

Reply to Southwood, Kearns and Star, and Cullity*

John Broome

I am extremely grateful to Garrett Cullity, Stephen Kearns, Nicholas Southwood, and Daniel Star for taking the trouble to comment on my work. I am honored that such excellent philosophers have given their time to this task. I also very much appreciate the work of the other philosophers who presented papers at the conference in Canberra that was the source of this symposium. All this critical attention is a great benefit to me, since I continue to work on all the same issues. I am relieved to find that I agree with a great deal of what these four authors say. I have not tried to make a comprehensive response to any of them; I have just picked a few points to respond to, selfishly guided by my interests at the moment.

I. NICHOLAS SOUTHWOOD

Morality requires some things of you; prudence requires some things of you; the law, rationality, and etiquette each require some things of you; and so on. I call morality, prudence, and the rest “sources of requirements.”

Some sources of requirements are normative. By this I mean that, when one of those sources requires something of you, the fact that it does so is a reason for you to do what it requires. Prudence is normative, for example: prudence requires you to look both ways before you cross the road, and that fact is a reason for you to look both ways before you cross the road. On the other hand, etiquette may not be normative in this sense. Etiquette requires you to reply to a formal invitation in the third person, but that fact may be no reason to do so. For each source

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of requirements, we can ask whether that source is normative. I call this the “normative question” about the source.¹

Some sources are instrumentally normative. By this I mean that they are normative and that the explanation of why stems from some other normative source. For instance, it is plausible that the law is instrumentally normative. When the law requires you to do something, that fact is a reason for you to do it, and the explanation of why plausibly stems from some other source. The explanation might be that you risk punishment if you break the law, and prudence requires you not to risk punishment. Or it might be that morality requires you to keep the law. Either way, the law is instrumentally normative.

My papers “Does Rationality Give Us Reasons?” and “Is Rationality Normative?” asked the normative question about rationality.² They particularly considered whether rationality is instrumentally normative and concluded it is not. I find it plausible that, given the contingent conditions of our world, you have an instrumental reason to be disposed to satisfy the various individual requirements of rationality. Here I agree with Garrett Cullity’s “standard-fixing account” of rationality, which is described in his paper in this symposium. The instrumental reason might stem from morality or from prudence or both. However, if rationality is to be normative, there must be a reason for you actually to satisfy each individual requirement. Even if there is an instrumental reason for you to be disposed to satisfy a requirement, it does not follow that there is one for you actually to satisfy it. Indeed, in some cases there is none. I therefore concluded that rationality is not instrumentally normative.

Those papers found no demonstration that rationality is normative. But I was still inclined to believe it is. I felt that left me in an uncomfortable position. But Nicholas Southwood and Nadeem Hussain independently pointed out to me that my position may not be as uncomfortable as I thought.³ H. A. Prichard believed we are in just the same position over morality.⁴

The normative question about morality—when morality requires something of us, is that a reason to do what it requires?—is just as difficult to answer as the normative question about rationality. Many philosophers have tried to answer it by showing that morality is instrumentally normative. Often, they have tried to show morality is normative

1. I take the term from Christine Korsgaard, in *The Sources of Normativity* (Cambridge: Cambridge University Press, 1996).

2. See Broome, “Does Rationality Give Us Reasons?” *Philosophical Issues* 15 (2005): 321–37, and “Is Rationality Normative?” *Disputatio* 11 (2008): 153–71.

3. Southwood’s view is presented in his paper in this issue, Hussain’s in his “The Requirements of Rationality” (unpublished manuscript, Stanford University, 2007).

4. H. A. Prichard, “Does Moral Philosophy Rest on a Mistake?” *Mind* 21 (1912): 21–37.

on grounds that stem from prudence. All their attempts have failed. Prichard found this no surprise. He believed it is a mistake to think that morality is instrumentally normative. Nevertheless, it is normative. It is normative in its own right; its normativity is not explained by any other normative source.

