Why Be Disposed to Be Coherent?*

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My subject is what I will call the "Myth of Formal Coherence." In its normative telling, the Myth is that there are "requirements of formal coherence as such," which demand just that our beliefs and intentions be formally coherent.[1] Some examples are these:

> *Noncontradiction* (*N*): One is rationally required (if one believes at t that p, then not to believe at t that not-p).
> *Closure* (*C*): If q is a logical consequence of p, then one is rationally required (if one believes at t that p, then to believe at t that q).[2]
> *Means-End* (*ME*): One is rationally required (if one believes at t that one will E only if one intends at t to M, and intends at t to E, then to intend at t to M).[3]

The intuitive idea is that formally incoherent attitudes give rise to a certain normative tension, or exert a kind of rational pressure on one another, and this tension, or pressure, is relieved, just when one of the attitudes is revised. To many, requirements of formal coherence have seemed the only sure thing in the domain of "oughts." Latter-day Humeans, if not

1. See, most notably, John Broome, "Normative Requirements," *Ratio* 12 (1999): 398–419, and "Does Rationality Give Us Reasons?" *Philosophical Issues* 15 (2005): 321–37.

2. I ignore, for simplicity, possible qualifications about the obviousness of the logical relationship and reasons for having an opinion whether q.

3. In "The Myth of Practical Consistency" (*European Journal of Philosophy* [forthcoming]), I separately discuss *Intention Consistency*: one is rationally required (either not to believe at t (that if one Xs, then one does not Y), or not to intend at t to X, or not to intend at t to Y). Henceforth, I drop, for simplicity, the temporal markers.

Hume himself, claim that there are no demands on what we desire but that it be means-end coherent. In celebrated contrast, Kant and his followers aim to vindicate more ambitious norms, such as the Moral Law itself. But, even for them, such a vindication amounts to showing that these norms are relatives, or analogues, of formal coherence as such. Despite their differences, both camps agree that requirements of formal coherence as such are the core or foundation of whatever "oughts" there are.

The Myth also has a descriptive version. On this telling, beliefs and intentions necessarily, or constitutively, tend to formal coherence as such (even if this tendency is sometimes inhibited). Part of what it is to be a belief, many in the philosophy of mind will say, is to tend to produce beliefs in what follows—or, rather, since there is *modus tollens* no less than there is *modus ponens*, to tend either to produce beliefs in what follows, or to disappear—as such. And part of what it is to be a belief is to tend either to repel contradictory beliefs, or to give way to them, as such. Likewise, part of what it is to be an intention, many in the philosophy of action will say, is to tend either to produce intentions for what seem necessary means, or to disappear, and to tend either to repel what seem jointly unrealizable intentions, or to give way to them, as such.[4]

Crucially, these are not themselves tendencies, or requirements, to have or lack any specific attitude, even if they may interact with tendencies, or requirements, that are. There is no specific attitude that one must have or lack in order for one's attitudes to be formally coherent, since formal coherence can always be achieved by making suitable adjustments in other attitudes. As John Broome puts it, requirements of formal coherence as such are "wide-scope."[5] "Requires" takes wide scope over the disjunction of all coherent patterns of attitudes, instead of narrow scope over certain particular patterns. And, crucially, these requirements, or tendencies, are not themselves conditional on, or sensitive to, one's particular situation, even if they may interact with requirements, or tendencies, that are. This is because what counts as formal coherence is not something that is conditional on, or sensitive to, one's particular situation. Formal coherence is always and everywhere the same. Finally, although this is less important for the purposes of this article, requirements of formal coherence as such are requirements

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4. Most notably, Michael Bratman, *Intention, Plans, and Practical Reason* (Cambridge, MA: Harvard University Press, 1987).

5. See, e.g., Broome's "Normative Requirements."

of rationality, in the sense that they are requirements that our attitudes stand in certain relations to one another, whatever else may be the case.[6]

As with most myths, the Myth of Formal Coherence is nourished by certain truths. There are valid requirements such that, if we satisfy them, then our attitudes will usually be formally coherent. And we have tendencies such that, when they manifest themselves, they usually make our attitudes formally coherent. But these are not requirements of, or tendencies to, formal coherence as such. Instead, they are requirements, or tendencies, to believe what the evidence supports and to intend what promises to be worth doing: to have the attitudes that "reason requires," to use an admittedly stilted covering term. Unlike requirements of formal coherence as such, reason requires specific attitudes; its requirements are "narrow scope." And, unlike requirements of formal coherence as such, which attitudes reason requires (usually) depends on one's particular situation. What is true is that if we pursue the evidence and intend what is likely to be worthwhile, then, as a kind of by-product, our beliefs and intentions will be, by and large, formally coherent. The Myth mistakes this by-product for a telos.

My point of entry into the Myth will be an alleged connection between its normative and descriptive versions: namely, that *requirements* of formal coherence as such are somehow justified by the value of *dispositions* to formal coherence as such. These dispositions are valuable, it is said, because they are a *means to having the attitudes that reason requires,* or because they are *necessary for having beliefs and intentions.* These claims, I argue, are untenable. These dispositions are not means, or they are only inferior means, to having the attitudes that reason requires. And they are not necessary for having beliefs and intentions. Once we see why this is, I suggest, the Myth's hold on us will loosen.

In Section I, I set up the alleged connection. I ask why we should make our beliefs *N*-coherent as such, given that doing so *in any particular case* is neither a means to having the beliefs that reason requires *in that case* nor necessary for having beliefs *in that case.* This invites the reply that, while this may be true in any particular case, surely having the disposition to make one's beliefs *N*-coherent as such is a means to having the beliefs that reason requires over the long run or is necessary for having beliefs in general. In Sections II and III, I argue that the disposition to satisfy *N* is not a means to believing as reason requires. And from this discussion, it follows almost immediately, as I

6. There are other requirements of rationality. Later, I discuss "Believed Reason": the narrow-scope requirement of rationality to conform to one's own assessment of one's reasons. If what reason requires is a function solely of perceptual experiences, beliefs, or desires—which I allow—then the requirements of reason will also be requirements of rationality.

explain in Section IV, that this disposition is not necessary for having beliefs. In Sections V and VI (which may be skipped in a first reading), I discuss how these findings generalize to *C* and *ME*. In Section VII, I sketch an error theory for *N* as a case study for a broader error theory for the Myth as a whole.

I. WHY OUGHT WE TO BE *N*-COHERENT AS SUCH?

In the case of belief, what reason requires is that one believe what is sufficiently likely, in light of the evidence provided by one's situation, to be true and not believe what is sufficiently likely, in light of the evidence provided by one's situation, to be false. We can leave it open what the evidence provided by one's situation is: for example, whether it is a function of one's psychological situation, consisting in one's perceptual experiences and other beliefs, or whether it is a function of one's nonpsychological situation. And we can assume, without prejudicing the arguments that we will proceed to evaluate, the following:

> *Stronger Evidence*: Reason permits one to believe p only if the evidence that p is stronger than the evidence that not-p.
> *Epistemic Strictness*: If reason permits one to believe p, then reason requires one to believe p.[7]

Together, these imply:

> *What Reason Requires Is N-coherent*: In any given case, there is some specific *N*-coherent pattern of belief that reason requires one to have. In particular, either
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> (i) reason requires one to believe p, and reason requires one not to believe not-p; or
> (ii) reason requires one not to believe p, and reason requires one to believe not-p; or
> (iii) reason requires one not to believe p and reason requires one not to believe not-p.

