Where the Action Is’, *Ethics* 126, no. 4 (2016): pp. 869–900. A more complicated proposal is ‘cognitivism about practical reason’: the view that practical reasoning is theoretical reasoning towards the truth of a proposition of the form *I will do A because of this very belief*. See e.g. J. David Velleman, *Practical Reflection* (Princeton, NJ: Princeton University Press, 1989).

¹¹ One can engage in successful theoretical reasoning from supposition; here I treat such cases as non-paradigmatic.

¹² This definition is from Frege’s ‘Logic’ (composed between 1879 and 1891); the translation above is from Sebastian Rödl, ‘Nature and the Good’, *Analytic Philosophy* 61, no. 4 (2020): pp. 281–96, p. 282.

between them; most contemporary philosophers would regard this as a basic Fregean insight—a lesson of Frege’s rejection of psychologism. And Anscombe distinguishes the logical and psychological aspects of reasoning and its constituents in basically this way.¹³ Indeed, much of ‘Practical Inference’ argues against the idea that inference takes place through a kind of logical compulsion—as if the fact a conclusion follows from premises guaranteed that an agent committed to the premises would be committed to the conclusion (whether the inference was theoretical or practical). Anscombe thinks this involves confusing the logical and psychological dimensions of reasoning: logic cannot force one to believe the consequences of one’s beliefs, or to take the means believed necessary to one’s ends. I will not address this here, since I think the point is now widely accepted—even if what exactly to say instead remains a source of perplexity.¹⁴

Within this outlook, our bit of reasoning might be represented like this:

Act	Content	Type	Role
<i>Belief</i>	All humans are mortal	<i>Proposition</i>	<i>Premise</i>
<i>Belief</i>	Socrates is human	<i>Proposition</i>	<i>Premise</i>
<i>Belief</i>	Socrates is mortal	<i>Proposition</i>	<i>Conclusion</i>

This representation distinguishes, from left to right: (i) the *acts of reason*, as I’ll call them, that constitute the train of reasoning; (ii) the *contents* of those acts of reason (or *what is χ -ed*, where ‘ χ ’ names an act of reason); (iii) the logical *type* of those contents; and (iv) the contents’ logical *role* in the reasoning. The premises (the first two propositions) entail the conclusion (the third proposition); and the reasoner believes the conclusion on their basis.¹⁵ Given this framework, the topic of inference concerns acts of reason: believing something on the basis of other things believed; perhaps transitioning from believing things to believing something else on their basis. The validity of the above inference consists in the fact that the first two propositions entail the third; its soundness in its validity and their truth.

On the view that practical reasoning is reasoning that is practical (merely) by virtue of its content, the only difference between the bit of theoretical reasoning above and a bit of practical reasoning will be in the particular propositions that figure in it: the reasoner ends up believing,

¹³ Anscombe, ‘Practical Inference’, pp. 129–40.

¹⁴ See the literature on ‘the taking condition’ spawned by Paul Boghossian, ‘What Is Inference?’, *Philosophical Studies* 169, no. 1 (2014): pp. 1–18, and compare Anscombe’s criticism of ‘the picture of a logical step: an act of mind which is making the step from premise to conclusion’ (‘Practical Inference’, p. 132). For further discussion of Anscombe’s relation to Frege, see Alexandra Newton’s contribution to this volume.

¹⁵ I will here ignore questions about whether we should construe that on the basis of which a reasoner comes to a conclusion as propositions, facts, or states of affairs, etc.

on the basis of other things she believes, (e.g.) that she ought to do *A*, or that doing *A* is ‘the thing to do’. The goodness of her reasoning will consist in just the same things: in the truth of the premises and in their showing the conclusion to be true (by entailing it, in the deductive case; by e.g. probabilifying it, in non-deductive cases). But the above representation of theoretical reasoning suggests at least four ways in which practical reasoning might be held to have a distinctively practical form.

(F1) The acts of reason that constitute a train of practical reasoning might not all be beliefs.

Theoretical reasoning involves believing something (the conclusion) on the basis of other things believed (the premises). But practical reasoning is often construed as starting from, and/or terminating in, a practical act of reason such as desire, intention, or intentional action. For instance, Michael Bratman and John Broome understand practical reasoning (paradigmatically) as reasoning from an intention to do something, via further premises believed, to an intention to do something else.¹⁶ By contrast, Jonathan Dancy and Eric Wiland construe practical reasoning (paradigmatically) as reasoning the conclusion of which is doing something intentionally, though while Dancy thinks that all reasoning is reasoning from what the reasoner believes, Wiland maintains that ‘the starting-point of practical reasoning is likewise an action’.¹⁷

(F2) The contents of a piece of practical reasoning might not all be of the logical type *proposition*. One version of this idea (**F2a**) takes the contents of practical attitudes (intentions and desires) to differ in mood from the contents of belief: whereas the latter are indicative, the former are imperative or optative.¹⁸ Another (**F2b**) takes what is intended, and what is done, to be specified linguistically not by complete sentences (whatever the mood) but by verb phrases: whereas a proposition is, we might say, a *thinkable* (a judgeable, a believable), what is intended, and what is done, is rather a *doable*. (Just as we can distinguish between what I believe and my believing it—what I believe, namely *that Chicago is in Illinois*, is what you too believe, but our believings are distinct—so too we can distinguish between what I intend, or am doing, and my intending, or doing, it—what I am doing, namely *eating an apple*, is something you and I have each done and may intend to do again, but our eatings, and intendings, are distinct.)

¹⁶ Michael E. Bratman, *Intention, Plans, and Practical Reason* (Cambridge, MA: Harvard University Press, 1987); John Broome, *Rationality through Reasoning* (Chichester: Wiley-Blackwell, 2013).

¹⁷ Jonathan Dancy, *Practical Shape: A Theory of Practical Reasoning* (Oxford: Oxford University Press, 2018), pp. 37–41; Eric Wiland, ‘In the Beginning Was the Doing: The Premises of the Practical Syllogism’, *Canadian Journal of Philosophy* 43, no. 3 (2013): pp. 303–21, p. 305.

¹⁸ E.g. Anthony Kenny, ‘Practical Inference’, *Analysis* 26, no. 3 (1966): pp. 65–75.

(F3) The relationship between the premises and conclusion of practical reasoning might be different: the premises might show (or indicate) not that the conclusion is belief-worthy—i.e. true—but rather that it is choiceworthy—i.e. good or otherwise ‘satisfactory’.¹⁹

(F4) There might be a distinctive set of rules or principles that license the drawing of a conclusion from a set of premises.²⁰

Different versions of each of these ideas, and different combinations of them, have been defended by various philosophers; to attempt a comprehensive survey and accounting would be out of place here. It will suffice to indicate the respects in which Anscombe’s *Intention* conception of practical reasoning construes it as practical by virtue of its form.

1.2 Formalism: Anscombe in intention

Though Anscombe portrays her discussion of practical reasoning in *Intention* as elucidating Aristotle on the topic, I will avoid exegetical evaluation here. For present purposes, I take the crucial features of Anscombe’s *Intention* conception of practical reasoning to be as follows. In practical reasoning, properly so-called, ‘the conclusion is an action whose point is shewn by the premises, which are..., so to speak, on active service’.²¹ So Anscombe holds versions of (F1) and (F3) above: she thinks that the concluding act of a piece of practical reasoning is not believing something, but doing something intentionally²²; and that the premises are not in the business of showing the *truth* of the proposition that an action of the relevant kind is occurring or will occur, but rather of establishing the *goodness* of acting in that way.²³ They do so, specifically, by showing how what the agent concludes her reasoning by doing is *useful* for realizing an *end* she wants to realize: ‘The mark of practical reasoning is that the thing wanted is *at a distance* from the immediate action, and the immediate action is calculated as the way of getting or doing or securing the things wanted’.²⁴

¹⁹ E.g. Kenny, ‘Practical Inference’; Dancy, *Practical Shape*.

²⁰ E.g. Kenny, ‘Practical Inference’; see §1.4 below.

²¹ Anscombe, *Intention*, §33, p. 60. The contrast is with ‘the idle practical syllogism which is just a classroom example’, in which the premises are *not* on active service (*Intention*, §33, p. 60).

²² For mild dissent, see Roger Teichmann, *The Philosophy of Elizabeth Anscombe* (Oxford: Oxford University Press, 2008), p. 58.

²³ In ‘Practical Inference’, Anscombe writes: ‘my view [in *Intention*] was...that the relation between the premises and the action which was the conclusion was this: the premises shew what good, what use, the action is’ (p. 114).

²⁴ Anscombe, *Intention*, § 41, p. 79. Indeed, in *Intention* Anscombe restricts *practical* reasoning to *instrumental* reasoning, the calculation of means to an end: her reason for saying that neither ‘He killed my father, so I shall kill him’ nor ‘I admire him so much, I shall sign the petition he is sponsoring’ is a case of practical reasoning is that ‘there is no calculation in these. The conjunction ‘so’ is not necessarily a mark of calculation’ (§35, p. 65). But see §3.4 below.

However, the fact that the agent wants (or intends) to realize the end is not itself a premise, Anscombe thinks: “The role of “wanting” in the practical syllogism is quite different from that of a premise’.²⁵ She rejects as ‘formally misconceived’ the following as an example of practical reasoning:

I want a Jersey cow
 They have good ones in the Hereford market
 So I’ll go there

in favour of this:

They have good Jersey cows in the Hereford market
 So I’ll go there.²⁶

Now it would be intelligible for someone to go to the Hereford market on the grounds that they have good Jerseys there only if she wanted to buy (steal, etc.) a good Jersey cow. Given a different end (e.g. to run the farm into the ground), she might intelligibly avoid the Hereford market on the same grounds; and without any Jersey-involving end, we cannot envisage any practical reasoning in which this premise could be pressed into ‘active service’. What Anscombe resists as a ‘formally misconceived’ construal of the premises of practical reasoning we might represent like this:

<i>Belief</i>	I want a Jersey cow	<i>Premise</i>
<i>Belief</i>	They have good ones in the Hereford market	<i>Premise</i>

Just as the agri-economic fact *that there are good Jerseys at Hereford* may be grounds for quite different courses of action, depending on the agent’s ends, the psychological fact *that the agent wants a Jersey cow* may be grounds for different courses of action, depending on her ends, too.²⁷ As Anscombe later clarified, ‘the end ought to be specified’—for, without it, we won’t know ‘what the conclusion should be, given these premises’—‘but the specification of the end is not in the same position as a premise’.²⁸ We might represent her point thusly:

²⁵ Anscombe, *Intention*, §35, p. 66.

²⁶ Anscombe imagines this form of words accompanying the conclusion—i.e. the agent’s going to the Hereford market—and calls it ‘the conclusion in a verbalised form’ (*Intention*, §33, p. 61). The action can of course be described in multiple ways; the ‘conclusion in a verbalised form’ gives the description under which the action’s point is shown by the premises.

²⁷ Compare an example Anscombe gives in ‘Practical Inference’ (and credits to Anselm Müller): an agent consults a psychiatrist because she wants to kill her parents. Her “wanting to kill [her] parents is among the facts of the case; it is not that wanting which we picture as, so to speak, constituting the motor force for acting on the premises. *That* is evidently the desire to get rid of the trouble” (p. 115).)

²⁸ Anscombe, ‘Practical Inference’, pp. 116–17.

<i>Want</i>	To buy (steal, see, etc.) a Jersey cow	<i>Objective</i>
<i>Belief</i>	They have good Jersey cows in the Hereford market	<i>Premise</i>
<i>Action</i>	Going to the Hereford market	<i>Conclusion</i> ²⁹

Means and ends are of course relative. Further practical reasoning may be needed to determine how to go to the Hereford market (the agent is in Leominster, but the A49 is closed), in which case the ‘conclusion’—going to the Hereford market—remains an objective towards which means must be identified and adopted. And it is unlikely that the agent wants to buy a Jersey cow for its own sake; her end will have been adopted, on the basis of further considerations (premises), as a ‘way of getting or doing or securing’ further things wanted: to realize a romantic fantasy of bucolic self-sufficiency, perhaps.

The picture thus far sketched suggests a distinction between valid and sound practical reasoning. We assess the validity of a (deductive) theoretical argument by bracketing the question of whether the premises are in fact true; the argument’s validity consists in the fact that, were the premises true, the conclusion would be true; and its soundness in its validity and the actual truth of the premises (and thus of the conclusion). If the premises of a piece of practical reasoning show the good of the conclusion—if the ‘property transmitted’ by good practical reasoning is not truth but rather goodness—then the validity of a piece of practical reasoning will consist in the fact that, were the objective(s) good and the premise(s) true, the conclusion would be good (choiceworthy); and its soundness in its validity and the actual truth of the premise(s) and goodness of the objective (and thus of the conclusion). And indeed, Anscombe later describes this conception of the validity of practical reasoning as ‘the great Aristotelian parallel’, something she clearly endorses:

in our philosophical training we learn carefully to use this idea of soundness of reasoning and to make the distinction between truth and validity and we are right to do so. Equally right, therefore, to distinguish between goodness and validity; for in the sphere of practical reasoning, goodness of the end has the same role as truth of the premises has in theoretical reasoning.³⁰

²⁹ These representations of objective and conclusion exemplify (F2) above: their contents are not given here as propositions. Unlike those to (F1) and (F3), Anscombe’s commitment to (F2) is not explicit; and though I have represented the relevant contents above as ‘doables’ (F2b), one might seek to represent them as ‘fiats’ (F2a), as Anscombe is content to in ‘Practical Inference’—more about this in §1.4 and §2 below.

³⁰ Anscombe, ‘Practical Inference’, p. 146. Anscombe’s calculative conception of practical reasoning, along with this understanding of the relationship between the goodness of ends and the validity of practical reasoning, are behind her insistence in *Intention* that practical reasoning is not as such *ethical* (§35, p. 65; §38, p. 72; §41, p. 78); but compare ‘Practical Inference’, pp. 144–7, and §3.5 below.