Prichard seems to have thought this means that the normativity of morality cannot be explained at all. But that does not follow. Even if there is no instrumental explanation of its normativity, there may be an explanation of some other sort. It would truly be unsatisfactory if there was no explanation at all. It would be a bad blow to philosophy to find there are inexplicable facts.

So far as I can tell, rationality is not instrumentally normative. It may be normative all the same, like morality, and there may be a non-instrumental explanation of why. For example, there may be a metaphysical explanation, derived from the metaphysics of normativity. Suppose we discover the metaphysical nature of the property of being a reason for *N* to *F*. It might turn out that this property is possessed by the fact that rationality requires *N* to *F*.⁵

Southwood undertakes to provide a noninstrumental explanation. He aims to provide a “philosophical theory of rationality that can do something to explain the normativity of rational requirements by saying what rational requirements are—that can explain how and why they are the kinds of things that are, by their very nature, normative” (11). This is not to explore the metaphysics of normativity, but nevertheless it seems a good way to look for a genuine explanation.

Proceeding this way, Southwood arrives at what he calls “the first-personal authority account” of rational requirements. He says rational requirements are relative to a “first-personal standpoint,” and their normativity consists in “honoring our first-personal authority” (20).

As I interpret his account, I agree with it to a large extent. I agree that we can consider most requirements of rationality as being relative to a standpoint. For instance, take the requirement I call “enkrasia.” This is the requirement, roughly, that you intend to do what you believe you ought to do. Suppose you believe you ought to *F*. Rationality does not require you simply to intend to *F*. Instead, its requirement is in a particular way relative to your belief that you ought to *F*. It is conditional on this belief. More exactly, rationality requires of you the conditional proposition that you intend to *F* if you believe you ought to *F*. Your belief that you ought to *F* is part of your standpoint. So the requirement is relative to your standpoint in a particular way. Precisely what this relativity amounts to is specified in the conditional form of what is required.

5. This is Hussain’s suggestion in “The Requirements of Normativity.”

Moreover, we might say that your belief that you ought to *F* has a sort of authority for you: the authority to require you to intend to *F*. We can consider the authority first-personal, since it comes from nowhere else but your own standpoint.

For another example, take the requirement that you do not have contradictory beliefs. Suppose you believe *p*. Rationality does not require you simply not to believe not-*p*. Its requirement is in a particular way relative to your belief that *p*. It is conditional on this belief. Rationality requires of you the conditional proposition that you do not believe not-*p* if you believe *p*. Again, we may consider your belief that *p* as part of your standpoint, so the requirement is relative to your standpoint. Moreover, your belief has a sort of authority for you: the authority to require you not to believe not-*p*.

Southwood argues that standpoint-relative requirements are pre-suppositions of even having a first-personal standpoint. This seems plausible, and it is a familiar idea. If you violate many requirements of rationality, it becomes doubtful that you are even a person. To interpret you as a person, we must assume you are rational to a fair degree.

So I agree with a lot of what Southwood says about standpoint relativity. Furthermore, I think he accurately separates his position from what he calls “the subjective reasons account.” On the subjective reasons account, failing to be rational is failing by your own lights. That cannot be entirely correct. Suppose you have inconsistent intentions but you think it is okay to have inconsistent intentions. You are not failing by your own lights but you are nevertheless irrational. Southwood’s view is better.

However, I do not think his theory constitutes an explanation of why rationality is normative. I believe that to formulate the requirements of rationality is to specify exactly what standpoint relativity and first-personal authority amount to. Those are vague and rather obscure notions, which are made precise in statements of the requirements of rationality. If we had a full list of requirements of rationality, we would have a full description of standpoint relativity and first-personal authority. For instance, to say that your belief that you ought to *F* has first-personal authority for you is to say nothing more than that rationality requires you to intend to *F* when you believe you ought to *F*. Indeed, it is to say less, since it does not specify what is required of you by the authority of this belief.