This is not *N*: *N* is a wide-scope, situation-insensitive requirement of a disjunction of patterns of belief. By contrast, What Reason Requires Is *N*-coherent is a disjunctive observation about possible or actual, narrow-scope, situation-sensitive requirements of particular patterns of belief. If one has contradictory beliefs, then one satisfies *N no matter which* belief one gives up. One satisfies the requirements described in What Reason Requires Is *N*-coherent, by contrast, only if one gives up the *specific* belief, or beliefs, *that reason requires one not to have*, in light

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7. I discuss these principles at greater length in "How Does Coherence Matter?" *Proceedings of the Aristotelian Society* 107 (2007): 229–63.

of one's situation. This is to say that *N*, but not What Reason Requires Is *N*-coherent, implies

> *N-satisfaction*: When one exchanges the *N*-incoherent pattern for any *N*-coherent pattern, *whether or not* it is the pattern that reason requires one to have in that case, one does something (although not necessarily everything) that one ought to do, in a way in which one would not have done something that one ought (at least not in the same respect) if one instead remained in the *N*-incoherent pattern.

Put another way, *N* requires a change from one only if one both believes *p* and believes not-*p*. By contrast, the requirements mentioned in What Reason Requires Is *N*-coherent may require a change even if one has only one of the beliefs. If reason requires one not to believe *p*, one should drop that belief, *whether or not* one believes not-*p*. In other words, in the case of *N*, it is the tension between *the beliefs* that necessitates a change, whereas in the case of the requirements in What Reason Requires Is *N*-coherent, it is the tension between (at least) *one of the beliefs and the evidence* provided by one's particular situation that necessitates a change. These differences stem from a more fundamental difference: that *N* represents a concern with the formal coherence of our beliefs as such, whereas the requirements mentioned in What Reason Requires Is *N*-coherent represent a concern to follow the evidence toward the true and away from the false.

Nevertheless, the resemblance between *N* and What Reason Requires Is *N*-coherent might suggest a Simple Error Theory for *N*: that we endorse *N* only because we confuse it with What Reason Requires Is *N*-coherent. While this Simple Error Theory no doubt captures part of the truth, it is, as it stands, too simple. *N*-satisfaction, which only *N* seems to explain, is intuitive. Consider a believer who is in the *N*-incoherent pattern of believing *p* and believing not-*p* when reason requires him to believe *p* and not to believe not-*p*. Now contrast two responses he might give. In the first, he continues along with contradictory beliefs, making no change. In the second, he revises his belief that *p* but keeps his belief that not-*p*. Granted, this second response does not lead him to the coherent pattern that reason requires him to have. But still, it seems, he does something that he ought to do in giving the second response, in a way in which he does not do something that he ought to do in giving the first response, that of remaining incoherent.

What needs to be explained is how he has done something that he ought to do. At first glance, at least, he has only lost a belief, the belief that *p*, that is sufficiently likely to be true that reason requires him to have it, while keeping a belief, the belief that not-*p*, that is sufficiently likely to be false that reason requires him not to have it.

"By making his beliefs *N*-coherent," one might first reply, "he takes *at least partial means* to believing as reason requires. Of course, he may need to take other means in order to believe as reason requires. Still, making his beliefs *N*-coherent as such is at least one of those means." Yet there is no helpful sense of "means" according to which, by satisfying *N* as he has *in this case*, he has taken *even partial means* to believing as reason requires *in this case*. How is *not* believing *p* and believing not-*p* taking any means at all to believing *p* and *not* believing not-*p*?[8]

Taking a different tack, one might say: "In satisfying *N*, he does something he ought, because satisfying *N* is constitutive of belief." But, again, this does not seem to be true in any particular case. One can violate *N*, at least on occasion. Indeed, if one could not violate *N*, some might doubt that it was a normative requirement at all, rather than a merely descriptive claim about belief.

At this juncture, the following reply suggests itself: "Granted, by satisfying a requirement of formal coherence *in a particular case,* one may not take means to believing or choosing what reason requires *in that case.* But by being *disposed* to satisfy requirements of formal coherence *over the long run,* one takes means to believing or choosing what reason requires *over the long run.* Surely, if one is disposed to avoid contradictions, or to avoid means-end incoherence, then one tends to believe and intend more of what reason requires." Michael Bratman, for example, has suggested that a disposition to satisfy *ME* has a "pragmatic rationale, one grounded in its long-run contribution to our getting what we (rationally) want."[9] And Broome finds it plausible that a disposition to conform to requirements of formal coherence in general,

8. Granted, a necessary condition of his (believing *p* and not believing not-*p*) is his (either (believing *p* and not believing not-*p*) or (not believing *p* and believing not-*p*)). So one can say that in (not believing *p* and believing not-*p*), he has satisfied a necessary condition of (believing *p* and not believing not-*p*). But this cannot explain what we want to explain: why, when he satisfies *N* in this way, he does something that he ought, whereas he would not have done something that he ought, at least not in the same respect, if he had continued with contradictory beliefs. For another necessary condition of his (believing *p* and not believing not-*p*) is his (either (believing *p* and not believing not-*p*) or (both believing *p* and believing not-*p*)). So, by the same logic, in continuing to have contradictory beliefs (or, indeed, in doing anything at all), he equally satisfies a necessary condition of (believing *p* and not believing not-*p*).

9. Bratman, *Intention, Plans, and Practical Reason*, 35; see also 43, 46, and 52. Further see Michael Bratman, "Intention, Belief, Practical, Theoretical," in *Spheres of Reason*, ed. Jens Timmerman, John Skorupski, and Simon Robertson (Oxford: Oxford University Press, forthcoming). Since *Intention, Plans, and Practical Reason*, Bratman has suggested that the disposition to satisfy *ME* may be valuable as a constituent of certain structures of autonomy, integrity, and sociality. See Michael Bratman, *Structures of Agency* (Oxford: Oxford University Press, 2006). I briefly discuss this suggestion in "The Myth of Practical Consistency."

including *N*, *ME*, and *C*, is "part of the best means [we] have of achieving much of what [we] ought to achieve."[10]

"Likewise," the response might continue, "while we might violate a requirement of formal coherence in some particular case and continue to have beliefs, it is not clear that we can violate requirements of formal coherence in general and continue to have beliefs.[11] Thus, a disposition to satisfy requirements of formal coherence is necessary for surviving as what we are. Or perhaps there is a subtler, transcendental point to be made here. There can be no live question whether we ought to have the disposition to satisfy requirements of formal coherence. If we lacked this disposition, the question could not so much as arise for us."[12]

To evaluate this line of reply, we need to clarify what the relevant disposition to satisfy requirements of formal coherence—or, more concretely, the disposition to satisfy *N*—would have to be. It would have to be, at very least, a disposition to avoid the incoherent pattern in favor of some coherent pattern. But which coherent pattern? The answer cannot be: some specific coherent pattern. If one has a disposition never to believe anything, for example, one has a disposition to satisfy *N* by having a specific coherent pattern (i.e., neither believing *p* nor believing not-*p*). Likewise, if one has a disposition to believe as reason requires, then one has a disposition to satisfy *N* by having a specific coherent pattern (i.e., the pattern that reason requires in each case). Showing that it is valuable to have a disposition to satisfy *N* by having a specific coherent pattern, however, would not explain the normativity of *N*. Suppose it is valuable to have a disposition, *D*, to satisfy *N* by having a specific coherent pattern. When one enters into a coherent pattern different from the specific one, one satisfies *N* but one does not manifest *D*. How can *D*'s value explain why, in satisfying *N* as one does in this case, one does as one ought, when, in satisfying *N* as one does in this case, one does *not* manifest *D*? That would be like saying that the fact that courage is a virtue explains why when we act cowardly we do something that we ought.