However, given the examples Anscombe provides of practical reasoning, one may wonder whether the parallel holds. Consider the following example:

Vitamin X is good for all men over 60
Pigs' tripes are full of Vitamin X
I'm a man over 60
Here's some pigs' tripes
So I'll have some.

Anscombe notes that 'no one could be tempted' to think that these premises entail the proposition—'I'll have some'—that accompanies the conclusion (taking some of the tripes).³¹ What *is* entailed is 'What's here is a type of food that (insofar as it is rich in Vitamin X) is good for me'—and of course whether or not the agent's recognition of *this*, on the basis of the considerations adumbrated, leads to action (and if so, of what kind) will depend on his objectives. Nevertheless, she says:

a man who goes through such considerations as those about Vitamin X and ends up by taking some of the dish that he sees, saying e.g. 'So I suppose I'd better have some', can certainly be said to be reasoning; on the other hand, it is clear that this is another type of reasoning than reasoning from premises to a conclusion which they prove.³²

Even if we accept that practical reasoning is not reasoning to the truth of a proposition, we may yet worry that what this man is doing *cannot* 'be said to be *reasoning*'. Joseph Raz, for instance, contends that 'whatever kind of argument is concerned'—whether theoretical or practical—'it is common to all rules of valid arguments that believing or relying on the premises and rejecting or refusing the conclusion involves some defect, some imperfection'.³³ But (i) suppose that Anscombe's man's objective is to maintain and improve his health, that this is in fact a good aim, and that the premises are true. It does not follow that taking some of the dish he sees is a good thing for him to do: he may be a vegetarian, or simply full; tripes are relatively high in cholesterol; and *these* may already be spoken for. Unlike deductive reasoning, practical reasoning is defeasible, and so, even when the agent's end is specified, a set of premises cannot *prove* that a certain course of action is good for her to take: further premises can be added that can 'block' the inference, and this in various ways.

Moreover, (ii) even if there are no further considerations or objectives that undermine the goodness of taking some of the dish that he sees, this still does not show that the man 'must' take some on pain of irrationality, unintelligibility, or some other 'defect' or 'imperfection'. For

³¹ Anscombe, *Intention*, §33, p. 61. See n. 26 above.

³² Anscombe, *Intention*, §33, p. 62.

³³ Raz, 'Normativity', p. 147.

eating some of the dish he sees is a sufficient but unnecessary means to eating some pigs' tripes, which is a sufficient but unnecessary means to ingesting some Vitamin X; and to be 'good for' one's health, Vitamin X need be neither a *sine qua non* nor a magic bullet. Aiming at health, the man might already have taken Vitamin X pills today on the grounds that Vitamin X is good for all men over 60. Yet taking the pills on these grounds would exemplify practical reasoning just as well as eating some of the tripes on the grounds Anscombe lays out. Indeed, she describes the situation in which an agent confronts a choice among various alternatives, each of which suits his ends, as 'by far the most common situation for anyone pursuing an objective', saying that '*which* he chooses is not determined by his end'.³⁴ Anscombe is more explicit still in 'Practical Inference':

Practical grounds may 'require' an action, when they shew that only by its means can the end be obtained, but they are just as much grounds when they merely shew that the end will be obtained by a certain means. Thus, in the only sense in which practical grounds can necessitate a conclusion (an action), they need not, and are none the less grounds for that.³⁵

But how can adopting an alternative, in pursuit of an end and in light of premises believed, count as *validly inferring* anything, if what one opts for is not determined by the reasons for which one does it? Anscombe confronts this challenge in 'Practical Inference', ultimately contending that what is distinctively practical about practical inference is best characterized, not in terms of a distinctive logical *form* that practical reasoning deploys, but in terms of a distinctively practical *use* that a practical reasoner makes of ordinary logical form.

Before considering this, however, we should bring out a final key element of the conception of practical reasoning elucidated in *Intention*: its nuanced treatment of what we might call the 'psychological reality' of practical reasoning. As we saw, Anscombe maintains that a man who takes some of the dish that he sees on the basis of the considerations like those about Vitamin X above 'can certainly be said to be *reasoning*'. But she does not think that in order to count as reasoning, an agent *must* 'go through' such considerations:

Generally speaking, it would be very rare for a person to go through all the steps of a piece of practical reasoning as set out in conformity with Aristotle's models, saying e.g. 'I am a human', and 'Lying on a bed is a good way of resting'. ...[I]f Aristotle's account were supposed to describe actual mental processes, it would in general be quite absurd. The interest of the account is that it describes an order which is there whenever actions are done with intentions; the same order as I arrived at in discussing what 'the intentional action' was, when the man was pumping water.³⁶

³⁴ Anscombe, *Intention*, §44, p. 81.

³⁵ Anscombe, 'Practical Inference', p. 120.

³⁶ Anscombe, *Intention*, §42, pp. 79–80.

The man referenced here is moving his arm up and down (doing A) because he is pumping (doing B), which he is doing because he is replenishing a house cistern with poisoned water (doing C), which he is doing because he is poisoning the house's inhabitants (doing D). Anscombe holds that there is here 'one action with four descriptions, each dependent on wider circumstances, and each related to the next as description of means to end'—that is, there is one action that exhibits an inner means-end structure.³⁷ Such a structure (an 'A—D order'), she argues, 'is there whenever actions are done with intentions' and it is known by the agent—he knows what he is doing, and how and why he is doing it—not on the basis of observation or theoretical reasoning; his knowledge is practical knowledge, an exercise of practical reason.³⁸

The A—D order, then, is something the agent knows, and thus in some sense *thinks*, even though it would be 'quite absurd' to suppose that 'actual mental processes' corresponding to it must occur (i.e. considering how to poison the inhabitants, recognizing that getting poison into the water supply would be a way of doing so, considering how to do that, etc.). Thus though a philosophical reconstruction of a piece of practical reasoning doesn't purport to record the history of an actual psychological process, it does not merely aim to represent something the agent *could* have thought but did not in fact; it represents what he did in fact think (indeed, knew), even though it goes beyond what was running through his mind. The agent's answers to Anscombe's question 'Why are you doing A?' neither occasion cognition nor vocalize an already running inner monologue.³⁹ And since a philosophical reconstruction of a piece of practical reasoning doesn't purport to record the history of an actual psychological process, there's no problem with thinking that, when psychological processes of deliberation *do* occur, the *sequence* in which they do so is not that suggested by the reconstructed *order*: the agent who takes the pigs' tripe needn't have begun his deliberation from a desire to act for the sake of his health; the 'psychological starting point' of his deliberation may be that here are some pigs' tripe.⁴⁰

1.3 The validity of practical reasoning

Many philosophers restrict valid practical (instrumental) reasoning to that which yields pursuit (intention, etc.) of *necessary* means. If my objective is its being the case that *p*, and if

³⁷ Anscombe, *Intention*, §26, p. 46.

³⁸ This summarizes a great deal of the argument of *Intention*. See especially §§5–8, pp. 9–15; §23, pp. 37–41; §26, pp. 45–7; §28–32, pp. 49–57; §48, pp. 87–9. For detailed interpretation, see Will Small, 'Practical Knowledge and the Structure of Action', in *Rethinking Epistemology Volume 2*, ed. Günter Abel and James Conant, (Berlin: De Gruyter, 2012), pp. 133–227.

³⁹ Cf. John Schwenkler, *Anscombe's Intention* (New York: Oxford University Press, 2019), pp. 148–52.

⁴⁰ Cf. Anscombe, 'Practical Inference', p. 142. Which thought is the psychological starting point may have ethical significance: see Douglas Butler, 'Character Traits in Explanation', *Philosophy and Phenomenological Research* 49, no. 2 (1988): pp. 215–38.

my doing A is a necessary means to securing this objective, then unless I do A , it will not be the case that p ; i.e. $\neg(I \text{ do } A) \supset \neg p$. As this is truth-functionally equivalent to $p \supset (I \text{ do } A)$, the validity of pursuing a necessary means, in light of the objective and the premise, is on this conception underwritten by *modus ponens*. By contrast, if my doing A were a sufficient but unnecessary means to making it the case that p , the premise would rather be $(I \text{ do } A) \supset p$: in which case neither *modus ponens* nor any other rule of propositional logic would license my doing A .

Reasoning to:	<i>a necessary means</i>	<i>a sufficient means</i>	
Want	p	p	Objective
Believe	$p \supset q$	$r \supset p$	Premise
Action/Intention	q	r (??)	Conclusion

Yet, on the face of it, the adoption of merely sufficient means to our ends is a pervasive characteristic of human agency. (I'm hungry, so I eat a sandwich. But I could have eaten something else.) It seems we must make sense of the validity of practical inference to sufficient means, on pain of branding vast quantities of seemingly reasonable human action as irrational—or as moves outside the space of reasons altogether.⁴¹

One attempt to accommodate reasoning to a sufficient means construes the means as also necessary, thereby validating it with *modus ponens*. Suppose my goal was to do C , that it was open to me to A or to do B (each sufficient but unnecessary means), and that I did A . One might claim (i) that there had to be some reason x why I did A rather than B (perhaps doing A was more efficient, more pleasurable, or more stylish, etc.); thus (ii) my objective was not simply to do C , but rather to do *C-as-x-ly-as-possible* (etc.); thus (iii) doing A was not merely sufficient but also necessary for achieving this more precisely specified end (and doing B was not only unnecessary but insufficient): $\neg(I \text{ do } A) \supset \neg(I \text{ do } C \text{ as } x\text{-ly as possible})$; i.e. $(I \text{ do } C \text{ as } x\text{-ly as possible}) \supset (I \text{ do } A)$.

Perhaps there are such cases. But though saying that I did A in order to do C is saying that what I did was intentional under the descriptions 'doing A ', 'doing A in order to do C ', and 'doing C ', it does not follow that it was intentional under the description 'doing A rather than B '. And even if I intentionally did- A -rather-than- B , I have may have done *that* for no

⁴¹ See Sarah K. Paul, 'The Conclusion of Practical Reasoning: The Shadow Between Idea and Act', *Canadian Journal of Philosophy* 43, no. 3 (2013): pp. 287–302 on 'plumping in the face of Buridan-esque indifference', which she conceives of as the arational exercise of an 'executive capacity to initiate action that is independent of judgments about reasons' (p. 301).

particular reason.⁴² Moreover, if I intentionally did-*A*-rather-than-*B*, and did so because doing *A* was a more pleasant way of doing *C*, I needn't have done so in order to do-*C*-as-pleasantly-as-possible, at least in Anscombe's view: 'If, thinking "if I do this, this will happen" [e.g. "if I do *A* rather than *B*, it'll be more pleasant"] he decides to do it, and so determines "this" [i.e. doing *C* more pleasantly] as the result he wants, which before was undetermined, and if "this" is not wanted with a view to any further end, he is not "reasoning with a view to an end" at all'.⁴³ I might have opted to do *B* instead, thereby doing *C* less pleasantly but more efficiently, without giving up any end of mine: my end was just to do *C*; I was not reasoning with a view to doing-*C*-as-*x*-ly-as-possible. In choosing to do *C* by means of doing *A* rather than *B*, on the grounds that it would be more pleasant to do *C* by doing *A*, I at best *made it the case* that my end was (other things being equal) to do *C* as pleasantly as possible; this was in no way the end I always had in view (albeit out of focus, as it would have to be taken to have been).⁴⁴

In any case, the mooted manoeuvre—construing a sufficient means as necessary, so as to validate taking it—gets things backwards. Sufficiency is at the heart of the concept of a means. For a necessary means to be a *means*, it must either *also* be sufficient or be *part* of a sufficient (set of) means. (I can't drive to work unless I turn the car's engine on, but if the garage door won't open, what's the point in turning it on?) And the calculative practical reasoning at issue centrally involves the identification of means to an end: as Anscombe puts it, 'What is important is surely that the end will be attained by the means arrived at, not whether it is the only means'.⁴⁵ She thus must be right to maintain that a man who takes some of the dish that he sees on the basis of the considerations like those about Vitamin X above 'can certainly be said to be *reasoning*': his action is not simply the effect of a sequence of thoughts merely causally connected by associative processes (or similar).⁴⁶ As Sebastian Rödl puts it,

Practical reasoning proceeds from something general, and its office is to arrive at a specification. It is in the nature of the case that there may be more than one way of doing

⁴² See Rosalind Hursthouse, 'Intention', in *Logic, Cause and Action: Essays in Honour of Elizabeth Anscombe*, ed. Roger Teichmann (Cambridge: Cambridge University Press, 2000), pp. 90–1, who reminds us that the usual Anscombean constraints on the intelligibility and sincerity of such an answer will apply (see *Intention*, §§17–18, pp. 25–8; §§25–27, pp. 41–9).

⁴³ Anscombe, *Intention*, §44, p. 81.

⁴⁴ Some think that we always want, or are perhaps rationally required to want, to achieve our ends by taking the 'best' available means; the 'best' means are then both necessary and sufficient. There is a danger of emptiness here: the only reason to think the agent thought doing *A* a better means than doing *B* is that he did *A* when he could have done *B*. There is also a danger of mistaking for a principle of practical reasoning a middle-class pathology that manifests e.g. in an inability to make even modest purchases without agonizing over the consumer reports (I should know).

⁴⁵ Anscombe, 'Practical Inference', p. 118.