In another way too, to talk of standpoint relativity and first-personal authority is to say less than to specify requirements of rationality. At least one requirement of rationality does not fit Southwood’s description. Rationality requires you not to believe a contradiction. For instance, it requires you not to believe that the liar sentence “This sentence is false” is true and also not true. There is nothing standpoint relative

about this requirement and no way in which it involves first-person authority.

There is no more substance to the claim that rational requirements are standpoint relative or reveal first-person authority that already appears in the specification of the requirements themselves. Indeed, there is less. So this claim cannot explain why rationality is normative, if indeed it is.

II. STEPHEN KEARNS AND DANIEL STAR

The word ‘reason’ can refer to many things. Now that reasons have become so prominent in moral philosophy, we urgently need to clarify this word’s meaning by identifying the various properties it can refer to. As part of the clarifying process, moral philosophers have come to distinguish motivating reasons from normative reasons. Motivating reasons offer a particular sort of explanation of people’s actions, which makes them important in the philosophy of action. Normative reasons are primarily important in moral philosophy and the philosophy of normativity.

The purpose of my article “Reasons” was to help the process of clarification by describing what a normative reason is.⁶ I identified two different sorts of normative reason. The well-established term “pro tanto reasons” refers to normative reasons of one sort. There is no well-established term for normative reasons of the other sort, but I call them “perfect reasons.” A perfect reason for *N* to *F* is simply an explanation of why *N* ought to *F*. A pro tanto reason for *N* to *F* is something that plays a particular role, which I described, in a particular sort of explanation, which I described, of why *N* ought to *F*, or of why *N* ought not to *F*, or of why it is not the case that *N* ought to *F* and not the case that *N* ought not to *F*. The complexities do not matter here. What matters is that the property of being a normative reason is the property of being something that partly or wholly explains a normative fact. I shall call this the “normative explanatory property” or just the “explanatory property.”

By “explain” I mean the inverse of “because,” so ‘*A* explains *B*’ means the same as ‘*B* is so because *A* is so.’ We may also say, equivalently, ‘*A* makes it the case that *B*.’

Since “Reasons” was about normativity rather than action, I did not try in that paper to describe what a motivating reason is. But for my purposes here I need a rough description. A motivating reason for *N* to *F* is something that can partly or wholly explain, in a particular way, why *N* is motivated to *F*. The explanation must be one that goes through

6. John Broome, “Reasons,” in *Reason and Value: Themes from the Moral Philosophy of Joseph Raz*, ed. R. Jay Wallace, Philip Pettit, Samuel Scheffler, and Michael Smith (New York: Oxford University Press, 2004), 28–55.

N's rational faculty. That is a very vague description of the particular sort of explanation, but it will do here. What matters is that the property of being a motivating reason is the property of being something that partly or wholly explains a fact about *N*'s motivations. This is not the normative explanatory property.

Suppose you believe you ought to eat cabbage. If you are motivated to eat cabbage, that might be because of this belief of yours. Your belief therefore constitutes a motivating reason for you to eat cabbage.

Suppose next there is evidence that you ought to eat cabbage: some reliable book says everyone ought to eat cabbage. If you are motivated to eat cabbage, that might be because of this piece of evidence. You might read the book and, because of what it says, come to believe you ought to eat cabbage. This belief in turn might motivate you to eat cabbage. So the book's assertion may constitute a motivating reason for you to eat cabbage.

However, this assertion neither partly nor wholly explains why you ought to eat cabbage. Whether or not you ought to eat cabbage is determined by such factors as its taste and its effects on your body, independently of what any book says about it. So the assertion does not have the explanatory property, and it is not a normative reason according to my account. This implication of my account seems to me correct. To claim that this piece of evidence is a normative reason, even though it neither partly nor wholly explains why you ought to eat cabbage, would be to confuse normative and motivating reasons.

Stephen Kearns and Daniel Star do not make this claim. They believe that the property of being a normative reason for *N* to *F* is the property of being evidence that *N* ought to *F*. I call this the "evidential property." They think the book's assertion is a normative reason for you to eat cabbage because it has the evidential property. However, they argue that this assertion also partly explains why you ought to eat cabbage, so it also has the explanatory property. I disagree about that, but I have no need to press my disagreement here. If they are right, then on my account as well as theirs, the book's assertion is a normative reason for you to eat cabbage.