The dialectically relevant disposition to satisfy *N* must be a disposition to satisfy *N as such*: not a disposition to avoid the incoherent pattern for some *specific* coherent pattern but instead a disposition to

10. Broome, "Does Rationality Give Us Reasons?" 333. See also John Broome, "Is Rationality Normative?" *Disputatio* (forthcoming).

11. Compare Donald Davidson, "Incoherence and Irrationality," in his *Problems of Rationality* (Oxford: Oxford University Press, 2004), 189–98, at 196–97.

12. Compare Christine Korsgaard, "The Normativity of Instrumental Reason," in *Ethics and Practical Reason*, ed. Garrett Cullity and Berys Gaut (Oxford: Clarendon, 1997), 215–54. However, Korsgaard has in mind specifically the acceptance of, or commitment to, requirements of formal coherence, which is more than a mere disposition to satisfy them.

avoid the incoherent pattern for *any* coherent pattern *indifferently*. Let us call this the "*N*-disposition" in order to distinguish it from dialectically irrelevant dispositions to conform to *N* by having a specific coherent pattern. What more precise sense are we to give to "indifferently"? It is hard to see what the answer could be if not a disposition, when in the incoherent pattern, to enter into, with equal probability, each of the coherent patterns that one is otherwise least disposed to avoid. If there is only one coherent pattern that one is otherwise least disposed to avoid, then the *N*-disposition disposes one to adopt that coherent pattern. The *N*-disposition is "indifferent" between that coherent pattern and any other, in the sense that if one had been otherwise least disposed to avoid a different coherent pattern, the *N*-disposition would have led one into that different coherent pattern instead. And if there is more than one coherent pattern that one is otherwise least disposed to avoid, then the *N*-disposition is "indifferent" among these patterns, in the sense that it selects from among them with equal probability.

II. FIRST ARGUMENT FOR *N*-MEANS: THE *N*-DISPOSITION AS PART OF THE DISPOSITION TO BELIEVE AS REASON REQUIRES

With the *N*-disposition now in focus, we can evaluate the argument that one ought to have the *N*-disposition, because:

> *N-means*: If one has certain complementary dispositions, the addition of the *N*-disposition leads one, over the long run, to have a greater *Difference*, that is, a greater number of attitudes that reason requires one to have less attitudes that reason requires one not to have.[13]

Why should *N*-means be true? The first of two arguments is that the *N*-disposition is part of the

> *Disposition to Believe as Reason Requires*: to believe *p*, if reason requires one to believe *p*, and not to believe *p*, if reason requires one not to believe *p*.

Note that, while this disposition, or whatever approximation to it that

13. One might complain that this Difference, this totting up of attitudes, is too crude. However, it is not enough for a proponent of *N*-means merely to register this complaint. He must provide some clear and workable alternative measure. Otherwise, *N*-means, while insulated from refutation, is at the same stroke deprived of the chance of positive support. If one wanted a more sophisticated measure, one might add weights to reflect the relative importance of certain beliefs. So long as the weights were not biased in some way, I doubt that this would significantly affect the results that I go on to discuss.

we might hope to possess, may operate in part via conscious reflection on reason, it must also largely operate via unconscious mechanisms.[14]

This argument needs to identify some "complement" which, when combined with the *N*-disposition, gives one the Disposition to Believe as Reason Requires. What is this complement? On the one hand, it cannot be the Disposition to Believe as Reason Requires itself. Otherwise, the *N*-disposition would make no difference. On the other hand, the complement cannot be a disposition to have a *coherent* pattern in which one does *not* believe as reason requires. Since the *N*-disposition is triggered only by *in*coherent patterns, it would again make no difference. Moreover, combining this complement with the *N*-disposition would not deliver the Disposition to Believe as Reason Requires.

Instead, the complement would have to be a disposition either to believe as reason requires or to have the incoherent pattern. More specifically, the suggestion would be that the

> *Negative Side* of the Disposition to Believe as Reason Requires: not to believe *p* if reason requires one not to believe *p*,

is constituted by the *N*-disposition and the

> *Negative N-complement*: (*either* not to believe *p or* (to believe *p* and to believe not-*p*)) if reason requires one not to believe *p*.[15]

The suggestion, when spelled out, is bizarre. In order to have the Negative *N*-complement, one must already have the ability to *detect*—that is, to *respond differentially* to, whether consciously or unconsciously—the fact that reason requires one not to believe *p*. But if one has the ability to detect that reason requires one not to believe *p*, then why not be disposed to respond to this detection *simply by not believing that p*? With such a disposition, one would have the Negative Side straightaway. Why be disposed, instead, to respond to this detection *by either not believing p or both believing p and believing not-p*? Of course, one can still recoup the Negative Side if one also has the *N*-disposition, since the *N*-disposition will prevent one from both believing *p* and believing not-*p*, and so it will steer one into not believing *p*. But why bother with this detour in the first place?

One might reply: "Granted, if we were somehow to construct the

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14. A lesson of Lewis Carroll, "What the Tortoise Said to Achilles," *Mind* 4 (1895): 278–80.

15. Why not suggest, instead, that the *Negative Side* is simple but the *Positive Side*: to believe *p* if one ought to believe *p*, is composed of the *N*-disposition and the *Positive N-complement*: (*either* to believe *p* or both to believe *p* and to believe not-*p*) if one ought to believe *p*? The answer is that, because of Stronger Evidence, this complement and the simple Negative Side would suffice for the Disposition to Believe as Reason Requires. The *N*-disposition would be superfluous.

Negative Side from scratch, this would be a bad way to go about it. But, as it happens, we do best to build on what we already have. And we already have the Negative *N*-complement. So, the best way for us to acquire the Negative Side is to acquire the *N*-disposition." However, it is simply implausible that we have the Negative *N*-complement: that we are disposed, when reason requires us not to believe *p*, either not to believe *p* or both to believe *p* and to believe its negation.

III. THE SECOND ARGUMENT FOR *N*-MEANS: THE *N*-DISPOSITION AS DEFAULT WHEN THE DISPOSITION TO BELIEVE AS REASON REQUIRES FAILS

On reflection, it is not surprising that the *N*-disposition is not part of the Disposition to Believe as Reason Requires or of whatever approximation to it that we might hope to possess: not part of a capacity to detect, and to exploit the detection of, what reason requires in each particular situation. As we noted from the outset, the *N*-disposition is *not sensitive* to particular situations.

The second argument for *N*-means is that the *N*-disposition comes into play when our sensitivity to reason, which is of course imperfect, gives out. When this happens, we are sometimes left in incoherent patterns. In such cases, the *N*-disposition exchanges this incoherent pattern for some coherent pattern, selected with equal probability from the coherent patterns that we are otherwise least disposed to avoid. Over the long run, this leads to a greater Difference. This, it might be argued, is why *N*-means is true.

Recall that, according to What Reason Requires Is *N*-coherent, either

  (i) reason requires one to believe *p*, and reason requires one not to believe not-*p*; or
  (ii) reason requires one not to believe *p*, and reason requires one to believe not-*p*; or
  (iii) reason requires one not to believe *p*, and reason requires one not to believe not-*p*.

Insofar as one encounters cases (i) and (ii), *N*-means is not corroborated. Consider case (i). If one exchanges the incoherent pattern for the coherent pattern of believing *p* and not believing not-*p*, then one loses a belief that reason requires one not to have. If one selects instead the coherent pattern of not believing *p* and believing not-*p*, then one loses a belief that reason requires one to have. And if one selects the coherent pattern of not believing *p* and not believing not-*p*, then one loses a belief that reason requires one to have and a belief that reason requires one not to have. So it is a wash. If the *N*-disposition selects

among these coherent patterns with equal frequency, then, over the long run, it will not lead to a greater Difference.