⁴⁶ See e.g. Broome, *Rationality Through Reasoning*, pp. 226–7 on distinguishing genuine reasoning from mere mental 'jogging'.

this. Inferring from this fact that practical reasoning fails to reach a definite action is refusing to consider the idea of practical reasoning.⁴⁷

But vindicating this thought requires freeing ourselves from assuming that features of specifically theoretical, or even deductive, reasoning belong to reasoning *as such*.⁴⁸

From the deductive case, we get a cluster of ideas associated with the concept of validity: the evaluation of grounds qua grounds, entailment, the conclusion's 'following from' the premises, and its doing so as a matter of 'form'. On the other hand, we have the insight that practical reasoning from an end to a (merely) sufficient means is not only pervasive but legitimate. Many philosophers are prepared to give up this insight in an attempt to understand practical reasoning in terms of the cluster of ideas. An alternative is to hold onto the insight, and give up on the idea that practical reasoning is capable of validity: after all, if the premises neither entail any merely sufficient means, let alone determine the adoption of one rather than another, then what is left of the idea of validity, and thus of practical *inference*?⁴⁹ Both reactions risk losing their grip on the topic: the first refuses to consider the idea of *practical* reasoning, and the second loses sight of it as a kind of *reasoning*. Is there an alternative?

1.4 Kenny's logicist formalism

Anthony Kenny attempted to underwrite the validity of practical reasoning to a sufficient means by identifying distinctive rules of practical inference (cf. F4 above). Such rules, Kenny proposed, must 'ensure that in reasoning about what to do we never pass from a plan which will satisfy our desires to a plan which will not satisfy them'.⁵⁰ Thus, whereas the 'point of the rules for theoretical reasoning is to ensure that one never passes from true assertions to false assertions', the point of the rules for practical reasoning is to 'transmit' or 'preserve' the property of *satisfactoriness* from the objective(s), via the premise(s), to the conclusion.⁵¹ Kenny thought these rules govern practical inference and imperative inference. The contents of a practical inference's objective and conclusion, or of commands in imperative inference, are not propositions (which purport to state how things *are*, and are *true* if things are that way) but rather 'fiats' (which purport to state how things are *to be* and are *satisfied* if things are that

⁴⁷ Sebastian Rödl, *Self-Consciousness* (Cambridge, MA: Harvard University Press, 2007), p. 22.

⁴⁸ This is a theme of Dancy, *Practical Shape*.

⁴⁹ Cf. Dancy, *Practical Shape*, p. 24, who for related reasons abandons the notions of premise, conclusion, inference, and validity in his account of practical reasoning.

⁵⁰ Kenny, 'Practical Inference', p. 73.

⁵¹ Kenny, 'Practical Inference', pp. 71–2.

way). Like Anscombe, I will use ' $p!$ ' as the sign for a fiat that shares its 'descriptive content' with the proposition p .⁵²

Kenny's 'logic of satisfactoriness' is the 'mirror image' of ordinary propositional logic: whenever the latter 'permits the inference from A to B, the logic of satisfactoriness permits the inference from B to A'.⁵³ Thus if q can be inferred from p in ordinary propositional logic, $p!$ can be inferred from $q!$ in the logic of satisfactoriness. This logic thus validates the intuitively legitimate inferences from *I hug someone!* To *I hug Fred!*, and from *I drive to work or I take the train to work!* To *I drive to work!*. In the case of a 'mixed' inference—from an objective-fiat to a conclusion-fiat via propositions believed (e.g. that pigs' tripes are rich in Vitamin X), $p!$ can be inferred from $q!$ and $r, s, t...$ whenever q can be inferred from $p, r, s, t...$. Thus *I eat some of this!* Can be inferred from *I get some Vitamin X in me!* And *This contains Vitamin X*, because *I eat some of this* and *This contains Vitamin X* entail *I get some Vitamin X in me*. In basing his Formalism in a distinctive logic of practical inference, Kenny's view is a version of what I'll call *Logicist Formalism* (or *Logicism*, for short).

Despite its not only validating, but making central, the derivation of sufficient means, Anscombe rejects this conception of practical inference. She gives three reasons. First, '[Kenny's] "logic"...curiously and comically excludes' practical inferences to merely necessary means: since p doesn't follow from q and $(p \supset q)$, $q!$ doesn't follow from $p!$ and $(p \supset q)$.⁵⁴ But inference to a necessary means is no less intuitively legitimate than inference to a sufficient means. Secondly, it 'seems absurd that $(p \& q)!$ for arbitrary q , follows from $p!$... the admission of arbitrary conjuncts is one of those forced and empty requirements of a view which shew that there is something wrong with it'.⁵⁵ But it seems that, for Anscombe, the deepest reason to reject Kenny's approach—and the one that points towards her alternative—is that invoking a distinct logic of practical inference is superfluous, precisely because this supposedly distinctive form of reasoning is a mirror image of theoretical reasoning:

We can represent any inference by setting forth a set of hypothetical considerations:

If p, q .

If q, r .

The question is: what are these considerations for, if they are not idle? There may at any rate be these uses for them: We may be able to assert p , and go on to assert r . Or we may want to

⁵² This notation's simplicity has two disadvantages: it misleadingly suggests (i) that the ' $!$ ' signifies something added to a proposition (as opposed to something added to the descriptive content common to the fiat and the proposition) and (ii) that an agent's objectives and practical conclusions are self-directed commands (the relevant fiats might be expressed more aptly in the optative mood).

⁵³ Kenny, 'Practical Inference', p. 73.

⁵⁴ Anscombe, 'Practical Inference', p. 122.

⁵⁵ Anscombe, 'Practical Inference', p. 123.

achieve *r*, and decide to make *p* true [i.e. want to satisfy *r*! and decide to satisfy *p*!]*—*this being something we can do straight away. In either case we may appeal to considerations. Looked at in this way, we find no special form of practical inference; we have a set of propositions connected with one another the same way in the two cases. The difference lies in the different service to which they are put.⁵⁶

Kenny's proposal that the logic governing practical reasoning differs from that governing theoretical reasoning is of a piece with claiming that the road from Thebes to Athens is a different road from that from Athens to Thebes. There is one road with two directions of travel, one logic with two uses. Though Anscombe's account of practical inference in her essay draws on Kenny's, she locates its practicality in the first instance, not in a distinctive *form* of reasoning, but in a distinctive *use* to which the premises are put.

2 The teleological conception of practical inference

Here is Anscombe's example of the sorts of hypothetical considerations that can be exploited in both practical and theoretical patterns of inference:

(P1) If plants are fed with substances XYZ, there will be spectacular plant growth.

(P2) If substances XYZ are in the soil, the plants will be fed by them.⁵⁷

An agent, A, may reason from her objective (to effect spectacular plant growth), via (P1) and (P2), to a practical conclusion: to putting substances XYZ in the soil. A theorist, T, may reason from the fact that substances XYZ are present in the soil, via (P2) and (P1), to the theoretical conclusion that there will be spectacular plant growth. 'Spectacular plant growth' figures in the starting point of A's reasoning, and in the conclusion of T's. It figures in T's conclusion in the indicative mood ('There will be spectacular plant growth'), whereas, if A's starting point is specified sententially, the optative ('There is to be spectacular plant growth') or imperative ('There shall be spectacular plant growth!') is needed. But in a certain sense the very same thing—*spectacular plant growth*—is aimed at by A and affirmed (here, predicted) by T; again, the same thing—*the presence of XYZ in the soil*—is what T reasons from and what A determines to effect. Practical inference moves from (aiming at) spectacular plant growth, via (P1) and (P2), to (effecting) the presence of XYZ in the soil; theoretical inference moves in the opposite direction, as it were, from (affirming—here, observing) the presence of XYZ in the soil, via (P2) and (P1), to (affirming—here, predicting) spectacular plant growth.

⁵⁶ Anscombe, 'Practical Inference', p. 128. Kenny at least later agreed; in *The Metaphysics of Mind* (Oxford: Clarendon Press, 1989), he writes:

it is perhaps misleading to speak as if there were a practical logic different from theoretical logic. If by a logic we mean a set of logical truths, then one and the same logic is exploited in both theoretical and practical reasoning. It is the patterns of inference which are used to exploit these logical truths which differ.

(p. 44)

⁵⁷ Lightly modified from Anscombe, 'Practical Inference', p. 134.

Anscombe regards these hypotheticals as constituting a logical kernel common to, and neutral between, the theoretical and practical inferences they afford. Her position is aptly characterized by Rachael Wiseman: they ‘record our collective and individual knowledge, opinion, belief, prejudices, about what follows from what’.⁵⁸ Insofar as we think of that logical kernel as underwriting the (unquestioned) validity of theoretical inference, we ought thereby to recognize that practical inference can be valid (and thus genuinely inference), too. The same hypothetical propositions, and their logical relations, account for the rectitude of adopting the conclusion in each case, and thus for the grounds (including the objective, in the practical case) functioning *as grounds*. What distinguishes practical reasoning is not (merely) its special subject matter; nor is it a special ‘logic’; rather, it is a distinctive use of the ordinary logic that underwrites the validity of both practical and theoretical inference.

Anscombe’s considered position is thus that, if ‘the common characteristics of [the] patterns are recognized, and it is also clear wherein they differ, then it seems a matter of indifference whether we speak of different kinds of inference or not’.⁵⁹ What she counts in favour of speaking this way is simply the ‘change of mood and a different order of the same elements.... *But that is all*’.⁶⁰ She is less explicit about what counts against it. Perhaps (1) it suggests a mysterious, or at least redundant, distinctive logic of practical reasoning. (2) It may conceal the deep unity of theoretical and practical reasoning (their dependence on the common logical kernel). (3) If the distinctive teleology (use, function) of practical inference *explains* the respects in which it may be said to exhibit a distinctive form, then though it may be true that practical reasoning has a different form from theoretical reasoning, it would be wrong to characterize its practicality as residing in this (just as *Intention* points out the error in construing the fact that practical reasoning has a practical subject matter as what its practicality consists in).

In this section, I want to consider this last thought. In my view, Anscombe is right to think that the distinctive function of practical inference explains the respects in which it exhibits a distinctive form. But close attention to that function reveals that there is significantly more to practical inference’s distinctive form than she recognizes.

⁵⁸ Wiseman, *Routledge Philosophy Guidebook to Anscombe’s Intention*, p. 143. Cf. Teichmann, *The Philosophy of Elizabeth Anscombe*, pp. 55–6 and Jessica Moss, ‘Right Reason in Plato and Aristotle: On the Meaning of Logos’, *Phronesis: A Journal for Ancient Philosophy* 59 (2014): pp. 181–230, p. 215, who interprets Aristotle’s conception of the relationship between demonstration and deliberation in this way.

⁵⁹ Anscombe, ‘Practical Inference’, p. 134.

⁶⁰ Anscombe, ‘Practical Inference’, p. 133, my emphasis.

2.1 Return of the means: inferential peculiarities

The teleological conception of practicality begins with the idea that practical reasoning is reasoning from an objective to its realization in intentional action through the implementation of means. This teleology of practical reasoning determines both its ‘inferential peculiarities’ and ‘also demands certain restrictions on its content’.⁶¹ To see what this means, and how the teleological view differs from Kenny’s Formalism, we may begin by considering three objections levelled against the latter by proponents of the former.

- (1) As we have seen, Anscombe insists on the validity of practical inference both to a necessary means and to a sufficient means, and objects that Kenny’s logic of satisfactoriness ‘curiously and comically’ excludes the former. It is a bit of a mystery, though, how Anscombe herself proposes to understand reasoning to a (merely) necessary means. The hypothetical that ‘proves the correctness’ of an inference from $p!$ to a necessary means $q!$ will be: $\neg q \supset \neg p$, i.e. $p \supset q$.⁶² But Anscombe seems to envisage the practical use of $p \supset q$ as taking place in the other direction, as it were, from the theoretical use; i.e. from $q!$ to $p!$, not from $p!$ to $q!$. What validates an inference to a necessary means—what logical structure is such an inference ‘making use of? Moreover, if $p \supset q$ validates an inference from an objective $p!$ to a necessary means $q!$, what prevents it from validating reasoning practically from an objective to intentionally realizing its foreseen side-effects?⁶³

Anscombe can answer the latter question by saying that what makes inference practical is the *use* to which certain hypothetical considerations are put; as the use is finding means to one’s end and adopting them for its sake, an inference to a necessary condition of one’s end that is *not* a means to it will not count as a practical inference, regardless of its other features. But the former question remains unanswered: we cannot *restrict* the legitimacy of reasoning to necessary *conditions* to reasoning to necessary *means* if we have no account of the legitimacy of reasoning to necessary conditions! And yet it would be odd if practical inferences could treat conditionals as if they were biconditionals, permitting ‘entry’ from either side.

A clue may be found in Kenny’s rationale for contending that, ‘properly understood’, excluding reasoning to a merely necessary means ‘is perfectly correct’: since one cannot achieve one’s objective by carrying out a plan that consists *only* of taking a means which is merely necessary, such a plan (intention, action) cannot be satisfactory (relative to that

⁶¹ Müller, ‘How Theoretical Is Practical Reason?’, p. 105.

⁶² Anscombe, ‘Practical Inference’, pp. 127–8.

⁶³ Cf. Vogler, ‘Anscombe on Practical Inference’, pp. 459–60.

objective).⁶⁴ Now Anscombe is right: we do need to accommodate the validity of reasoning to a merely necessary means. As Michael Thompson emphasizes, it is characteristic of intentional action that it has *parts*, themselves intentional actions performed as means to doing that of which they are parts⁶⁵; and some of a means's jointly-sufficient parts may be necessary even if the means is merely sufficient. (Driving to work is one among other means to getting there, but unless I turn the engine on, I can't drive there.) The objection to Kenny is that, given:

$$\begin{aligned} & s! \\ & r \supset s \\ & (p \ \& \ q) \supset r \end{aligned}$$

then, though his logic permits inferring $(p \ \& \ q)!$, it does not subsequently permit either inferring $p!$ or inferring $q!$. But I will need to infer each if I cannot satisfy $(p \ \& \ q)!$ except by satisfying $p!$ and $q!$ independently.