If they are right, this example does not separate their account from mine. Indeed, as I understand them, Kearns and Star believe that the explanatory property and the evidential property have the same extension. If that is so, no factual example will separate their account from mine.

Still, we can separate our two accounts by using an example that they would consider counterfactual. Suppose, contrary to what they think, that the book's assertion were not a partial explanation of why you ought to eat cabbage. Would it then be a normative reason for you to eat cabbage?

The answer is “No.” I think Kearns and Star agree. They say, “If a fact is not part of an explanation of what one ought to do, it is intuitively not a reason.” So far as I can tell, this is said in their own voice. Moreover, they later use it implicitly as a premise in an argument. Here is their entire argument for their claim that the book’s assertion is a partial explanation of why you ought to eat cabbage: “One would be remiss if one were to ignore the book’s advice. Though the fact that the book says you ought to eat cabbage may not count greatly in favor of eating cabbage, it does so to some extent” (19). At the beginning of their paper, Kearns and Star use the expression “count in favor of” to define a normative reason. So their argument is that the book’s assertion is a normative reason for you to eat cabbage. But that does not support their conclusion unless there is an implicit premise that a normative reason must be part of an explanation of what one ought to do.

So, under the assumption—perhaps counterfactual—that the book’s assertion is not a partial explanation of why you ought to eat cabbage, it is not a normative reason for you to eat cabbage. Yet this assertion has the evidential property. It follows that the property of being a normative reason is not the evidential property.

Weighing

Kearns and Star make a further claim. They say, not only that reasons are evidence, but also that weighing reasons is weighing evidence. We often judge whether or not a proposition is true by weighing the evidence for and against it. Whether or not *N* ought to *F* is often determined by the weighing of reasons for *N* to *F* against reasons for *N* not to *F*. Kearns and Star claim that this latter sort of weighing of reasons is just an instance of the former sort of weighing of evidence.

They confuse epistemology with the determination of facts. Take any proposition—say, that it rained in Glasgow yesterday. Judging whether or not this proposition is true is an epistemological process. We often do it by weighing the evidence for and against it. However, the weight of evidence does not determine whether or not it rained in Glasgow yesterday. That is determined by atmospheric processes.

Similarly, we may judge whether or not you ought to eat cabbage by weighing the evidence for and against this proposition. That is an epistemological process. But the weight of evidence does not determine whether or not you ought to eat cabbage. It would not determine it even if Kearns and Star were right that the property of being evidence that you ought to eat cabbage is the property of being a reason for you to eat cabbage.

The epistemological process is a matter of weighing evidence for the proposition that you ought to eat cabbage against evidence for its negation: that it is not the case that you ought to eat cabbage. On the

other hand, whether or not you ought to eat cabbage is determined by the weight of reasons for you to eat cabbage against the weight of reasons for you not to eat cabbage. If Kearns and Star were right, and all these reasons were evidence (and if the weight they have as reasons were the same as the weight they have as evidence), it would be determined by the weight of evidence for the proposition that you ought to eat cabbage against the weight of evidence for the proposition that you ought not to eat cabbage. But the proposition that you ought not to eat cabbage is not the same as the proposition that it is not the case that you ought to eat cabbage. Evidence for the latter need not be evidence for the former.

For instance, in judging whether or not you ought to eat cabbage, we might weigh the assertion in Professor Brassica's book that everyone ought to eat cabbage against the assertion in Professor Arnica's book that Professor Brassica's experimental methods are flawed. But Professor Arnica's assertion is no evidence that you ought not to eat cabbage.

So the weighing of reasons is not the weighing of evidence.

III. GARRETT CULLITY

Evidently Garrett Cullity and I have been pursuing the same line of thought. We have been trying to formulate some of the requirements of rationality as accurately as we can. Cullity correctly points out various errors in the formulae I presented some years ago, and he has been looking for ways to put them right. So have I.