It is only insofar as one encounters case (iii) that *N*-means is corroborated. In that case, by dropping the belief that *p* or dropping the belief that not-*p*, one loses a belief that reason requires one not to have. And by dropping both beliefs, one loses two beliefs that reason requires one not to have.

By parity of reasoning, however, a different disposition would lead to an even greater Difference, namely, the

> *Suspend-Belief (SB)-disposition*: a disposition, when one believes *p* and believes not-*p*, to drop both beliefs.

In cases (i) and (ii), the *SB*-disposition, like the *N*-disposition, is a wash. In case (iii), the *SB*-disposition increases the Difference more than the *N*-disposition. The *SB*-disposition always leads one to lose two beliefs that reason requires one not to have, whereas the *N*-disposition sometimes leads one to lose only one.[16] In the end, the *N*-disposition is worth having only insofar as it approximates the *SB*-disposition. The argument for the *N*-disposition is thus unstable. If it supports the *N*-disposition, then it supports the alternative *SB*-disposition even more.

One might reply, along lines we encountered earlier: "Granted, if it were up to us which dispositions to have, we ought to have the *SB*-disposition. But, as it happens, we ought to build on what we already have. And we already have, to some extent, the *N*-disposition, not the *SB*-disposition." However, it is less plausible that we have the *N*-disposition than that we have the *SB*-disposition, or no relevant disposition. Simply put, little in our experience indicates the presence of a randomizing mechanism like the *N*-disposition.

IV. THE ARGUMENT FOR *N*-CONSTITUTION

Two points made in our discussion of *N*-Means allow us to reject straightaway

> *N-constitution*: If one does not have the *N*-disposition, then one does not have beliefs.

First, as we saw, the *N*-disposition is not necessary for the Disposition to Believe as Reason Requires. But the Disposition to Believe as Reason

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16. In fact, the *N*-disposition will very rarely lead one to lose both beliefs. If one is otherwise disposed to be in the incoherent pattern, then one is otherwise disposed to believe *p* and otherwise disposed to believe not-*p*. Thus, believing neither is the coherent pattern that one is otherwise most disposed to avoid. The coherent patterns that one is otherwise least disposed to avoid are believing *p* and not believing not-*p*, and not believing *p* and believing not-*p*.

Requires would seem to be sufficient for having beliefs. Second, as we also saw, it is doubtful that we have the *N*-disposition. But it is not doubtful that we have beliefs.

V. DO THESE CONCLUSIONS GENERALIZE TO *C*?

The first argument for *N*-means was that the *N*-disposition is part of the Disposition to Believe as Reason Requires.[17] The analogous argument for *C*-means—that the *C*-disposition is part of the Disposition to Believe as Reason Requires—may at first seem more plausible.

One might initially suggest that the

Positive Side: to believe p if reason requires one to believe p

is composed of the *C*-disposition and the

Unrestricted Positive C-complement: (either to believe p or to believe p and not to believe q) if reason requires one to believe p and q is a logical consequence of p.

But this suggestion would not support *C*-means. It is hard to see why *C*-means should be true unless the following is true:

Epistemic Transmission: If reason requires one to believe p and q is a logical consequence of p, then reason requires one to believe q.[18]

And if Epistemic Transmission is true, then the Unrestricted Positive *C*-complement suffices for the Positive Side, without any help from the *C*-disposition.

In order to leave a role for the *C*-disposition to play, one must suggest that the Positive Part is composed of the *C*-disposition and the

Restricted Positive C-complement: (either to believe p or to believe p and not to believe q) if, *as far as the noninferential evidence goes,* reason requires one to believe p,

where "noninferential" evidence is not transmitted from other evidence by logical consequence. Consider a case in which reason requires one to believe p as far as the noninferential evidence goes, but it is not the case that reason requires one to believe q as far as the noninferential evidence goes. On its own, the Restricted Positive *C*-complement might well leave one believing p and not believing q. The *C*-disposition would prevent this, leading one to believe q.

17. I am indebted here to comments from John Broome, which prompted me to elaborate on this point.

18. As in my formulation of *C*, I ignore qualifications about the obviousness of the logical relationship and reasons for having an opinion whether q. I offer more explanation of Epistemic Transmission in "How Does Coherence Matter?"

The Restricted Positive *C*-complement does not seem as strange or superfluous as the *N*-complement we considered. Indeed, it may appear to effect a plausible division of labor. When the Restricted Positive *C*-complement detects sufficient noninferential evidence, it leads one to believe *p*. The *C*-disposition then responds to the *belief* that *p*—not to any independent inferential evidence—by leading one to believe *q*. In other words, with this division of labor, one needs to monitor directly only the noninferential evidence. The *C*-disposition will ensure that one then believes what one would have believed if one had monitored directly the inferential evidence, without the cost of directly monitoring it.

Yet this division of labor is an illusion. The *C*-disposition and the Restricted Positive *C*-complement do not suffice for the Positive Side. Consider a case in which

(1) *q* is a logical consequence of *p*1 and *q* is a logical consequence of *p*2;
(2) as far as the noninferential evidence goes, reason requires one not to believe *p*1, *p*2, or *q*;
(3) nevertheless, all things considered—taking into account both the noninferential and inferential evidence that *q*—reason requires one to believe *q*. This is precisely because logical consequence transmits the noninferential evidence that *p*1 and the noninferential evidence that *p*2 to *q*. Although these pieces of evidence are insufficient on their own, they are conclusive when taken together.[19]

The *C*-disposition and the Restricted Positive *C*-complement would not lead one to believe *q*, even though reason requires one to believe *q*. (Call this "Problem A.") The lesson is that we believe what reason requires only if we are *independently* sensitive to inferential evidence.[20]

Moreover, in order to have not only the Positive Side but also the Negative Side of the Disposition to Believe as Reason Requires, we must

19. For example, the man in the getaway car appears to me in one moment to be Tweedledee and in the next to be Tweedledum. (Or one witness tells me that he is Tweedledee, while another tells me that he is Tweedledum.) There is not sufficient evidence to conclude that he is Tweedledee, and there is not sufficient evidence to conclude that he is Tweedledum. But there may be conclusive evidence for a logical consequence of each of these would-be conclusions: that either he is Tweedledee or he is Tweedledum.

20. Joseph Raz points out to me (without endorsement) that one might understand the Restricted Positive *C*-complement as to believe *p* if (*all things considered*, reason requires one to believe *p*, and also, *as far as the noninferential evidence goes*, reason requires one to believe *p*). However, this would still face Problem A. And it would vitiate the division of labor. It would require us to monitor directly the inferential evidence but forbid us to respond directly to it.

add some negative disposition to the *C*-disposition and the Restricted Positive *C*-complement. First, suppose that we add the

> *Default Negative Disposition*: not to believe *p* unless led to believe it by the Restricted Positive *C*-complement or the *C*-disposition.

In a case in which

(1) as far as the noninferential evidence goes, reason requires one to believe *p*, and
(2) all things considered, reason requires one not to believe *p*,

this trio of dispositions would lead one to believe *p*, even though reason requires one not to (Problem B). Worse, suppose that

(3) *q* is a logical consequence of *p*, and
(4) all things considered, reason requires one not to believe *q*. Indeed, there is strong noninferential evidence against *q*, and this accounts for the inferential evidence against *p* that overrides the noninferential evidence that *p*.

Then the trio of dispositions would also lead one to believe that *q*, even though reason requires one not to (Problem C).

Instead of the Default Negative Disposition, we might add the

> *Restricted Negative Disposition*: not to believe *p*, if, as far as the noninferential evidence goes, reason requires one not to believe *p*.