The solution suggested by the clue, however, is simply that I am not permitted to infer $p!$ from $(p \ \& \ q)!$ unless I also infer $q!$ (just as I cannot infer $(p \ \& \ q)$ from p alone, but only from p and q). And surely this is correct: I can infer a merely necessary means only *as a means*, that is, only as part of an actual (i.e. sufficient) means. Thus, given an objective $r!$ and that $r \supset p$, I can infer $p!$ only if there is some q such that $(p \ \& \ q) \supset r$ and I also infer $q!$.⁶⁶ Consequently, $(r \supset p)$ plays no role in the inference; there is no danger of this accommodation of practical reasoning to necessary means letting foreseen side-effects in, too. It is false, then, that 'if one thinks the valid form is reasoning to a sufficient means...one renders reasoning to a necessary means a fallacy': it is fallacious only if one reasons to a merely necessary means without also reasoning to further means with which it is jointly sufficient.⁶⁷

⁶⁴ Kenny, 'Practical Inference', p. 74.

⁶⁵ Michael Thompson, *Life and Action: Elementary Structures of Practice and Practical Thought* (Cambridge, MA: Harvard University Press, 2008), Part II.

⁶⁶ This proposal will need finessing to accommodate diachronic considerations: an agent may adopt a necessary means while not yet knowing what else she'll do in order to achieve her objective. But for it to be reasonable to adopt the necessary means without yet knowing this, she must reasonably expect that requisite additional means will manifest themselves, and that she'll adopt them when the time comes.

⁶⁷ Dancy, *Practical Shape*, p. 114; cf. Price, *Contextuality in Practical Reason*, pp. 11–17. Dancy claims that 'if a means is both necessary and sufficient, the case for taking that means is stronger than it would be if the means were either [i] merely necessary or [ii] merely sufficient' (*Practical Shape*, p. 113). (i) is correct; Dancy is right to point out that views that ground the validity of practical inference in reasoning to necessary means cannot explain it. But (ii) is false: the sufficiency of the means alone explains the case for taking it (for taking it as a means, anyway—there may be independent reasons that also count in its favour). If I had thought that doing *A* and doing *B* were each sufficient means for doing *C*, but now realize that in fact doing *A* is 'also' necessary, what is revealed is not that the case for doing *A* is stronger than initially thought, but that there's no case for doing *B*.

(2) Anthony W. Price claims that '[a] logical inference must admit contraposition':

suppose that my end is not to have a hangover. I might then reason from 'I will not have a hangover' either to 'I won't drink five double whiskies' (necessary means), or to 'I won't drink anything' (a sufficient means), in either case forming the matching intention. If this is a logical inference, I must also be conditionally willing to reason, by contraposition, either from the supposition of 'I will drink five double whiskies', or from that of 'I will drink something', to 'I will have a hangover'. But the second inference makes no sense, and the first reasons to a consequence, not to a means.⁶⁸

Price concludes from this that

neither reasoning from an end to a necessary means by a logic of satisfaction [i.e. a logic of fiats whose rules of inference parallel those of propositional logic], nor reasoning to a sufficient means by a logic of satisfactoriness, can constitute a logical inference in which one intention generates another.⁶⁹

Though intentionally avoiding a necessary means may well require giving up the pursuit of the end, Price is right that it doesn't require intentionally pursuing the contradictory end: if, knowing that five double whiskies will give me a hangover, I drink them anyway, then perhaps I must give up my objective of avoiding a hangover, but this isn't the same as making a hangover my objective (conflating them is the practical equivalent of conflating *not believing p* with *believing ¬p*).

As I just suggested, however, Kenny can accommodate the inference from an objective of avoiding a hangover to not drinking five double whiskies, by construing it as relying not on (I won't have a hangover \supset I won't drink five double whiskies) but rather on ((I won't drink five double whiskies & *p*) \supset I won't have a hangover). The situation is then the same as with Price's second inference. And that presents no issue at all for the logic of satisfactoriness. The premise about sufficient means is (I drink no alcohol \supset I don't have a hangover). But someone who accepts this and decides to drink some alcohol is not committed to intending (or even foreseeing) a hangover: rejecting a believed conditional's antecedent doesn't require rejecting its consequent, and rejecting a course of action I know to be a sufficient means to my end doesn't commit me to rejecting that end—I can simply adopt another sufficient means (I'll drink one small glass of wine only). And, accepting this premise, someone pursuing a hangover will do so by means of drinking some alcohol (and doing something else, namely drinking more).⁷⁰

⁶⁸ Price, *Contextuality in Practical Reason*, pp. 16–17.

⁶⁹ Price, *Contextuality in Practical Reason*, p. 16.

⁷⁰ Kay Cho has suggested to me that the latter inference must be regarded as the inverse, not the contrapositive, of the original, and thus that Price's point stands: it makes no sense to pursue a hangover in order to drink some alcohol. But a partygoer—seeking an alcoholic beverage, indifferent to a hangover, and confronted by two unmarked bowls of fruit punch—who is warned that a glass of the orange stuff will give him a hangover might thereby choose it in recognition of the same connection between drinking alcohol and getting a hangover that the

(3) More compelling is the teleological case against Kenny regarding an inference from $p!$ to $(p \ \& \ q)!$, for arbitrary q . Kenny knew his logic licensed such inferences: he viewed the objection as stemming from the worry that it might be somehow *wrong* to satisfy $q!$; but in that case $(\neg q)!$ should be among the objectives, and $(p \ \& \ q)!$ wouldn't follow after all.⁷¹ Alternatively, one might suggest that the objection stems from assuming that one is *required* to satisfy $(p \ \& \ q)!$ insofar as one aims to satisfy $p!$ —that is, that one *must* draw the inference. But Kenny holds only that one is *permitted* to draw it: insofar as $q!$ is consistent with $p!$ (and any other objectives one might have), a plan to satisfy $(p \ \& \ q)!$ is satisfactory, relative to one's objective(s), as might be any number of incompatible plans.

Anscombe's complaint is deeper, however:

Effecting two things may indeed often be *a way of* effecting one of them; but the admission of arbitrary conjuncts is one of those forced and empty requirements of a view which shew that there is something wrong with it.⁷²

Her remark brings out the difference between conceiving of practical reasoning in terms of *preserving satisfactoriness* (such that if satisfying $q!$ won't get in the way of satisfying $p!$, adding it to a plan can yield no loss of satisfactoriness, and is thus legitimate) from conceiving of it in terms of *realizing ends*: if satisfying $q!$ doesn't *contribute* anything to satisfying $p!$ (or the further objectives for the sake of which I aim to satisfy $p!$), then there is no *practical* inference to it. (Things would be different if, in addition to $p!$, my objectives included $r!$, and $q \supset r$.) As Price puts it, 'proceeding from "I will ϕ " ... to "I will ϕ and χ " can get the agent no closer to ϕ -ing; so the inference cannot be for the sake of ϕ -ing'.⁷³ Satisfactoriness captures only part of practicality.

Anscombe says that 'effecting two things may indeed often be *a way of* effecting one of them'—*often*, i.e. not always. But $(p \ \& \ q)$ is always a sufficient condition for p : $(p \ \& \ q) \supset p$

above inferences exploit. (Compare: his Vitamin D levels low, X aims to eat more leafy greens, and knowing that eating spinach is way of eating leafy greens, he eats some spinach to this end; subsequently discovering a spinach allergy, and unable reliably to tell spinach apart from other leafy greens, X now avoids eating leafy greens altogether so as to avoid eating spinach, and finds another way to boost his Vitamin D.) Of course, just as avoiding drinking any alcohol is sufficient but not necessary for getting a hangover, giving oneself a hangover is sufficient but not necessary for having drunk some alcohol; acknowledging the premise does not commit a willing drinker to the pursuit of a hangover any more than it commits someone avoiding a hangover to a dry evening. What being 'conditionally willing to reason, by contraposition' comes to will be different, depending on whether the reasoning is practical or theoretical.

⁷¹ Kenny, 'Practical Inference', pp. 74–5.

⁷² Anscombe, 'Practical Inference', p. 123. Though someone who believes p ought to evaluate $(p \vee q)$ as true, it is hard to make sense of their believing $(p \vee q)$ on the ground that p , i.e. *inferring* $(p \vee q)$ from p . But the teleology of *theoretical* thinking is beyond my scope.

⁷³ Price, *Contextuality in Practical Reason*, p. 22.

is a logical truth. Moreover, that p suffices for q does not show that satisfying $p!$ is a *means* to, or *way* of, satisfying $q!$: means necessary to satisfying $p!$ may themselves satisfy $q!$ directly. Not every necessary condition of an objective's realization is a necessary means to it, and nor is every sufficient condition a sufficient means. But it is the concepts of necessary and sufficient conditions that are at work, respectively, in attempts to explain the validity of practical inference in terms of *modus ponens* and its counterpart in the logic of satisfactoriness. By contrast, the concept of a means lies at the heart of the teleological conception. But thinking this idea through reveals the need for a more radical break with Kenny's conception of practical inference than Anscombe acknowledges.

2.2 Return of the means: content restrictions

The fact that p will both make true the proposition ' p ' and satisfy the fiat ' $p!$ ': in virtue of the fact that Hume died in 1776, 'Hume died in 1776' is true and 'Hume's dying in 1776!' is satisfied. But Hume's dying in 1776 has long ceased to be a possible objective for anyone. Practical reasoning is oriented towards the future, to 'getting or doing or securing...things wanted'—things, that is, that do not yet obtain (or that, if they already obtain, are not guaranteed to continue to obtain in the future)—by means of acting, doing things it is up to us to do.⁷⁴ Thus, given $(p \supset q)$ and $(q \supset r)$, then, regardless of the actual contents, we can assert r if we can assert p ; but the 'hypotheticals can be put to *practical* service only when they concern "what can be otherwise," that is: what may happen one way or the other, that is: future matters, results which our actions can affect'.⁷⁵ The envisaged practical use is reasoning from $r!$ to $p!$; so 'when the propositions are turned into Fiats they are restricted in their subject-matter to future matters which our action can affect'.⁷⁶

The Teleological conception of practicality begins with the idea that practical reasoning is reasoning from an objective to the implementation of means in intentional action. This explains why a practical inference from $r!$ to $p!$ is available on the basis of the above hypotheticals only when p , q , and r concern future contingents affectable by action. By contrast, insofar as Kenny's Logicism construes practical reasoning as reasoning in accord with a logic that is identified as the mirror image of ordinary propositional logic, the restriction of valid substitution instances in fiats and conditional propositions to future contingents must appear as an additional constraint—a restriction, in effect, of what counts as a well-formed formula in the logic of satisfactoriness. Anscombe concedes that such a restriction 'may be

⁷⁴ Anscombe, *Intention*, §41, p. 79.

⁷⁵ Anscombe, 'Practical Inference', p. 129.

⁷⁶ Anscombe, 'Practical Inference', p. 131.

formally characterizable'.⁷⁷ But it seems that what would make the restriction non-arbitrary is precisely the Teleological idea that practical reasoning is *for the sake of* realizing one's objectives through action. It is not just that the starting point of a practical inference is called an objective and the conclusion an intentional action: 'like its typical result', acting with an intention, practical reasoning itself 'is done *with a view to* an end and *on account of* my insight that it helps to bring this end about'.⁷⁸

Indeed, our discussion of the difference between a means and a sufficient condition might suggest that the contents of the premises of practical reasoning are not of the form:

(I drink no alcohol \supset I don't have a hangover)

but rather of the form:

Drinking no alcohol is a means to (or: way of, etc.) avoiding a hangover.

So it might not be enough to say, as Anscombe does, that the 'hypotheticals can be put to *practical* service only when they concern "what can be otherwise"; it looks as if the concept of a *means* must figure in the content, too—thereby rendering the 'hypothetical' non-hypothetical. One might then think that though 'I want to avoid a hangover; drinking no alcohol is a way to avoid a hangover; so I won't drink any alcohol' is good practical reasoning, it is merely materially, but not formally, valid. But surely 'drinking no alcohol is a way to avoid a hangover' doesn't merely predicate *being a way to avoid a hangover* of *drinking no alcohol*. The right thing to say has to be that the concept of a 'way' or 'means' is a *formal* concept of *practical* thinking: a practical conditional 'connective' that is a specific determination of ' \supset '.⁷⁹

⁷⁷ Anscombe, 'Practical Inference', p. 134. The restriction would rule out the absurd but otherwise legitimate inference from (1) *Hume dying in 1776!* and (2) *I steal a car \supset Hume died in 1776* to (3) *I steal a car!*. One may wonder whether the Logician needs it. After all, $(p \ \& \ \neg p)$ entails q , but as there is no such thing as believing that $p \ \& \ \neg p$, there is no such thing as inferring q from it. If it is not possible to make (1) my objective, then I cannot reason practically from it, and so I cannot draw, via (2), the problematic inference, even if (1) and (2) 'imply' (3) in the logic of satisfactoriness.

⁷⁸ Müller, 'How Theoretical Is Practical Reason?', p. 97; cf. Price, *Contextuality in Practical Reason*, pp. 20ff.

⁷⁹ Cf. Broome, *Rationality Through Reasoning*, who understands the 'correctness' (i.e. validity) of instrumental reasoning in terms of following the rule: from an intention that e , a belief that m 'is a means implied by' e , and a belief that m 'is up to me', derive an intention that m (pp. 255–61). ' m is a means implied by e ' and ' m is up to me' are Broome's shorthands for, respectively, 'if m were not so, e would not be so because m is not so' and 'if [the agent] herself were not then to intend m , m would not be so because she herself does not then intend m ' (pp. 159–60). Broome is aware that the rule cannot simply involve a belief that $(\neg m \supset \neg e)$, because this might be true in virtue of m and e being 'effects that share a common cause' (p. 259) and in any case it may not be within the agent's power to effect m (in which case the derivation of an intention that m would be incorrect). Thus, though Broome holds that correct instrumental reasoning is (in the fundamental case) reasoning to a necessary means, his rule for it is not simply an instance of *modus ponens*: rather, it is grounded in a *sui generis* 'requirement of rationality' (pp. 159–70) articulated in terms of m 's being believed to be a 'means implied by e ' and 'up to me'.