I am pleased to find that we agree to a remarkable extent. Our disagreements are minor. Nevertheless, we have ended up formulating requirements in ways that differ in some significant respects. I shall discuss some of our differences over instrumental rationality. I shall shamelessly take the opportunity of recommending my own formulation.

My formula for the requirement of instrumental rationality is:

Instrumental Requirement. Rationality requires of N that, if

1. N intends at t that e , and
2. N believes at t that, if m were not so, because of that e would not be so, and
3. N believes at t that, if she herself were not then to intend m , because of that m would not be so, then
4. N intends at t that m .

This is the current edition of my requirement. I have learned from experience not to be confident that I have homed in on a perfectly correct formulation. But at present I believe this one to be correct.

Cullity's corresponding formula is his 4-I. It would be tedious to work through all of the differences between his and mine. I shall discuss

just two features of the formulae, which are among those Cullity particularly pays attention to.

First, my Instrumental Requirement is synchronic. It mentions only attitudes that you have at the one time t . Cullity's 4-I is diachronic in that it refers to a period of time. He attaches importance to this difference.

However, Cullity's formula is not significantly diachronic. It is equivalent to this synchronic requirement:

Synchronic 4-I. Rationality requires of N that, if

- i. N intends at t that e , and
- ii. N believes at t that e will not be suitably achieved if she herself does not intend at t' some particular means to e , and
- iii. N believes at t that it is t' , then
- iv. N intends at t what N believes is a suitable means to e .

Look back to 4-I in Cullity's paper. You will see that Synchronic 4-I is simply 4-I applied to a period consisting of the single moment t . (I have slightly altered the wording so as to make Synchronic 4-I more parallel to my own Instrumental Requirement.)

Cullity himself tells us that 4-I subsumes a synchronic requirement, so he evidently intends a single moment to count as a "period." Therefore, 4-I entails Synchronic 4-I. Conversely, if you satisfy conditions i, ii, and iii of 4-I during a period ending at t , you satisfy conditions i, ii, and iii of Synchronic 4-I at t . The conclusion is the same in both formulae. Consequently, Synchronic 4-I entails 4-I itself.

Cullity's requirement 4-T is also not significantly diachronic. It, too, is equivalent to a corresponding synchronic formula that may be constructed in the same way.

Cullity's purpose in making his requirements diachronic was to account for the irrationality of two sorts of procrastination, but actually diachronic requirements are not needed for that purpose. The first sort is when you intend some end for a while but never form the intention of taking a means to the end. That is not always irrational. For instance, you may stop intending the end before the time comes when you see the need to intend a means to it. But sometimes this sort of procrastination is indeed irrational. The circumstances in which it is irrational are exactly those in which it is irrational according to my synchronic Instrumental Requirement. So no diachronic requirement is needed for that sort of procrastination.

The second sort is when you intend for a while to do something but never do it or try to do it. Again, this may happen rationally. For instance, you might rationally drop your intention before the time comes when you see the need to start fulfilling it. But on all occasions when

it cannot happen rationally, this sort of procrastination cannot happen at all; it is impossible rather than irrational.

Take this apparent example of it. You intend to get on the nine o'clock bus. You stand by the bus saying goodbye, nothing prevents you from getting on, and you continue to intend to get on. But you do not get on. At nine o'clock, the bus drives off without you. This is an impossible story. An intention to get on the bus is a particular sort of disposition to do so. If you are disposed to do some act, you do it unless something prevents you. Therefore, if you do not get on the bus, and nothing prevents you, you do not intend to.

To be sure, if you do not get on at a particular time, and nothing prevents you, it does not follow that you do not intend at that time to get on. At that time, you may intend to get on at a later time. But concentrate on what you believe to be the last possible moment when you could get on. If you are still off the bus then, and you do not then get on, and nothing prevents you, at that moment you do not intend to get on.