In the case that we were just considering, the Restricted Negative Disposition would press one not to believe *q* (avoiding Problem C). But the Restricted Positive *C*-complement would still press one to believe that *p* (Problem B). Not only is this the wrong result but also it would result in a stalemate of conflicting dispositions, since the *C*-disposition would press one either not to believe *p* or to believe *q* (Problem D).

Furthermore, suppose that

(1) *q* is a logical consequence of *p*;
(2) as far as the noninferential evidence goes, reason requires one to believe *p*;
(3) as far as the noninferential evidence goes, reason requires one not to believe *q*; and
(4) all things considered, reason requires one to believe *p*, and so requires one to believe *q*.

In this case, the Restricted Negative Complement would press one not to believe that *q*, even though reason requires one to (Problem E). And once again there would be a stalemate of conflicting dispositions (Problem D).

The lesson is that we avoid believing what reason requires us not

to believe only if we are *independently* sensitive to inferential evidence—just as, as we saw earlier, we believe what reason requires only if we are independently sensitive to inferential evidence. In other words, we have the Disposition to Believe as Reason Requires only if we are independently sensitive to inferential evidence. But if we are independently sensitive to inferential evidence, then the *C*-disposition is superfluous.

The second argument for *N*-means was that our imperfect sensitivity to reason would sometimes leave us in incoherent patterns. The *N*-disposition would then lead us to exchange those incoherent patterns for some coherent pattern, which over the long run would increase the Difference. The problem, as we observed, was that the *SB*-disposition would increase the Difference even more.

The analogous argument for *C*-means falls short in a parallel way. Epistemic Transmission implies

> *What Reason Requires Is C-coherent*: In any given case, where *q* is a logical consequence of *p*, there is *a specific C*-coherent pattern of belief that reason requires one to have. In particular, either
>
> (i) reason requires one to believe *p*, and reason requires one to believe *q*; or
> (ii) reason requires one not to believe *p*, and reason requires one not to believe *q*; or
> (iii) reason requires one not to believe *p*, and reason requires one to believe *q*.

In case (i), if one believes *q*, the Difference increases by one, but if one revises one's belief that *p*, then the Difference decreases by one, so the *C*-disposition is a wash. In case (ii), the situation is the reverse, and so the *C*-disposition is again a wash. It is only in case (iii) that *C*-means is corroborated. The *C*-disposition increases the Difference by one, if one forms the belief that *q*, and also by one, if one revises the belief that *p*.

However, the

> *Reversion (R)-disposition*: a disposition, when one believes *p* and does not believe *q* (which is a logical consequence of *p*), to revise the belief that *p* and form the belief that *q*,

would lead to an even greater Difference. In cases (i) and (ii), the *R*-disposition, like the *C*-disposition, is a wash. In case (iii), the *R*-disposition always increases the Difference by two, whereas the *C*-disposition sometimes increases the Difference by only one. So the argument for the *C*-disposition is unstable. If it supports the *C*-disposition, then it supports the *R*-disposition to an even greater extent.

VI. DO THESE RESULTS GENERALIZE TO *ME*?

The first argument for *N*-means was that the *N*-disposition is part of the Disposition to Believe as Reason Requires. The analogous argument—namely, that the *ME*-disposition is part of the Disposition to Believe and Intend as Reason Requires—for the analogous thesis—namely, *ME*-means—is no more plausible:[21]

> The *Negative ME-complement*: (either not to intend to *E* or (to intend to *E*, to believe that *E* only if one intends to *M*, and not to intend to *M*)) if reason requires one not to intend to *E*,

is likewise oddly indirect and not plausibly actual.[22]

The analogue of the second argument for *N*-means—namely, that the *ME*-disposition is a useful default when one's imperfect sensitivity to reason lands one in an incoherent pattern—might seem at first even less promising. What Reason Requires Is *N*-coherent, which follows from Stronger Evidence and Epistemic Strictness, at least guarantees that, in any case, the pattern that reason requires satisfies *N*. But it is not immediately clear why the corresponding thesis, What Reason Requires Is *ME*-coherent, should hold. Granted, in cases in which reason requires one not have the means-end belief or requires one not intend to *E*, the pattern (or patterns) that reason requires one to have is *ME*-coherent. But what if it is neither the case that reason requires one not have the means-end belief nor the case that reason requires one not intend to *E*? For What Reason Requires Is *ME*-coherent to be true, reason must then require one to intend to *M*. Epistemic Strictness implies that reason requires one to have the means-end belief. And if reason *requires* one to intend to *E*, then, from

> *Practical Transmission*: If reason requires one to believe that one will *F* only if one *G*s and reason requires one to *F*, then reason requires one to *G*,[23]

it follows that reason requires one to intend to *M*. But what if reason neither requires one to intend *E* nor requires one not to intend *E*? Why then should reason require one to intend to *M*? If it is not the case that reason requires one to intend the end, then why should it be the case that reason requires one to intend the means? We could ignore this

21. Just as we left it open whether evidence was a function of belief or objective factors, we can likewise leave it open whether reason for intention is a function of desires or value.

22. The same is true of the Positive *ME*-complement.

23. This is in the spirit of, if not strictly entailed by, the "facilitative principle" that Joseph Raz formulates in "The Myth of Instrumental Rationality," *Journal of Ethics and Social Philosophy* 1 (2005): 1–28.

possibility if there were some practical analogue to Epistemic Strictness. But there is no such analogue. It is often underdetermined which ends reason requires us to adopt.

We can guarantee What Reason Requires Is *ME*-coherent, however, if we slice the relevant intentions more finely. Instead of speaking simply of whether reason requires one to intend to *E* and whether reason requires one to intend to *M*, we need to speak of whether reason requires one

  (i)   to intend to *M*, provided one intends to *E*;
  (ii) to intend to *M*, provided one does not intend to *E*;
  (iii) to intend to *E*, provided one intends to *M*; and
  (iv) to intend to *E*, provided one does not intend to *M*.

Recall that the apparent exception to What Reason Requires Is *ME*-coherent is a case in which reason requires one to have the means-end belief, neither requires nor forbids one to intend to *E*, and does not require one to intend to *M*. In such a case, one might be in the incoherent pattern of having the means-end belief, intending to *E*, and not intending to *M* without it being the case that reason required one to revise some attitude. This seems plausible, however, only because we fail to distinguish (iii) from (iv). If one *does* intend to *M*, then it might well be the case that reason neither requires one to intend to *E* or not to intend to *E*. But if one is in the incoherent pattern, and so does *not* intend to *M*, then presumably (assuming that reason requires one to have the means-end belief) reason requires one *not* to intend to *E*. At least this would be so if we accept

> *Effectiveness*: Reason requires one not to intend to *E* unless intending to *E* makes it more likely that one *E*s.[24]

Intending to *E*, without taking (what reason requires one to believe are) necessary means to *E*ing, would not make it more (epistemically) likely that one *E*s.

Since *N* implied only three coherent patterns of belief and What Reason Requires Is *N*-coherent implied only three reason-patterns, it was fairly easy to evaluate what the effect of the *N*-disposition would be. By contrast, *ME* implies seven coherent patterns of attitudes, and the foregoing defense of What Reason Requires Is *ME*-coherent implies 162 reason-patterns! Fortunately, we can summarize the effects. Suppose that one leaves the incoherent pattern for the coherent pattern of

  (A)   intending to *M*, intending to *E*, and believing that one *E*s only if one intends to *M*.

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24. In "The Myth of Practical Consistency," I offer, in effect, more explanation of Effectiveness.