If this is acceptable, then we needn't follow Anscombe in conceding that 'though there is a "validity" of practical inference, it is not of a purely formal character'.⁸⁰ Anscombe makes this concession because, though she thinks the content restriction to future contingents 'may be formally characterizable', the 'restriction...on inferences to *bringing it about that p and q*'—that is, the restriction to cases where doing so is a sufficient *means*, not merely a sufficient *condition*—'apparently cannot be'.⁸¹ But this restriction is formally characterizable, if the connective that figures in the conditionals used in practical inference is our means-connective, henceforth '→'.

What does this connective connect? Means and ends. But what kinds of things are they? A proposition represents a state of affairs as obtaining, and a fiat represents a state of affairs as to be brought about. But neither (future contingent) states of affairs, states-of-affairs-as-obtaining, nor states-of-affairs-as-to-be-brought-about are means. Means are doables: it is doing *A* that is a means to doing *B*, not *I do A* (or *I will do A*, or *I am doing A*) or the results of my doing *A*.⁸² Sometimes ends are specified in terms of states of affairs (i.e. desired *outcomes* or *results*). But in such cases the agent's objective is, strictly speaking, *to bring it about that (see to it that, effect) p*, which is a doable, albeit a highly generic one.⁸³ Other ends are manifestly doables: my objective in practising the piano these past few months is to play Schubert's last sonata well; that it has already been played thousands of times, and better than I'll ever play it, is irrelevant—my concern is with the deed, not its result. The general form of a practical conditional is thus:

doing *A* → doing *B*.

Müller points out that it is 'in virtue of the context'—i.e. the *use*—'that a judgment is classified as a practical premise'.⁸⁴ Such a content is not inherently practical; one might reason

⁸⁰ Anscombe, 'Practical Inference', p. 134.

⁸¹ Anscombe, 'Practical Inference', p. 134.

⁸² This is not to deny that e.g. 'If I do *A*, I'll thereby do *B*' can be a linguistic guise of the thought that doing *A* is a means to doing *B*.

⁸³ Or *to preserve p*, if *p* already obtains. A mere desire or wish for a state of affairs to obtain can be satisfied or fulfilled even though one does nothing to satisfy or fulfill it. But things are different with one's objectives. I have not realized or fulfilled my objective if the desired state of affairs comes about independently of me (not that I needn't be glad: perhaps it had been my objective only because I wanted things to be thus-and-so, regardless of how it came to pass). In 'making a state of affairs one's objective', one makes it one's objective *to realize that state of affairs*—i.e. to do something. (For an alternative perspective, however, see Anselm W. Müller, 'Moral Objectives', in *Practical Reason*, ed. Stephan Körner (New Haven, CT: Yale University Press, 1974), pp. 212–20 and Luca Ferrero, 'Can I Only Intend My Own Actions?', *Oxford Studies in Agency and Responsibility* 1 (2013): pp. 70–94.)

⁸⁴ Müller, 'How Theoretical Is Practical Reason?', p. 92.

theoretically from it to p via $((\text{doing } A \rightarrow \text{doing } B) \supset p)$. But nor is believing that doing A is a means to doing B inherently *practicable*.

Practical reasoning is for the sake of achieving an end, and it contributes to that achievement by articulating *practicable* knowledge of how to achieve the end: when all goes well, the end is achieved through knowledge how to achieve it. Knowing that doing A is a means to doing B is one form that knowing how to do B can take. But unless one can put this knowledge into practice by actually *doing* A (in order to do B), it cannot play a role in successful practical inference, and so it cannot amount to knowing that doing $A \rightarrow$ doing B . (Compare: someone who is not in a position to infer q from p is someone who does not know that $p \supset q$.) I may know that *one* can do B by means of doing A ; or that *were* I to do A , I would thereby do B ; or that, if only I *could* do A , I could do B by means of doing A . But unless *I* know how to do A in a manner such that I *can* do A by exercising this knowledge, knowledge that doing A is a means to doing B cannot be but practically idle—even if my objective is to do B . Knowing that doing A is a means to doing B is not, as such, knowing that doing $A \rightarrow$ doing B .

Now, knowing that doing A is a means to doing B can be practicable (can amount to knowing that doing $A \rightarrow$ doing B) by virtue of knowing that doing Z is a means to doing A —but only if the latter knowledge is practicable. Knowledge of the form *doing* $A \rightarrow$ *doing* B is practicable only derivatively; it ultimately depends on knowledge how to do something that is *immediately practicable*. This—and not something temporal—is what is reflected in the requirement that practical reasoning identify something the agent can ‘just do’, do ‘straightaway’, or ‘immediately make true’.⁸⁵ Successful practical reasoning renders the agent’s objective (derivatively) practicable by identifying immediately practicable means.

2.3 Practicability: specification & particularization

To understand how practical reasoning does this, consider two distinctions that Anscombe draws with respect to ends, between *generic* and *specific*, and between *general* and *particular*:

The generic is contrasted with the more specific: what form of wealth, for example, is a man who wants to be wealthy aiming at in his calculations, when he has worked out something to do in order to be wealthy? The possession of lands, or of a regular income, or of a large sum of money? ...

...When I call an end particular, I...mean that the end is that something shall hold about a given individual. ... That this hut is to be inhabitable is particular but not very specific. More specific is that it is to be warm, or furnished. Still more specific: that it is to be warmed with a coke stove. We descend from the merely specific to the particular on the side of what is to

⁸⁵ Cf. Anscombe, ‘Practical Inference’, pp. 117, 128; and Will Small, ‘Basic Action and Practical Knowledge’, *Philosophers’ Imprint* 19, no. 19 (2019): pp. 1–22.

be done to the hut if I make it my objective that it be warmed with the stove I found in a certain shop; at least, if I mean the very example of the stove, and not the type.⁸⁶

Since means and ends are relative, these distinctions apply to means, too. The generic-specific distinction comes in degrees and is relative (frying is a specific way of cooking, but deep-frying is both a more specific way of cooking and a specific way of frying), whereas the general-particular distinction is neither. The distinctions are orthogonal: the objective of making *this* hut inhabitable is particular but generic, and the objective of writing a paper on the practicality of practical inference is specific but general. But both distinctions are drawn with respect to doables, which are themselves general, by contrast with the particular actions that are the doings of them on particular occasions: I may realize my specific and particular objective to warm this hut with that stove night after night, and some nights someone else may do it. The full descent to particularity takes place through action; it requires more than deliberation alone.

Practical reasoning aims to identify a doable that is practicably specific and particular. An objective to kill my father's killer needs both specification (by what means or instrument will I kill him?) and particularization (who exactly will I kill, and with which sword?). But, as Anton Ford emphasizes, it has not yet been *practicably* particularized if I determine the target and weapon only via proper names or uniquely referring descriptions: the 'given individuals' on and with which the agent acts must, in the basic case, be given *perceptually*. And it is not enough merely to perceive the patient and the instrument. I must *recognize* them:

Because I cannot identify the wire that I would need to snip in order to disarm the bomb—the one connecting the detonator to the explosive—it is, for me, useless information that, were I to snip it, I would disarm the bomb. And because I am aware that I cannot identify the relevant wire, I am aware that that is useless information. The imagined line of thought does not recommend to me, and does not seem to recommend, any course of action.⁸⁷

In addition to knowing that

snipping the wire connecting the detonator to the explosive → disarming the bomb,

I need to know that

⁸⁶ Anscombe, 'Practical Inference', pp. 141–2.

⁸⁷ Anton Ford, 'On What Is in Front of Your Nose', *Philosophical Topics* 44, no. 1 (2016): pp. 141–61, p. 150. It is in fact common to interact with a perceptually-absent individual patient with a perceptually-given particular instrument (e.g. thanking someone over email by interacting with *this* computer). However, instruments are—in, but only in, a sense—patients: I act *on* the recipient *with* an email by means of acting *on* my computer keyboard.

snipping *this* wire [with *that* ready-to-hand instrument] → snipping the wire connecting the detonator to the explosive

if I am to disarm the bomb in that way. The variables philosophers of action use for doables ('do A', 'ϕ', etc.) represent 'what is common between "snip the wire to the detonator" and "snip *this* wire"' while concealing the 'formal distinction' between them.⁸⁸

As well as premises of the form

doing A → doing B,

which facilitate an objective's specification, then, we need to recognize practical premises of the form

doing A vis-à-vis *this* → doing A [where '*this*' is a perceptual demonstrative],

which allow an objective's particularization.⁸⁹ Such a premise 'represents the reasoner's recognition that what she wants to do can be done "with regard to" and "face to face with" (*vis-à-vis*) the particulars of her circumstances'.⁹⁰ This recognition involves both the presence of the object recognized and the exercise of the agent's recognitional capacities, which may be mundane (e.g. the ability to recognize light switches) or specialized (e.g. the ability to recognize a luffing jib). Absent this recognition, the agent's reasoning has not identified immediately practicable means and thus has failed to render her objective practicable—specification alone 'does not provide a sufficient ground on which to act'.⁹¹

Ford points out that the acquisition of practicable knowledge of particular means requires a literal *search*, a physical intentional action that essentially involves sense-perception, the success of which requires the practical perceptual recognition of particulars:

before I can try to consult my watch [as a means to learning the time] I need to identify some particular material object the consulting of which would be the consulting of my watch.... [T]here is only one way to get myself in position to think ['I can consult my watch by consulting this']: namely, by looking for [and finding] my watch. This might be as simple

⁸⁸ Ford, 'On What Is in Front of Your Nose', p. 152.

⁸⁹ The relevant notion of perceptual recognition needs to include (e.g.) an actor's recognizing the particular moment at which to deliver her line: the relevant moment of time is not itself an object of her sense-perception, though no doubt her scene partner's preceding utterance was.

⁹⁰ Ford, 'On What Is in Front of Your Nose', p. 151.

⁹¹ Ford, 'On What Is in Front of Your Nose', p. 148. Though Ford sometimes makes it sound as if particularization inevitably takes place after specification (e.g. pp. 156–7), it needn't: an assassin may wait to get her target in view before specifying how to do him in.

as raising and pronating my forearm, tilting my head, and directing my gaze to my wrist....
But if my watch is in the dresser drawer, finding it will take longer.⁹²

Action and perception are thus essentially involved in the acquisition of the practicable knowledge of means that it is the business of practical reasoning to identify for the sake of realizing one's objective. (Indeed, they may be required in order to specify an objective: in order to specify an objective to do *B* into something doable by me, I might watch a video in order to find out that doing *A* → doing *B*.)⁹³

It might seem odd to think of perception and action as moments belonging to practical reasoning itself—to think that in looking for my watch I am deliberating. Don't they belong rather to the execution of intentions? It depends on what we mean by 'deliberation'. Narrowly construed, deliberation is the reflective consideration, selection, and combination of knowledge of means in order to render practicable one's objective in the circumstances of action (which may be now or in the future). Knowledge of means (whether specific or particular) is not acquired through deliberation in this sense, but is presupposed and used by it; deliberation so understood is thus incomplete until adequate knowledge of means has been acquired (through action and perception, as necessary).⁹⁴ On a broader construal, deliberation includes reflective activity engaged in for the sake of realizing one's objective. It includes e.g. reflecting on whether, say doing *A* and *then* doing *B* might be a means to doing *C*, recognizing that it is, and looking for and identifying particular objects on and with which I must act if I am to do *A* and *B*, as well as collecting and combining them in the thought that I can achieve my objective of doing *C* by means of first doing *A* vis-à-vis *this* and subsequently doing *B* vis-à-vis *that*.

⁹² Ford, 'On What Is in Front of Your Nose', p. 155.

⁹³ Ford contends that 'one has to perform an intentional action *before* one draws a conclusion [of practical reasoning], and even before one reaches the premise from which a conclusion is drawn' ('On What Is in Front of Your Nose', p. 161 n. 30). Obviously I don't need to identify a particular taxi to take me home from O'Hare before setting out to Heathrow; I may leave it open whether to take a taxi or a train, depending on how I feel when I arrive. But we typically have expectations about the circumstances we expect to be in. Such partially determined plans, and the possibility of acting on them before they are filled in, depend on expecting that the relevant opportunities will be afforded, and that I have, and will be able to exercise, the relevant recognitional and practical abilities to recognize and take those opportunities: e.g. that there will be trains and or taxis to be taken when I arrive at O'Hare, that I'll be able to recognize them, and that I'll have the know-how and wherewithal to take them. Cf. Bratman, *Intention, Plans, and Practical Reason* on partial plans, and n. 66 above.

⁹⁴ More precisely, the only knowledge of means acquired through deliberation (narrowly construed) is knowledge that I can achieve my objective (to do *D*), in the circumstances of action, by taking immediately practicable means (doing *A* vis-à-vis *this*); this presupposes knowing—and thus doing anything necessary to know—that I can do *D* by means of doing *C*, that I can do *C* by means of doing *B*, that I can do *B* by means of doing *A*, and that I can do *A* by means of doing *A* vis-à-vis *this*.

As I noted above, whereas particularization is all-or-nothing, specification comes in degrees and is relative. How much specification needs to happen for practical reasoning to identify a practicably specific means depends, in the first instance, on an agent's skills and practical abilities: I may have practicable knowledge how to do *B* by virtue of knowing that I can do *B* by means of doing *A*, whereas your knowledge how to do *B* may be immediately practicable—doing *B* is, or is part of, a skill you have acquired but I have not. But it also depends on the agent's objectives and the circumstances she faces. Ordinarily, knowing that I can achieve my objective by *walking across the field* before me is sufficiently specific to be immediately practicable; further specification would ordinarily be redundant—though not if it is a minefield. And specification must be sensitive to the possibilities for particularization afforded by the circumstances (given the agent's recognitional abilities).