I admit there is a technical problem with this argument. There may be no last possible moment when you could get on. Perhaps you could get on at any time before nine o'clock, but not at exactly nine o'clock. I also admit that I have no solution to this problem. However, I do not take it seriously, because it depends on an implausible precision in the timing of your act.

If you do not get on the bus because something prevents you, you may be rational. Some things prevent you even without making you unable to get on. For instance, your watch may be slow. You may think you have time to spare, and continue to say your goodbyes, but unexpectedly see the bus driving off without you. You can get on the bus, as you intend, but you do not do so. You do not even try to do so. Nevertheless, you may be rational. You are prevented from getting on by the slowness of your watch.

The upshot is that the second sort of irrational procrastination does not exist. Therefore, no diachronic requirement of rationality is needed to account for it. From now on, I shall ignore the diachronic aspects of Cullity's formula. I shall compare my Instrumental Requirement with the synchronic version, Synchronic 4-I.

Next I come to Cullity's discussion of what Michael Bratman calls "cognitivism" about instrumental rationality.⁷ Compare my Instrumental Requirement with this:

Bogus Instrumental Requirement. Rationality requires of *N* that, if

7. Michael Bratman, "Intention, Belief, and Instrumental Rationality," in *Reasons for Action*, ed. David Sobel and Steven Wall (Cambridge: Cambridge University Press, 2009), forthcoming.

- 1a. *N* believes at *t* that *e*, and
- 2a. *N* believes at *t* that if *e* then *m*, and
- 3a. *N* believes at *t* that if *m* then she herself then intends that *m*,
and
- C. *N* cares at *t* about whether she herself then intends that *m*, then
- 4a. *N* believes at *t* that she herself then intends that *m*.

The Bogus Instrumental Requirement requires you to believe what follows by two steps of *modus ponens* from things you believe, if you care about the result. It is plausible because the inference is so easy. For the sake of argument let us assume it is a genuine requirement. In calling it “bogus” I do not mean to say it is not a requirement; I mean to say it is not an instrumental requirement. Indeed, it is not a practical requirement at all. It is purely theoretical; it is a requirement on beliefs only.

Still, it is closely related to the genuine Instrumental Requirement. Normally, the three attitudes of intending something, believing you intend it, and believing you will do it exist together. Normally you satisfy condition 1a of the Bogus Requirement if you satisfy condition 1 of the genuine Instrumental Requirement: you believe that *e* if you intend that *e*. Normally you satisfy 4 if you satisfy 4a: you intend that *m* if you believe you intend that *m*. Moreover, 2 entails 2a, and 3 entails 3a. Suppose you satisfy conditions 1, 2, and 3 of the Instrumental Requirement. Then you normally satisfy 1a, 2a, and 3a of the Bogus Requirement. It is also fair to assume you satisfy C. It follows therefore that, if you satisfy the Bogus Requirement, you normally satisfy 4a and hence normally 4. So if you satisfy the Bogus Requirement, you normally also satisfy the genuine Instrumental Requirement.

This is the source of cognitivism. Cognitivists claim that the Instrumental Requirement, which is practical, is actually derived from the Bogus Requirement, which is theoretical.

However, the genuine Instrumental Requirement is actually independent of the bogus one. To show this, I shall describe a case where you satisfy the Bogus Requirement but breach the Instrumental Requirement. It will be a case where you satisfy 1 without satisfying 1a: you intend something without believing your intention will be fulfilled.

You have planned a complex world tour, which includes visiting Agra. You intend to visit Agra. For one thing, you have bought a ticket from Delhi to Agra. However, you have temporarily forgotten this part of your plan. You still have the intention; an intention is a dispositional state, and the dispositions that constitute this intention are still in place. You are disposed to do what needs doing when it needs doing, except for one lacuna in your planning that I shall mention in the next paragraph. You are disposed to remember your intention before you get

to India, you are disposed to get on the right train from Delhi, and so on. But you have forgotten your intention. You do not believe you intend to visit Agra, and consequently you do not believe you will visit Agra. Let e be the proposition that you visit Agra. You intend e , so you satisfy condition 1 of the Instrumental Requirement. But you do not believe e , so you do not satisfy condition 1a of the Bogus Requirement. Therefore you satisfy the Bogus Requirement by default.