Then the effect on the Difference is:

(a1) +1 when reason requires one to intend to *M* provided that one intends to *E,*

(a2) −1 when reason requires one not to intend to *M* provided that one intends to *E,*

(b1) +1 when reason requires one to intend to *E* provided that one intends to *M,*

(b2) −1 when reason requires one not to intend to *E* provided that one intends to *M,*

(c1) −1 when reason requires one to intend to *E* provided that one does not intend to *M,*[25]

(c2) +1 when reason requires one not to intend to *E* provided that one does not intend to *M,* and

  0 in all others.

In shorthand, the effect from moving into other coherent patterns is:

(B) intend to *M,* intend to *E,* don't believe: same as for (A), plus

  (d1) −1 if requires to believe and
  (d2) +1 if requires not to believe.

(C) intend to *M,* don't intend to *E,* believe:

  (c1) −1 if requires to *E* if not *M,*
  (c2) +1 if requires not to *E* if not *M,*
  (e1) +1 if requires to *M* if not *E,* and
  (e2) −1 if requires not to *M* if not *E.*

(D) intend to *M,* don't intend to *E,* don't believe: same as for (C), plus

  (d1) −1 if requires to believe and
  (d2) +1 if requires not to believe.

(E) don't intend to *M,* don't intend to *E,* believe:
  (c1) −1 if requires to *E* if not *M* and
  (c2) +1 if requires not to *E* if not *M.*

25. Objection: "Suppose that reason requires one to intend to *E* provided that one does not intend to *M* because reason requires one to intend to *E whether or not* one intends to *M.* Why should the difference change in this case?" Reply: It is not affected in such a case, and our scorekeeping does not imply otherwise. Since (c1) is the case, there is a decrease of one, but since (b1) is also the case, this is offset by an increase of one.

(F) don't intend to *M*, don't intend to *E*, don't believe: same as (E),
      plus

  (d1) −1 if requires to believe and
  (d2) +1 if requires not to believe.

(G) don't intend to *M*, intend to *E*, don't believe:

  (d1) −1 if requires to believe,
  (d2) +1 if requires not to believe.

Notice that for each set of reason-patterns, say (a1), in which moving into a given coherent pattern, (A)–(G), has a net gain, there is another set, here (a2), in which moving into that same coherent pattern has a net loss. If one confronts different reason-patterns with equal frequency, therefore, the *ME*-disposition, which selects coherent patterns with equal probability, does not increase the Difference.

One might reply, however, that it is not plausible that one confronts reason-patterns with equal frequency. Assume that there is no independent reason for intending to *M* or intending to *E*. That is, the only reason, if any, to intend to *M* is that it is a necessary means to *E*ing and that *E*ing is worth taking some sufficient means to it, and the only reason, if any, to intend to *E* is that *E*ing is worth taking some sufficient means to it (i.e., that the only reasons to intend to *E* are "object-given"). Further, assume that if one intends to *E*, then one will take means that, if added to *M*, would be sufficient for *E*, that the means-end belief is no more likely to be true than to be false, and that *E*ing is no more likely to be worth any given means than not to be worth those means. Then, it might be argued, first, that (a1) is less likely than (a2). For (a1) will be true only when the means-end belief is true *and E*ing is worth *M*, whereas (a2) will be true if either conjunct fails. Since conforming to *ME* does not affect the Difference or decreases it by one when (a2) is the case and does not affect the Difference or increases it by one when (a1) is the case, this "a-asymmetry" tends, other things equal, to lead the *ME*-disposition to lower the Difference. Similarly, it might be argued that (e1) is less likely than (e2). Indeed, the assumption that there is no independent reason to intend to *M* entails that, while (e2) can occur, (e1) cannot. Since satisfying *ME* either does not affect the Difference at all or lowers it by one when (e2) is the case and does not affect the Difference at all or increases it by one when (e1) is the case, this "e-asymmetry" likewise tends, other things equal, to lead the *ME*-disposition not to increase the Difference.

However, it might be argued, other things are not equal: (c1) is less likely than (c2). For (c1) is true only when the means-end belief is false

and *E* is worth some sufficient means to it, whereas (c2) is true if either conjunct fails. Since satisfying *ME* either does not affect the Difference or increases it by one when (c2) is the case and does not affect the Difference or lowers it by one when (c1) is the case, this "c-asymmetry" tends, other things equal, to lead the *ME*-disposition to increase the Difference. Moreover, the c-asymmetry comes into play when the agent enters into any of the first six coherent patterns, (A)–(F). The a-asymmetry comes into play only when the agent enters into two patterns, (A) and (B), and the e-asymmetry comes into play only when the agent enters into two patterns, (C) and (D). So, provided that the c-asymmetry is not too small relative to the a- and e-asymmetries, the c-asymmetry might make it the case that the *ME*-disposition increases the Difference.

By the same token, however, a disposition to enter into only (E) and (F), that is, the

> *Suspend the End* (*SE*)-disposition: a disposition, when one intends to *E*, believes that one will *E* only if one intends to *M*, and does not intend to *M*, to revise the intention to *E*,

would increase the Difference even more than the *ME*-disposition. On the one hand, the *SE*-disposition increases the Difference to the same extent as the *ME*-disposition when the c-asymmetry appears. On the other hand, the *SE*-disposition never decreases the Difference when the a- and e-asymmetries appear, whereas the *ME*-disposition sometimes does.

VII. HOW DO WE EXPLAIN THE "OUGHT" OF FORMAL COHERENCE?

The foregoing suggests that we may have to do without requirements of formal coherence as such. But can we do without them? Again, let us consider the simplest case, *N*. The Simple Error Theory, as we saw earlier, holds that we merely confuse *N* with What Reason Requires Is *N*-coherent. The difficulty, as we also saw, is that What Reason Requires Is *N*-coherent cannot explain, whereas *N* can explain,

> *N-satisfaction*: When one exchanges the *N*-incoherent pattern for *any* *N*-coherent pattern, *whether or not* it is the pattern that reason requires one to have in that case, one does something (although not necessarily everything) that one ought to do, in a way in which one would not have done something that one ought (at least not in the same respect) if one instead remained in the *N*-incoherent pattern.

Our question, then, is whether we can explain *N*-satisfaction without *N*.

Here is a proposal. Suppose that one believes *p* and believes not-*p*. Plausibly, both this fact and the general truth, What Reason Requires

Is *N*-coherent, are available to one. So, plausibly, one is in a position to know that either reason requires one not believe *p* or reason requires one not believe not-*p*. In other words, the incoherence in one's beliefs is itself *evidence* that there is some revision that reason requires one to make: that there is some specific coherent pattern, different from the incoherent pattern one now has, that reason requires one to have. In light of this (at least if it matters sufficiently whether *p* or whether not-*p*), plausibly reason requires one to believe that reason requires one not have at least one of these beliefs and/or requires one to try to decide which belief, or beliefs, reason requires one not have.[26] Suppose one responds to either of these "second-order" requirements of reason. Then either one arrives at a conclusion about which belief, or beliefs, reason requires one not have or one does not. If, on the one hand, one arrives at a conclusion that reason requires one not have certain beliefs, then one would be defying one's own judgment to refuse to revise those beliefs. If, on the other hand, one reaches no conclusion about which belief, or beliefs, to revise, then one would be defying one's own judgment, in much the same way, to refuse to suspend belief. A live doubt has been raised whether reason permits one to believe *p*, and one is presently deliberating whether it permits this. To believe that *p* before having concluded that reason permits one to believe it is to defy one's own judgment. (The same, of course, goes for believing not-*p*.) It is irrational to defy one's own judgment in either of these ways, as is codified by

> *Believed Reason* (*BR*): If one believes at *t* that reason requires one to have attitude *A*,[27] then one is rationally required to form or sustain, going forward from *t*, on the basis of this belief, *A*, and if one believes at *t* that reason requires one not to have *A*, then one is rationally required to revise or refrain from forming, on the basis of this belief, going forward from *t*, *A*, and if one is deliberating at *t*, in response to a live doubt, whether reason permits one to have *A* but has not yet concluded that it does,[28] then one is rationally required to revise or refrain from forming, going forward from *t*, *A*.