An immediately practicable means is still, of course, a doable, and thus general by contrast with the particular deeds that realize it. Many people have walked across the lower third of this field; my walking across it on this occasion will have countless properties that outrun its being a walking across the lower third of this field: it began at a particular time on a particular date, took a particular length of time and route, cast particular shadows and made particular sounds of various types, etc. But only those specifics and particularities that figure in the descriptions under which the action is intentional belong in a reconstruction of the relevant practical reasoning.⁹⁵

Intentional action involves an agent exercising skills and practical abilities that are presupposed by her plans and practical reasoning; exercising these abilities presupposes opportunities to exercise them in pursuit of the objective via the adopted means, and involves exercising abilities to recognize those opportunities (including their constitutive particulars). The combination of practical reasoning, skill, and recognition of opportunity in immediately practicable knowledge of means—e.g. that *I can* do *A* (vis-à-vis *this*)—transforms my otherwise impracticable knowledge that

if I could do *C*, I could do *D* by means of doing *C*

if I could do *B*, I could do *C* by means of doing *B*

if I could do *A*, I could do *B* by means of doing *A*

into the actually practicable knowledge that

⁹⁵ Reconstruction of the teleological structure of an intentional action may identify elements the source of which is skill, not deliberation; this is unproblematic so long as skill and deliberation are both recognized as manifestations of practical reason. See Small, 'Basic Action and Practical Knowledge', pp. 14–19.

I can do <i>B</i> by means of doing <i>A</i> , and thus	[doing <i>A</i> → doing <i>B</i>]
I can do <i>C</i> by means of doing <i>B</i> , and thus	[doing <i>B</i> → doing <i>C</i>]
I can do <i>D</i> by means of doing <i>C</i> , and thus	[doing <i>C</i> → doing <i>D</i>]
I can do <i>D</i> by means of (doing <i>C</i> , which I can do by means of doing <i>B</i> , which I can do by means of doing <i>A</i> , which I can do by means of) doing <i>A vis-à-vis this</i>. ⁹⁶	[doing <i>A vis-à-vis this</i> → doing <i>D</i>]

The teleological conception of practicality takes seriously the idea that practical reasoning is for the sake of realizing in action the objective that is its starting point. And taking this seriously requires more than just asserting that the conclusion ‘is an action’: we need to think about what intentional action is, and what its subjective conditions of possibility are, in order to understand what kind of practical thought it is the function of practical reasoning to deliver.⁹⁷ I noted in §1.1 that one way (F1) in which practical reasoning might be taken to exhibit a different form from theoretical reasoning is that some of the acts of reason that constitute an instance of it might be practical: e.g. the agent reasons from a desire or intention, to an intention or intentional action. But the conditional premises that mediate such transitions are regarded by almost everyone as the contents of beliefs.⁹⁸ Ideally, these beliefs are not mere beliefs; they are knowledge—but they are construed as *theoretical* knowledge, knowledge that apprehends the world as it is independently of being so known. However, our reflections on specification and particularization show that this assumption is mistaken in three ways.

First, insofar as the ultimate premise of practical reasoning (the one that identifies immediately practicable means) involves perceptual demonstratives, the act of reason of which it is the content cannot be a mere belief; perception must be involved. And this must be perceptual recognition, which may require exercising the sorts of specialized recognitional abilities that often help constitute practical skills.

Second, as Ford notes, insofar as the ultimate premise involves recognizing obstacles and opportunities, it does not simply represent the world as it is anyway:

⁹⁶ We thus see that the ‘can’ of the ‘I can’ that figures, along with the concept of a means, in the explication of the meaning of ‘→’ is what Kenny, in *Will, Freedom and Power* (Oxford: Basil Blackwell, 1975), calls ‘the all-in “can” of ability and opportunity’ (pp. 131ff).

⁹⁷ Despite maintaining that practical reasoning concludes in intentional action, Dancy nevertheless thinks that ‘theoretical and practical reasoning are in all essentials pretty much indistinguishable from each other’ (*Practical Shape*, p. 8).

⁹⁸ Rare exceptions include Ford, ‘On What Is in Front of Your Nose’ and Sebastian Rödl, ‘Two Forms of Practical Knowledge and Their Unity’, in *Essays on Anscombe’s Intention*, ed. Anton Ford, Jennifer Hornsby, and Frederick Stoutland (Cambridge, MA: Harvard University Press, 2011), pp. 211–41.

On the one hand, of course, ‘This is an obstacle’, is like ‘This is a rock’, in that both can be true or false: both are responsible to ‘the facts, reality’. On the other hand, though, if what I perceive is a rock, it is not a rock because of me. ... By contrast, if what I perceive is an obstacle, it is only an obstacle because of what I am doing—say, walking home. ... What I perceive, in perceiving an obstacle, is such that it would not be there to be perceived apart from my being up to something.⁹⁹

Indeed, whether or not something is an obstacle or opportunity depends not only on the agent’s objectives but on her skills: ten-knot winds present an opportunity to an advanced sailor but an obstacle to a novice.

Third, though ‘were I to do *A*, I would thereby do *B*’ might be true whether or not anyone knows it, this proposition, which represents something’s being a sufficient condition for something else, is not the consideration on which I act. Nor is my premise the fact that I *could* do *B* by means of doing *A*. It is rather that I *can* do *B* by means of doing *A* (i.e. doing *A* → doing *B*). And *this* is true only if I actually believe it: the possibility it represents as really practicable is one my taking of which requires deploying knowledge of this very fact. If I am doing *B* by means of doing *A*, then I am doing *A* in order to do *B*, *on account of my insight that doing A is a way for me to do B*: if I don’t know that I can do *B* by means of doing *A*, then it is not true that I *can*. (It may be true that I *could*, if only I *did* know!)¹⁰⁰ It is possible to have theoretical knowledge that doing *A* is a means to doing *B*, but this is not equivalent to knowing that doing *A* → doing *B*. The latter is a practical conditional, knowledge of which makes it possible to do *B* by means of doing *A*, and (what is the same) to draw the conclusion of a practical inference in which it figures as a premise.

A teleological conception of practicality thus allows us to see the ways in which skill and perception are internal to practical reasoning. Ford points out, and aims to redress, the almost-total disregard of perception by contemporary treatments of practical reasoning. They spurn skill too, though differently; it is always lurking in the shadows, in the requirement that the conclusion of a practical inference is something the agent ‘can just do’. Anscombe, for instance, gives the following:

Objective: to have it that *p*.

If *q*, then *p*.

If *r*, then *q*.

Whereupon, *r* being something we can do, or rather immediately make true, we act.¹⁰¹

That *r* is something the agent ‘can immediately make true’ is presupposed by the possibility of her engaging in this piece of practical reasoning, but it is not itself among the premises; its

⁹⁹ Ford, ‘On What Is in Front of Your Nose’, p. 154.

¹⁰⁰ This point could be finessed to accommodate doubts about one’s abilities.

¹⁰¹ Anscombe, ‘Practical Inference’, p. 117.

place is in the commentary that accompanies the representation of the reasoning, not in the representation itself. No one would interpolate something analogous in the theoretical case:

$$p$$

$$p \supset q$$

Whereupon, q being something I can believe, I believe it.

The interpolation is clearly redundant: in thinking that $p \supset q$, a subject manifests the cognitive capacities required to think that q . But, because it is possible to think $r \supset q$ while lacking the ability to ‘immediately make true’ r , it is thought necessary to add the qualification in the case of practical reasoning. I have argued that the conditional premises of practical inference are not of the form $p \supset q$, but rather doing $A \rightarrow$ doing B , and that the capacity to do A is no more external to the capacity to think doing $A \rightarrow$ doing B than the capacity to think q is to the capacity to think $p \supset q$. Skill is internal to practical reasoning.

2.4 Means and reality

To say that it is true that I can do B by means of doing A only if I think I can, is not to say that simply thinking it makes it so. The truth of ‘I can do B by means of doing A ’ depends on facts—of quite various kinds—about the natural and social world, facts that underwrite knowledge of means.¹⁰² Anscombe sees this. She notes that the practical reasoning of a geometry student whose objective is to find the centre of a given circle might be represented in two ways:

The centre of a circle is the mid-point of a diameter.	If we construct the perpendicular bisector of a diameter, that will give us the centre.
The perpendicular bisector of a chord, produced to the circumference, is a diameter.	If we construct the perpendicular bisector of a chord, and produce it to the circumference, that will give us a diameter.

On these grounds, the student draws a chord, bisects it, and then bisects the resulting diameter. Anscombe says that ‘the considerations on the left justify (prove) those on the right’: it is *because* the centre of *a* circle is the mid-point of *a* diameter that constructing the perpendicular bisector of a *given* circle’s diameter will give us *its* centre.¹⁰³

¹⁰² Cf. Rödl, ‘Two Forms of Practical Knowledge and Their Unity’.

¹⁰³ Anscombe, ‘Practical Inference’, p. 120.

But it is the considerations on the right that illuminate the structure of the practical reasoning.¹⁰⁴ The concept of construction does not appear on the left-hand side. Construction is the specific way in which such geometrical results are brought about. Someone who lacked the concept of geometrical construction, or the abilities to construct a chord and to construct the perpendicular bisector of a line, would not be in a position to ‘find’ the centre of the given circle in the relevant sense, even if he knew all the left-hand propositions (and had inferred that the centre of a circle is the mid-point of the perpendicular bisector of a chord produced to the circumference). As Ford puts it, ‘Mere cognition of what is the case, like mere sense-perception, is the raw material of practical recognition; and it is this recognition, not its raw material, that a premise of practical reasoning purports to represent’.¹⁰⁵ Even if the successful student called to mind the left-hand propositions before attempting the problem, he must have been operating with those on the right, if what he does in pursuit of the end and on grounds of these considerations is *to construct a chord, its perpendicular bisector to the circumference, and then that line’s perpendicular bisector*. If he believed *only* the propositions on the left but had not recognized the practical possibilities they afforded him (which the right-hand propositions make more explicit), it would be inexplicable for him to do that!¹⁰⁶

Suppose someone reasoned: ‘All mammals are mortal; Socrates is a man; so Socrates is mortal’. It is true that *Socrates is a man* ‘justifies (proves)’ *Socrates is a mammal*. But we need to give the latter as a premise in order to represent the validity of the inference: as stated, the inference is necessarily truth-preserving on conceptual/material grounds, but not *formally* valid. Anscombe, recognizing that an account of the formal validity of practical inference cannot be given in terms of ‘ \supset ’, gives up on accounting for it. If we allow ourselves the practical conditional ‘ \rightarrow ’, defined in terms not of necessary or sufficient conditions but rather in terms of means, we needn’t give up the ambition. Of course, this requires us to think of an agent as exploiting ‘right-hand propositions’—i.e. practical conditionals—rather than the ‘left-hand’ facts that ‘justify (prove)’ them. There is no hope of understanding ‘I want to get bread; the bakery is across the street; so I’ll cross the street’ as *formally* valid (even disregarding the necessary vs. sufficient means issue); to do that, we need a ‘hypothetical [that] mediates between will for an objective and decision on an action’, namely ‘I want to get bread; I can get

¹⁰⁴ More precisely, they come closer to doing so: Anscombe’s formulation might be interpreted as representing—in terminology to be introduced imminently—facts of type-(i) rather than the required type-(ii).

¹⁰⁵ Ford, ‘On What Is in Front of Your Nose’, p. 158.

¹⁰⁶ Anscombe notes that in many of his examples of practical reasoning, Aristotle gives the premises in their ‘left-hand’ versions; she indicates how to convert them into their ‘right-hand’ counterparts (‘Practical Inference’, p. 117); cf. Anthony W. Price, *Virtue and Reason in Plato and Aristotle* (Oxford: Oxford University Press, 2015), pp. 242–6.

bread by means of crossing the street (i.e. crossing the street [& doing A] \rightarrow getting bread); so I'll cross the street'.¹⁰⁷

We have, then, three closely related kinds of facts:

- (i) that *one* can do *B* by means of doing *A* (that doing *A* 'is' a means to doing *B*);
- (ii) that *I can* do *B* by means of doing *A* (that doing *A* \rightarrow doing *B*); and
- (iii) the worldly facts (concerning e.g. the properties of figures or the location of bakeries) that underwrite facts of types (i) and (ii).

Type-(iii) facts can take various forms (e.g. if *p* were the case, *q* would be the case; if an event of type *E* happens, an event of type *F* will happen; *Fs* are *Gs*; *Fa*; etc.). Facts of types-(i) and – (ii) have a specific form: they connect two doables, representing one as a means to the other. And type-(ii) facts do this in a specific way, exhibiting the form doing *A* \rightarrow doing *B*. I noted above that it is possible to have merely theoretical knowledge of type-(i) facts: I can know that 'one' can do *B* by doing *A*, even though, as things stand, it is beyond me to render this knowledge practicable through practical reasoning. But that there are type-(i) facts to be known theoretically depends on their type-(ii) counterparts being, or having been, known by somebody.¹⁰⁸

What Anscombe takes to be the insight extractable from Kenny's account of practical inference is the idea of a logical kernel that can be used in two ways, but which is neutral between those two uses: one and the same 'truth-connexion of *p*, *p* \supset *q*, and *q*...is common to both kinds of inference', mediating 'the transmission...of belief from *p* to *q* and...of intention from Fiat *q*! to Fiat *p*!'.¹⁰⁹ But there is no such neutral kernel. The type-(iii) facts that underwrite type-(ii) facts can be used in theoretical reasoning, but have no place in practical reasoning. And the existence of type-(ii) facts (and their type-(i) counterparts), and thus the possibility of making use of them in theoretical reasoning, depends on their original role in practical reasoning. Moreover, insofar as the practical conditionals that mediate between the objective and the conclusion 'connect' doables (not propositions or fiats), to the extent that something like formal validity can be accommodated, it depends on the contents of the objective and conclusion being doables, too. There is only an *analogue* of the 'truth-connexion of *p*, *p* \supset *q*, and *q*' that underwrites theoretical inference, namely the 'practicability-connexion', as it were,

¹⁰⁷ Anscombe, 'Practical Inference', p. 129; cf. Rödl, 'Two Forms of Practical Knowledge and Their Unity', pp. 217ff.