Now let m be the proposition that you get some rupees. Suppose you satisfy 2: you believe that if you were not to get some rupees, because of that you would not visit Agra. And suppose you satisfy 3: you believe that if you were not now to intend to get some rupees, because of that you would not get some rupees. But suppose you do not satisfy 4: you do not intend to get some rupees. Then you breach the Instrumental Requirement. Since you satisfy the Bogus Requirement, the Instrumental Requirement is independent of the Bogus Requirement.

A cognitivist will now doubt that the Instrumental Requirement is truly a requirement of rationality. Roughly, this requirement says you are irrational if you do not intend what you believe is a means implied by an end that you intend. A cognitivist will claim this is so only when you believe you intend the end and believe you do not intend the means. If you have those beliefs you breach the Bogus Requirement, and if you do not have those beliefs you are not irrational. A cognitivist might recognize that there is a sort of inconsistency in intending the end but not intending the means. But she might think that inconsistency is not irrational in itself—only inconsistency that you are aware of is irrational.

On the other hand, someone who accepts the Instrumental Requirement thinks you can be irrational just because of an inconsistency in your intentions, whether or not you are aware of it. This marks the Instrumental Requirement as genuinely practical.

Just because the genuine Instrumental Requirement is not cognitivist, its conditions 2 and 3 have to be stronger than the corresponding conditions 2a and 2b of the Bogus Requirement. Instrumental rationality requires you to intend what you believe is strictly a means to an end you intend. It does not require you to intend what you believe is connected to your end in other ways—for instance, by sharing a common cause with your end. Condition 2 of the Instrumental Requirement requires you to believe that m is strictly a means to e , and condition 3 requires you to believe that your intending m is strictly a means to m .

That is accomplished in the conditions' formulation by their subjunctive mood and their "because" clauses together. I can describe counterexamples to the Instrumental Requirement, if either the subjunctive mood or the "because" clause is omitted from either 2 or 3. They are examples where, for instance, you believe that m and your intending m share a common cause, but you do not believe that your

intending m is a means to m . These counterexamples are arcane, and I shall not describe them here.

Cullity agrees that instrumental rationality is not cognitivist but instead an independent requirement of practical rationality. However, just because he is setting out a practical requirement, Cullity's conditions are too weak to serve the purpose demanded of them. Synchronic 4-I is actually false, because its condition ii is too weak. Condition ii should require you to believe that your intending a means to e is itself a means to e . But actually it merely requires you to believe that intending a means to e is connected to e through a simple conditional.

Here is a counterexample to Synchronic 4-I that exploits this weakness. You intend to travel to Edinburgh on July 14, and you believe you will do so. You could travel either by train or by plane, and you believe there is no need to decide between those two alternative means until May. However, you recognize that you are unduly anxious about these things. You believe you would never travel to Edinburgh without having bought your ticket six months in advance, and you believe this occasion is no exception. So you believe your traveling to Edinburgh on July 14 will not be suitably achieved without your intending a particular means by January. It is now January 31, and you believe that, as you predicted, you have made your choice and bought a ticket. You believe you now intend to go to Edinburgh by train. However, that is not so; your memory has temporarily failed you. You do intend to go by train on a separate trip to Glasgow on July 2, and you are muddling your Glasgow trip with your Edinburgh trip. You have not yet decided how to travel to Edinburgh.

You do not satisfy Synchronic 4-I. But you are not necessarily irrational. You do not believe there is any need to intend a particular means of travel at this stage, so there is no instrumental irrationality in your not doing so. Possibly your lapse of memory is irrational, but if it is, it does not have the sort of instrumental irrationality we are concerned with.

Cullity needs to tighten up his formula because he rejects cognitivism and is describing a genuinely practical requirement.