26. This may also count as a requirement of rationality, as Fabrizio Cariani points out to me.

27. Of course, no one will readily express his or her belief in these terms. Recall that "reason requires" is an artificial covering term. In the case of believing that *p*, the relevant judgment might be more commonly expressed as: "There's compelling evidence that *p*," or as "It's overwhelmingly likely that *p*."

28. This clause, or at least the phrase "live doubt," needs further elaboration. As Mike Martin and Mike Titelbaum point out to me, there are cases in which it does not seem irrational to continue believing something while considering whether there is sufficient evidence for it.

Our aim, recall, is to explain the "ought" in *N*-satisfaction: an "ought" that one violates if one continues with incoherent beliefs but satisfies if one adopts an *N*-coherent pattern of beliefs, even if it is a pattern that is no closer to what reason requires. My suggestion is that the "ought" in *N*-satisfaction is either of the second-order requirements of reason or the rational requirement *BR*. If one satisfies either of the second-order requirements of reason and *BR*, then one's beliefs will be coherent. Yet one might satisfy these requirements in a way that leaves one no closer to what reason requires. This is because, in complying with the second-order requirements, one might fail to reach the correct conclusion about what reason requires one to believe.

This explanation faces two objections. First, it may seem merely to replace the puzzle of why we ought to satisfy *N* with the puzzle of why we ought to satisfy *BR*. After all, if one falsely believes that reason requires one not to believe *p*, when in fact reason requires one to believe *p*, then satisfying *BR* only leads one to lose a belief that reason requires one to have. Why, in doing this, does one still do something that one ought?

One suggestion is that the positive judgment that attaches to satisfying *BR*, even against reason, is an *evaluative* rather than, strictly speaking, a *normative* judgment. Evaluative judgments have their home in the third-person standpoint of appraisal, from which we admire or criticize, praise or blame, the responses of a person, or of some sub–personal system of his. Normative judgments, by contrast, have their home in the first-person standpoint of deliberation, within which we seek to settle for ourselves the questions, "What to believe?" "What to choose?"—and, by extension, in the second-person standpoint of advice, from which others offer us reasons to help us to settle these questions. The suggestion is that while one does not, strictly, do something that one *ought*, still one, or some sub–personal system of one's, *does well* in some respect: displays a virtue or functions properly.

This suggestion is at least part of the answer. We can explain why satisfying *BR* should be evaluated positively. When a person manifests a valuable disposition, that manifestation naturally merits positive appraisal: as displaying a virtue or functioning properly. And the disposition to satisfy *BR*, in contrast to the *N*-disposition, is valuable. When complemented by a disposition to have true beliefs about reason, the disposition to satisfy *BR* leads to a greater Difference. Thus, the disposition to satisfy *BR* is plausibly a part of the Disposition to Believe and Intend as Reason Requires. Moreover, the disposition to satisfy *BR* is not only instrumentally valuable but also constitutively valuable. It is a necessary part of our capacity to be guided by our awareness of what reason requires, and this capacity is part of what makes us persons, or

rational agents.[29] So we can explain why one does well when one satisfies *BR*.

The trouble is that we not only do well but also, it seems, respond to a normative requirement when we satisfy *BR*. When *BR* applies to us, it usually does, or could, seem to us, from within the deliberative perspective, that we *ought* to satisfy *BR*. Correspondingly, it makes sense for others to advise us, or do something like advise us, to satisfy *BR*. "Given that you believe that the evidence makes it overwhelmingly likely that *p*, you ought to believe *p*. It would be irrational of you to refuse to." This is not, or not merely, third-person appraisal. Somehow it is meant to carry weight within our own deliberation.

This reason, which is supposed to speak in favor of satisfying *BR* on a particular occasion, cannot be that the *disposition* to satisfy *BR* is valuable. The fact that a disposition is valuable may be reason to *cultivate* that disposition, perhaps even reason strong enough to support a requirement. But it does not follow from the fact that reason requires one to *cultivate* a disposition that reason requires one, or even that one has any reason, to *manifest* it on any particular occasion. This familiar gap between general and particular threatens traditional forms of indirect utilitarianism. From the fact that one is morally required to cultivate a *disposition* to conform to commonsense morality (because this disposition will lead one to do the most good over the long run), it does not follow that one is morally required to *conform* to commonsense morality in a particular case in which this would not do the most good.[30] As Broome similarly illustrates, it does not follow from the fact that reason requires you to cultivate a disposition to flee from an irresistible attack that reason requires you, or even that you have any reason, to flee an irresistible attack from a grizzly bear (in which case one's only hope is to play dead).[31] Likewise, the fact that a disposition is valuable

29. Compare Derek Parfit, *Reasons and Persons* (Oxford: Oxford University Press, 1984), ix. David Owens and Geoff Sayre-McCord suggested this to me.

30. See, e.g., Parfit, *Reasons and Persons*, 31–35. Notice that, even if the *N*-disposition were valuable, this problem would stand in the way of accounting for a normative requirement to satisfy *N*.

31. Broome ("Does Rationality Give Us Reasons?" 335–36) proposes an ingenious way to bridge the gap between general and particular. It is natural, he suggests, that complaints about a person's failure to cultivate a disposition should be focused on particular failures to manifest it. For the latter is particularly salient evidence of the former. Thus, when we say, "Given that you believe that reason requires you not to *X*, you ought rationally not to *X*," what we mean is something like "To the extent that you believe that reason requires you not to *X*, but still *X*, this indicates that you have failed to cultivate the disposition to be rational to the fullest degree, which reason required you to do." I don't find this proposal entirely persuasive. First, there are cases in which it makes sense to criticize someone as being irrational for a particular episode, even though we do not believe that he failed to take steps, that reason required him to take, to cultivate a dis-

may explain why manifesting it on a particular occasion counts as an episode of proper functioning. When one flees the grizzly, one, or one's "flight response," functions properly. But this hardly speaks, within the standpoint of deliberation, in favor of fleeing the grizzly. And even if one insists that it is *some* reason to flee, it clearly is not reason enough to make it the case that reason *requires* one to flee.