¹⁰⁸ This does not rule out the possibility that type-(ii) facts depend on type-(i) facts in another respect; see Rödl, 'Two Forms of Practical Knowledge and Their Unity', pp. 224–9; Will Small, 'The Transmission of Skill', *Philosophical Topics* 42, no. 1 (2014): pp. 99–105; Small, 'Basic Action and Practical Knowledge', pp. 17–19.

¹⁰⁹ Anscombe, 'Practical Inference', pp. 129–30.

of doing B , doing $A \rightarrow$ doing B , and doing A ; the latter, not the former, is what practical inference exploits.

3 Upshots of the teleological conception of practicality

Thinking the teleological conception of practicality through has revealed that a more radical break with Kenny's framework than Anscombe's is needed. Ironically, the very reason for this is that there is a significant difference in form between theoretical and practical reasoning: specifically, a difference in the form of the premises that mediate between the starting point and conclusion of a practical inference. But this more radical formal difference is itself explained by the distinctive teleology of practical reasoning. Let us explore some of the upshots of this, beginning with three important differences between practical and theoretical reasoning that the teleological view makes salient, but which do not show up when practical reasoning is construed as reasoning from intention to intention (or fiat to fiat), whether with ordinary propositional logic or the logic of satisfactoriness.

3.1 Theoretical and practical reasoning compared, from our new vantage point

(1) One can go on for as long or as little as one wants in theoretical reasoning. If I infer q from p and $p \supset q$, there is nothing incomplete about either my reasoning or my judgment that q (as opposed to my knowledge in general), that awaits the discovery that $q \supset r$ (and hence r). Similarly, from the perspective of the logic of satisfactoriness, the inference

$r!$
 $p \supset q$
so, $q!$

is in perfectly good order as it stands, regardless of the immediate practicability of $q!$ —and, indeed, of $r!$. But practical reasoning has a definite terminus: it aims to determine a course of action that is both practicable and sufficient for attaining the objective. The course of action specified and particularized needs to be immediately practicable. If it is not determinate enough to be so, the reasoning is by its own lights incomplete (even if it articulates a plan that is satisfactory so far as it goes); and there is no call for it to be determined beyond what is practically significant.¹¹⁰

¹¹⁰ I may know (1) that either p or q or r , and then discover (2) that $\neg r$, inferring (3) $p \vee q$. I may have no interest in going on to determine whether p or q ; even supposing I do, if further deliberation is inconclusive, that doesn't affect the conclusiveness of my reasoning from (1) to (3). This is because $p \vee q$ is itself a proposition, a believable; one can (and typically does) believe it while neither believing p nor believing q . By contrast 'do A or B ' is a doable only insofar as it can be done by either doing one or doing the other (one cannot do A or B while neither doing A nor doing B); thus practical reasoning that has delivered the result that I can achieve my objective by means of doing A or of doing B remains incomplete. Note too that though one can do A and B , one will need to do A first,

- (2) In theoretical reasoning, one can (*inter alia*) draw general conclusions from premises concerning particulars and vice versa. Practical reasoning moves in one direction only: from the not-yet practicable to the practicable, via specification and particularization. One cannot reason practically e.g. from a specific objective to a more generic one: whereas an observer might infer that I, who am baking a Victoria sponge, am by that very fact baking a cake, I could not reason practically from an objective of baking a Victoria sponge to an intention to bake a cake, even though I know that I cannot bake a Victoria sponge without baking a cake.¹¹¹ And specification and particularization, if they are to yield practicable knowledge of means, implicate perception and skill.
- (3) If theoretical reasoning is successful, it results in one's thinking a thinkable on the basis of thinkables already actually thought. If practical reasoning is successful, it results in one's actually doing a doable in pursuit of a doable one was *not* already actually doing, precisely because the reasoning is what renders the objective actually doable (practicable) by the agent—it makes it a practical possibility for her, and when all goes well this possibility is realized, through the reasoning.¹¹² Indeed, the conclusion of practical reasoning isn't really just doing A (vis-à-vis *this*); it is doing A (vis-à-vis *this*)-in-order-to-do-B-in-order-to-do-C-in-order-to-do-D (or: doing D-by-means-of-doing-C-by-means-of-doing-B-by-means-of-doing-A [vis-à-vis *this*]). This is a lesson one might learn from Anscombe's discussion of the A—D order in *Intention*, together with her contention that that order and the order of practical reasoning are the same thing looked at from different perspectives.¹¹³ As she puts it elsewhere,

We should not forget that the choice of means is choice of them as means. ... The wanting of the thing you choose is in your decision. But there is also wanting what you choose it for, and this wanting is in the decision too....¹¹⁴

or B first, or do them together (etc.)—and this is something to be determined through an exercise of practical reason. There is no parallel when it comes to believing that (*p & q*).

¹¹¹ *Baking a cake* is a necessary condition of, but not a necessary means to, *baking a Victoria sponge* even though, were someone not to bake a cake, then he wouldn't bake a Victoria sponge because he didn't bake a cake (cf. Broome's 'means implied by', n. 79 above).

¹¹² Further nuance is required to accommodate the practical reasoning of someone working out how to continue a project that is already underway; the point is that the project's continuing actually to be underway depends on the reasoning's success.

¹¹³ Anscombe, *Intention*, §42, p. 80.

¹¹⁴ G. E. M. Anscombe, 'Practical Truth', originally published in a series of *Working Papers in Law, Medicine and Philosophy* (ed. John M. Dolan) by the Program in Human Rights and Medicine of the University of Minnesota in 1993. Cited as reprinted in *Human Life, Action and Ethics: Essays by G.E.M. Anscombe*, ed. Mary Geach and Luke Gormally (Exeter: Imprint Academic, 2005), p. 154.

How exactly one needs to do *A*—and perhaps what even counts as doing it—may depend on whether one is doing it in order to do *B* or in order to do *G*: what I am taking the means *for* enters into what I am doing in taking them. But if, already knowing that $(p \supset r)$, and $(q \supset r)$, I learn that *p* and infer *r*, what I believe in believing that *r* is intrinsically just as it would have been had I instead learned that *q* and inferred *r* from it. That I have inferred *r* from *p*, that I believe *r* on the basis that *p*—these are facts about my psychology; they do not enter into the characterization of what I believe in believing that *r*. The concluding belief of the theoretical inference is a belief that *r*, not a belief that $(r, \text{since } p)$.¹¹⁵

3.2 The first-personal character of practical inference

I have argued that there are more significant formal differences between practical and theoretical inference than Anscombe countenances, but that these very differences derive from the distinctive teleology of practical reasoning. There is no more tension between adopting a teleological conception of practicality and acknowledging these formal differences and their significance than there is between adopting either a teleological or a formalist conception of practicality and acknowledging that practical inference has a distinctive subject matter. But Anscombe seems almost determined to restrict the recognition of formal differences to the bare minimum. In addition to rejecting Kenny's account of practical inference's distinctive inferential form, she rejects a suggestion made by G. H. von Wright, that, unlike theoretical inference, it has a distinctively first-personal form.

Von Wright claimed that the agent whose objective gives the reasoning's starting point must be the same as the agent who draws the conclusion.¹¹⁶ Anscombe offers the following scenario as a counterexample. X says to Y:

I want to get this message to N by four o'clock.

Unless you take it to him, I shan't get it to him by four o'clock.

Whereupon X hands Y the message 'with nothing more said', and Y carries it to N: 'Such is [their] relationship'.¹¹⁷ As Anscombe envisages it, in taking the message to N, Y is drawing the conclusion of a practical inference on the basis of grounds which are not his own, but rather X's: Y needn't have the objective of getting the message to N by four, or believe that it won't happen unless he takes it to him (lacking the belief, Y acts 'perhaps woodenly or even as it were

¹¹⁵ As theoretical reasoning is usually understood, anyway. Though it is typical to speak of 'detaching' the consequent, there may be some advantages to thinking of 'saturating' the conditional with truth, the real: when, already believing that $(p \supset q)$, I am apprised that *p*, I do not detach *q* from $(p \supset q)$, but rather saturate $(p \supset q)$ thusly: (since *p*, so *q*), or (*q*, because *p*).

¹¹⁶ Georg Henrik von Wright, 'Practical Inference', *The Philosophical Review* 72, no. 2 (1963): pp. 159–79.

¹¹⁷ Anscombe, 'Practical Inference', p. 136.

ironically’).¹¹⁸ Anscombe thinks this example shows that the agent who acts (who draws the practical inference) needn’t be the same as the agent whose objective is thereby pursued: though for Y to count as making the inference, its elements ‘must all be in one head...but the cognate believing and willing do not have to exist in that soul’.¹¹⁹

Obviously it doesn’t show this if Y concludes from what X says that she wants him to take the message to N in order to get it to the latter by four o’clock, and acts accordingly in pursuit of his own objective to make it the case that X’s desire is satisfied. Subordinates frequently act with such objectives, themselves pursued for the sake of further objectives—to keep one’s job, stay out of trouble, avoid a beating, etc. For the case to be a counterexample, Y would have to act as X’s subordinate without making *acting as X’s subordinate* (or something equivalent, e.g. ‘doing my job’) a means to an objective of his own.¹²⁰

Anscombe thinks this is possible, if Y’s “consciousness has not been raised” sufficiently for the idea to enter into his calculation’.¹²¹ But it seems highly dubious that any consciousness-raising is required for a subordinate to have the thoughts that vitiate the scenario as a counterexample. Anscombe seems to be envisaging the means identified by X as sufficient but in fact unnecessary; Y takes them despite knowing that more efficient (etc.) means are available, thus acting ‘ironically’. But suppose the means X identifies (Y’s doing A) were not sufficient for the achievement of her objective (to do B): Y would have to decide whether to do A (and not achieve X’s objective) or to do B by some other means—and this might require deliberation, factoring in X’s personality, the specifics of X and Y’s relationship, etc. But any such calculation would clearly show that Y’s ‘consciousness’ was sufficiently ‘raised’ to rule out what Anscombe thinks she is showing.¹²²

¹¹⁸ Anscombe, ‘Practical Inference’, p. 137. As Teichmann, *The Philosophy of Elizabeth Anscombe*, pp. 62–3 notes, speech acts of the sort X produces typically function as commands or requests. But if, in saying to Y what she does, X is telling/asking Y to take N the message, then (a) *telling/asking Y to take the message to N* is the conclusion of X’s practical inference, drawn in pursuit of her own objective and on the grounds of what she herself believes; and (b) Y now takes the message to N *because X told/asked him to*, which—by Anscombe’s lights—gives a reason, but not something from which Y can reason practically to taking the message to N. See n. 24 above; cf. Anscombe, ‘Practical Inference’, p. 135; and Anselm W. Müller, ‘Backward-Looking Rationality and the Unity of Practical Reason’, in *Essays on Anscombe’s Intention*, ed. Anton Ford, Jennifer Hornsby, and Frederick Stoutland (Cambridge, MA: Harvard University Press, 2011), pp. 242–69.

¹¹⁹ Anscombe, ‘Practical Inference’, p. 139.

¹²⁰ Another version of the scenario that doesn’t give Anscombe what she wants has X and Y as partners: Y takes what X says as an expression of what ‘we’ (i.e. X and Y) want and believe, and derives from these an individual practical conclusion (‘So I’ll take it to N’). The transition from what *we* want and believe to what *I* will do on these grounds deserves philosophical attention; but it is a transition *within* the first-person (from plural to singular).

¹²¹ Anscombe, ‘Practical Inference’, p. 137.

¹²² Perhaps if he were an Aristotelian ‘natural slave’, Y would be such as to act in the way Anscombe intends, as X’s ‘instrument, a kind of rational tool’ (‘Practical Inference’, p. 137). But that concept lacks objective validity.

Moreover, Anscombe presents the example as the practical analogue of Y's "drawing the conclusion" without believing it' from assertions produced by X that Y does not believe:

Not aiming at what the directing will aims at, not believing his premises, but still drawing the conclusion in action: that will be what corresponds to not believing the assertions and not believing the conclusion but still drawing the conclusion in the theoretical case.¹²³

But the correspondence fails. In the theoretical case, Y recognizes an entailment, which is to recognize that an inference is there for the taking by one who believes the premises. Y might say: 'Well, if you actually believe p and if p then q , then perhaps you should believe q '. The practical analogue is recognizing that if X wants to get this message to N by four o'clock and believes that unless Y takes it to him that won't happen, then perhaps X should communicate this desire to Y; and we have already seen that *this* is no counterexample to our thesis: the fact that X desires and believes these things—like the fact that they have good Jerseys at Hereford market—is not by itself such as to move Y to do anything, absent an objective on Y's part relative to which this type-(iii) fact underwrites the thought that *taking the message to N* → *achieving that objective*. The theoretical analogue of Anscombe's example, as she understands it, would be actually believing a proposition on the basis of (e.g. because it is entailed by) propositions one does not believe; and it is very hard to see this as a case of *inference*.

3.3 Teleology & anti-psychologism

Anscombe's rejection of a psychologistic conception of inference (practical or theoretical) is a thread that runs throughout 'Practical Inference'. But the teleological conception of practicality developed here puts pressure on the anti-psychologistic framework she adopts there.

On the one hand, Anscombe distinguishes sharply between acts of reason and their contents, and expounds the validity of inference in terms of proof patterns (entailments, etc.) that hold between contents, and the logical facts that underwrite them. On the other, she acknowledges there 'would be no point in the proof patterns, if they were never to be plugged into believing minds, if nothing were ever asserted; and equally no point in patterns of practical inference if nothing were ever aimed at'.¹²⁴ Indeed, her claim is precisely that the practicality of practical inference resides in the *use* to which an agent puts these proof patterns. Though an agent may 'use' them by engaging in explicit deliberation, Anscombe of course denies that this is necessary (see §1.2 above). A reconstruction of practical reasoning represents an order that is there is an agent's practical thought and intentional action, regardless of how much or little of it runs through her mind. The geometry student makes use of the right-hand propositions in

¹²³ Anscombe, 'Practical Inference', p. 137.

¹²⁴ Anscombe, 'Practical Inference', p. 139.

finding the centre of the given circle (§2.4 above), even if the left-hand propositions, or the stain on his teacher's tie, occupy his thoughts while he is doing so. To be 'plugged into' an agent's mind in the relevant way, objectives and considerations needn't occupy the stream of consciousness.

Thought through, however, the root idea of the teleological conception of practicality, that practicality resides in use—that in practical reasoning the agent engages in reasoning *in order to* identify practicable means to the objective that is the reasoning's starting point—suggests that, when it comes to premises of practical reasoning, 'the distinction between the content and the employment of a thought', which is central to Anscombe's anti-psychologism, 'is of limited validity only'.¹²⁵

As we've seen, for a consideration to be capable of figuring as a premise in a practical inference that results in the agent's drawing a conclusion—i.e. acting in pursuit of her objective and on the grounds of the premises—it must be of the form *doing A* \rightarrow *doing B*, and an elucidation of what she thinks in thinking such a thought will show it to be a case of practical self-consciousness: she thinks that *she herself* can do *B* by means of doing *A*. Knowledge that Will Small can do *B* by means of doing *A* is not practicable for anyone, even me; I need to know that *I* can do *B* by doing *A*, and this is what it is for me to know that *doing A* \rightarrow *doing B*. As we saw, it is not simply that the determination of what I think in knowing this depends on my thinking it; its being the case that *I can* do *B* by means of doing *A* depends, in part, on my thinking it. But by Anscombe's lights, though self-consciousness 'is something real', "I" is neither a name nor another kind of expression whose logical role is to make a reference, *at all*.¹²⁶ Though a discussion of the first person and 'The First Person' is beyond my scope here, it seems to me that Anscombe of all people ought to recognize the difficulties in this vicinity of maintaining the sort of strict distinction between propositional contents and thinkings of them that she expounds in 'Practical Inference'.¹²⁷

Moreover, as Müller argues, if my practical reasoning about how to do *D* is something that is itself occurring for the sake of doing *D*, its teleology must be 'unreasoned'. What makes it the case that I am doing *C* for the sake of doing *D* is that it is my objective to do *D*, I think that I can do *D* by means of doing *C*, and I am doing *C* on these grounds: the teleology of intentional

¹²⁵ Müller, 'How Theoretical Is Practical Reason?', p. 99.

¹²⁶ G. E. M. Anscombe, 'The First Person', originally published in 1975, reprinted in *Metaphysics and the Philosophy of Mind*, The Collected Papers of G. E. M. Anscombe, Volume 2 (Oxford: Basil Blackwell, 1981), pp. 21–36, pp. 26, 32. For illumination of this difficult text, see Adrian Haddock, "'I Am NN": A Reconstruction of Anscombe's "The First Person"', *European Journal of Philosophy* 27, no. 4 (2019): pp. 957–70.

¹²⁷ The near contemporaneity of composition (see n. 5 above) of 'Practical Inference' and 'The First Person' is thus surprising.

action is elucidated in terms of practical reasoning. But if a parallel explanation were given of what makes it the case that I am reasoning about how to do *D* for the sake of doing *D*, a regress would be in the offing: a second bit of practical reasoning would be needed to account for the teleology of the first, and a third for the second, and so on.¹²⁸ Yet the teleology of practical reasoning is not behind the agent's back (like the natural teleology of pupil dilation): I know why I am reasoning about how to achieve my objective. If I didn't, it would not be *practical* reasoning, but rather (e.g.) an act of procrastination or daydreaming. In thinking that doing *A* → doing *B*, I am thinking that I am thinking this for the sake of doing *B*. As Müller puts it, 'a practical thought...involves consciousness of its own practical function as well as a judgment relating means to [the] end. ... The practical consideration "behind" a practical consideration, one might say, is part of it'.¹²⁹ I confess that I have no idea how to capture this insight in the orthodox framework of post-Fregean anti-psychologism, which governs both contemporary accounts of reasoning and Anscombe's discussion in 'Practical Inference'.¹³⁰

3.4 Practical reasoning beyond calculation?

Jonathan Dancy has Anscombe among his targets when he complains that 'instrumental reasoning...certainly does not constitute the whole of practical reasoning, ...despite what so many people have said'.¹³¹ He suggests that Anscombe's conception of practical reasoning is too restrictive; there are ways 'in which an action can be done in the light of reasoning' that it does not capture.¹³² Dancy imagines an Anscombean parody of a detective's reasoning:

if I say to him 'I arrest you', I'll be arresting him;
 if I arrest him I'll be arresting the guilty person;
 if I arrest the guilty person, I'll be solving the crime;
 if I solve the crime, I'll be promoting the cause of justice, doing my job etc.;

so I'll say to him 'I arrest you'

and contrasts it with his own sober representation: 'He had a motive and an opportunity, and there is nobody else of whom the same can be said; further, he gave a false alibi and was identified by the chemist as having asked for rat-poison. So I'll arrest him'.¹³³

¹²⁸ Müller, 'How Theoretical Is Practical Reason?', pp. 98–103; 'Mental Teleology', pp. 165–67.

¹²⁹ Müller, 'How Theoretical Is Practical Reason?', p. 99.

¹³⁰ This is not to say that the psychologistic position Anscombe there criticizes is correct. In my view, Anscombe's method and account in *Intention* suggest an alternative to psychologism more satisfactory than the one she adopts in 'Practical Inference'.

¹³¹ Dancy, *Practical Shape*, p. 54.

¹³² Dancy, *Practical Shape*, p. 172.

¹³³ Dancy, *Practical Shape*, pp. 172–3.

But these are not competing representations of the same reasoning. Dancy's premises warrant the detective in drawing a theoretical conclusion, to the effect that 'he' (the butler, say) is the guilty person. This is a type-(iii) fact that underwrites the detective's knowledge that *arresting the butler* → *arresting the guilty person*. The detective's acting on this knowledge presupposes an objective (e.g. to do his job) to which arresting the guilty person figures as a (partial) means—and a different objective (e.g. to embarrass his superiors, regardless of the personal consequences) might lead him to avoid arresting the butler, on the very grounds Dancy gives.

Indeed, Dancy accepts that practical reasoning is 'enquiry that serves a practical purpose' and that '[t]o have a practical purpose is to want something, or to have an aim'; what he resists is the idea that it has to 'start from a desire that is already somehow given, the only question being whether or how one is to implement it'.¹³⁴ Now if a practical purpose's being 'given' means *presupposed by the bit of practical reasoning that serves this purpose*, then of course practical reasoning must 'start from a desire that is already somehow given', for that is just its having an aim.¹³⁵ But if 'given' means that it is not aimed at for the sake of anything else, then of course Anscombe does not think that the starting point of practical reasoning is a 'given' purpose—unless it is the 'last architectonic end' which 'governs all', *if* human beings have one.¹³⁶ Anscombe's acknowledgment of generic ends, and of practical reasoning from generic ends to specific ends, shows that and how she allows for the 'deliberation of ends'.

3.5 The great Aristotelian parallel, revisited

In the concluding pages of 'Practical Inference', Anscombe introduces and endorses Aristotle's idea that the goal of practical thinking is *practical truth* ('truth in agreement with right desire').¹³⁷ She understands this as 'getting things the way you want them to be' where that's 'a way it's all right to want them to be', and notes that her discussion thus far had concerned practical reasoning the success of which merely 'gets things the way you want them to be' (whether or not that's a way it's all right to want them to be).¹³⁸ Practical truth is thus what is bracketed when the validity of practical inference is distinguished from its soundness: we are right, Anscombe says, to distinguish between the validity of theoretical reasoning and the truth of its premises, and 'equally right' to distinguish between the validity of practical reasoning and

¹³⁴ Dancy, *Practical Shape*, p. 123.

¹³⁵ That a practical purpose is presupposed does not mean it is the *psychological* starting point of any piece of practical reasoning that serves it. See §1.2 and n. 40 above.

¹³⁶ Anscombe, 'Practical Inference', p. 147.

¹³⁷ Aristotle, *Nicomachean Ethics*, VI.2, 1139a27–30.

¹³⁸ Anscombe, 'Practical Inference', p. 144.

the goodness of the end (and the truth of the premises).¹³⁹ This is the ‘great Aristotelian parallel’ that Anscombe identifies and endorses:

if it is right, then the goodness of the end and of the action is as much of an extra, as external to the validity of the reasoning, as truth of the premises and of the conclusion is an extra, is external to the validity of theoretical reasoning. As external, but not more external.¹⁴⁰

Of course, what exactly this parallel comes to depends on just how external the truth of the premises and conclusion is to the validity of theoretical reasoning. Anscombe is disappointingly brief:

We know that the externality is not total. For truth is the object of belief, and truth-preservingness an essential associate of validity in theoretical reasoning. The parallel will hold for practical reasoning.¹⁴¹

Though theoretical reasoning is defined in terms of the preservation of truth, (theoretical) truth is certainly not typically defined in terms of theoretical reasoning. In contemporary philosophy, we think of (theoretical) truth as something that belongs to propositions considered one at a time, and that can be laid hold of non-inferentially (e.g. in perception or intellectual intuition). We might say that though truth is not external to theoretical reasoning, theoretical reasoning *is* external to truth. Is the same true of practical reasoning and the good that can be attained through it?

Anscombe’s considered position ought to be that it is not. In a later paper, she writes:

practical truth is the truth brought about in sound deliberation leading to decision and action, and this includes the truth of the description ‘doing well’. Then, if the decision is sound, what happens—the action—does accord with it as I have described—right up to the description ‘doing well’. ... Practical truth ... might be called ‘praxistic truth’ in order to emphasise that it is truth brought about by a praxis resulting from deliberation—i.e. by an action (in fulfillment of a choice) which satisfies the description ‘doing well’. That is a final description of what every praxis—every ‘action’ in this limited sense—aims at being.¹⁴²

As Anscombe understands it, practical truth is actually doing well by exercising practicable knowledge how to do well (in the circumstances) in pursuit of the objective of doing well. And practical truth is the good achievable in action: this good is known by realizing it, and it is essentially realized (and thus known, made praxistically true) *through deliberation*. The good aimed at in action, and realized in the good human life, is not at all external to practical reasoning.

¹³⁹ Anscombe, ‘Practical Inference’, p. 146; cf. §1.2 above.

¹⁴⁰ Anscombe, ‘Practical Inference’, p. 146.

¹⁴¹ Anscombe, ‘Practical Inference’, p. 146.

¹⁴² Anscombe, ‘Practical Truth’, p. 157.

To endorse the ‘great Aristotelian parallel’, one must hold that the goodness of the end and of the action, on the one hand, and the truth of the premises and conclusion, on the other, are exactly as external as each other to practical and theoretical reasoning, respectively. If the great Aristotelian parallel is not to commit us to an anaemic conception of practical reasoning’s relationship to the good achievable in human action, it requires adopting a considerably more Aristotelian conception of the relationship between theoretical reasoning and the truth that is its business—one on which what is true, in the relevant sense, is not simply a proposition, but an explanatory system of propositions, the systematicity of which is understood together with a conception of theoretical reasoning.¹⁴³

4 Conclusion

Practical reasoning can be distinguished from theoretical reasoning by its subject matter, by its defining question, by the property it seeks to preserve or transmit to its conclusion, or anything else you like. Practical reasoning itself distinguishes itself from theoretical reasoning through its teleology. Thus far Anscombe is correct. But that practical reasoning distinguishes itself from theoretical reasoning by its teleology does not mean that it does not have a distinctively practical form, or that it is a matter of indifference whether this is acknowledged. It has a significantly different form: and its formal differences are determined by its distinctively practical function.

Most of my attention has been on the form and function of the conditional premises of practical inference. I have argued that such contents have a distinctive form (doing $A \rightarrow$ doing B ; doing A vis-à-vis *this* \rightarrow doing A). This form involves distinctively practical elements—doables (not propositions or fiats)—being combined in a distinctively practical way—with a practical quasi-connective ‘ \rightarrow ’, the meaning of which is elucidated in terms of the idea of a *means* (as opposed to necessary and sufficient conditions) and a means being practicable (‘I can’). A conditional premise of practical inference is thus a first-person thought. If correct, it is both self-knowledge and knowledge of the world, but a world that is not independent of the agent’s skills and will, which are themselves exercised in thinking such a premise for the sake of achieving one’s objective through practical inference. The distinctively practical content is thus the content of a distinctively practical act of reason, not a mere belief that aims to

¹⁴³ See Aristotle, *NE* VI.3, 6–7, and *Posterior Analytics* for pertinent discussions of *epistēmē* and the way in which it grasps truth. It’s clear Anscombe is not operating with the relevant Aristotelian conception of the theoretical: in “ordinary” inference, when, for example, we use “if p , then q ” in *modus ponens*, [we don’t] have to ask ourselves whether p is a truth-condition of q [such that the truth of p *explains* the truth of q], or q is some other sort of consequence of p .

(‘Practical Inference’, p. 128)

represent the world as it is anyway: it is a kind of practical knowledge, which involves the recognition of the possibilities latent in the circumstances to the agent, given her skills and objectives. Because such premises are themselves thought for the sake of achieving the end that they represent doing something as a means to, this conception of them puts pressure on the distinction between act of reason and content. However, it makes available an approximation of a notion of formal validity, which remains unavailable to conceptions of practical inference that construe means-end premises in terms of the material conditional (' \supset '). Müller is correct: '[t]he assumption of a mirror image connexion between practical and theoretical reasoning must be qualified'.^{144,145}

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¹⁴⁴ Müller, 'How Theoretical Is Practical Reason?', p. 106.

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