Let me suggest another explanation of what, within the first-person deliberative perspective, speaks in favor—or, rather, *seems* to speak in favor—of satisfying *BR* on a particular occasion. Take someone who is required by *BR* to believe *p*. Given that *BR* requires her to believe *p*, she must satisfy its antecedent, by judging that reason requires her to believe *p*—or, less artificially, that she ought to believe *p*, because the evidence makes it overwhelmingly likely that *p*. Since she judges that she ought to believe *p*, and since believing *p* is what *BR* requires, it will seem to her, of what *BR* requires, that she ought to do it. It is not as though she sees herself as having, or needing, some *special* reason to realize such-and-such a pattern among her beliefs: a reason of the kind for which we searched in vain in the last section. Instead, she just judges,

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position that would have led him to avoid that irrationality. Even if we have reason to want a disposition to be rational to the fullest degree, it does not follow that reason requires us to acquire that disposition to the fullest degree. At the margins, the costs of improving our disposition—extensive therapy, e.g.—might be quite high. There is no guarantee that the costs will not outweigh the benefits. Second, there are cases in which we believe that someone failed to take steps, that reason required him to take, to improve his disposition to be rational, but do not criticize him for irrationality in any particular case. We may not have witnessed any irrationality, and there may not even be any irrationality to witness. Suppose an agent happens by luck to acquire the disposition to be rational, even though he failed to take the steps he should have taken to bring that about. Even when confronted with evidence of this failure, we do not criticize him for being irrational. Finally, even when we witness some present failure to manifest some disposition, and know, on this basis, that the agent failed in the past to take steps, which reason required him to take, to acquire this disposition, it is not generally true that we express our criticism of this past failure to acquire in terms of a criticism of the present failure to manifest. An adult illiterate, brought up in a suitable environment, without congenital defects, ought to have acquired the capacity to understand the written word. So we might say, "You ought to be able to read this sign. You ought to have acquired that capacity." But we would never say: "You ought to read this sign here and now. Read it!" It might be replied that there is a crucial difference between this case and the case of someone who lacks the disposition to be coherent: the illiterate, who lacks the *capacity* to read, simply *cannot* understand the sign here and now, whereas the person who lacks the *disposition* to be rational still *can* be rational here and now, although he is not disposed to. This is why it makes sense to say to the irrational person: "You ought not *X* here and now; it would be irrational of you to *X*! Don't!" whereas we would not say to the illiterate: "You ought to read this sign here and now! Read it!" The question, however, is why this difference should matter, if what we are really criticizing, in both cases, is not what the agent is failing to do here and now but instead what the agent failed to do in the past. In that respect, the two cases are relevantly similar. The agent *could have* acquired the capacity or the disposition.

perhaps falsely, that she ought to believe *p* because the *evidence* makes it overwhelmingly likely that *p*. Furthermore, we can advise, or do something that looks like advise, her to believe as *BR* requires, by drawing her attention to the content of her own belief that she ought to believe it. In sum, while reason does not in fact require one to satisfy *BR*, we can explain why it will inevitably *seem* to one as though reason requires it.[32] And this explanation of the *seeming*, if not actual, normative force of *BR* may be enough for the error theory that we are trying to construct.[33]

The other objection to the proposed explanation of *N*-satisfaction is that it does not cover all of the relevant cases. According to *N*-satisfaction, one does something that one ought if one makes one's beliefs *N*-coherent. However, one can make one's beliefs *N*-coherent in ways that satisfy neither the second-order requirements of reason, nor *BR*, nor any first-order requirement of reason. First, one can make one's beliefs *N*-coherent *akratically*: in defiance of one's own judgment about what reason requires one to believe.[34] Second, one can make one's beliefs *N*-coherent *unreflectively*: without any conscious reflection on one's reason at all. This is surely what happens in children and lower animals, which sometimes make their beliefs *N*-coherent, even though they have no beliefs about reason.

Here is a partial response. These akratic and unreflective cases may merit positive evaluation, because one manifests certain valuable unconscious dispositions, different from the *N*-disposition. As we have seen, being in an *N*-incoherent pattern of belief is information that one is not believing as reason requires. One unconscious disposition that might take advantage of this information is a disposition to respond to incoherence by deploying further sensitivities to reason that might, with some reliability, determine which coherent pattern reason requires. To the extent that these sensitivities are reliable, this disposition is instrumentally valuable.[35] If no further sensitivities settle the matter, then a

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32. The same cannot be said for *N*, because *N*'s content does not guarantee that, when *N* would require one to revise either the belief that *p* or the belief that not-*p*, one believes that reason requires one either to revise the belief that *p* or to revise the belief that not-*p*.

33. This is the "Transparency Account" of my "Why Be Rational?" (*Mind* 114 [2005]: 509–63). For careful and forceful objections, see Jason Bridges, "Rationality, Normativity, and Transparency," *Mind* (forthcoming); and Nadeem Hussain, "The Requirements of Rationality" (unpublished manuscript, Stanford University, 2007). Some of these objections may be answered by the observation that satisfying *BR* qualifies one for positive appraisal.

34. I thank Alex Sarch and Nishi Shah, in particular, for pressing me on this.

35. Now, one might wonder why there should be *further* sensitivities to reason. If there were sensitivities that might determine, with some reliability, which coherent pattern reason requires one to have, then why weren't they deployed earlier, so that one never entered into an incoherent pattern in the first place? One answer might be that our Disposition to Believe

second disposition comes into play: the *SB*-disposition, to respond to *N*-incoherent patterns by suspending belief. As we saw, the *SB*-disposition increases the Difference more than the *N*-disposition over the long run. So the *SB*-disposition is also instrumentally valuable. Furthermore, these unconscious dispositions, to deploy further sensitivities and then to suspend belief, are plausibly actual. They are the unconscious analogs of what we do at the conscious level. When we find ourselves believing contradictory things, we tend to respond by reviewing the apparent evidence (thereby satisfying a second-order requirement of reason), and if this does not settle the matter, by suspending judgment (thereby satisfying *BR*).

Of course, there is no guarantee that *every* akratic or unreflective case involves the manifestation of one of these two dispositions. We can at very least imagine akratic or unreflective cases that do not. Perhaps there is some inclination to say that we still do well in such cases. But I suspect that this is overgeneralization.

VIII. CONCLUSION

I have tried to suggest that it is a mistake to think that beliefs and intentions tend to strive, or ought to strive, for formal coherence as such. A tendency to formal coherence as such helps us neither to believe what the evidence supports nor to intend what promises to be worthwhile. This suggests, in turn, that no such tendency is necessary for beliefs or intentions.

In large part, the Myth of Formal Coherence is fostered by certain truths about the structure of reason. There are reasons for beliefs, which have to do with the likelihood that the beliefs will be true, and there are reasons for intentions, which have to do with the likelihood that the intentions will lead one to act in worthwhile ways. The structure of these reasons, as codified by such principles as Stronger Evidence and Effectiveness, ensures that the pattern of attitudes that reason requires is formally coherent. Thus, if our attitudes are not formally coherent, it follows that we must be violating some requirement. However, this is not a requirement of formal coherence but instead some requirement of reason: a requirement to believe what the evidence supports, or to intend what promises to be worthwhile. Likewise, if we follow our reason, then our attitudes will be formally coherent. But no disposition to formal

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as Reason Requires consists in coarser-grained sensitivities, which are deployed first, and finer-grained sensitivities, which are more costly to deploy and so are more efficiently deployed only when there is some indication, such as an incoherent pattern, that the coarser-grained dispositions are not reliable.

coherence is involved in this.[36] If we tend, or ought, to be formally coherent, it is not as such, but only as a by-product of pursuing what ultimately matters: believing the truth and choosing the good.[37]

36. What, one may ask, are we to say about children and brutes? They have something like beliefs and perhaps even something like intentions. But arguably they lack reasons. (If they have no deliberative perspective, the argument would run, then no consideration can carry weight within their deliberative perspective.) Nevertheless, they have unconscious sensitivities to something structurally analogous to reason: to what is likely to be true and (perhaps) to what is likely to achieve a certain balance of "objectives" (e.g., nourishment, reproduction, avoidance of predators) fixed by natural selection or by some independent conception of the creature's good. Like our sensitivity to reason, and unlike the dispositions to formal coherence as such, these sensitivities produce *specific* attitudes in response to features of the creature's *situation*. And like our sensitivity to reason, and for similar reasons, one might expect, these sensitivities will lead the creature to patterns of attitudes that are formally coherent.

37. The Myth may be reinforced by a further thought: that, our limitations being what they are, we must somehow rely on simple, easily followed rules—which requirements of formal coherence undoubtably are—in order to believe and intend as reason requires. This thought is itself highly questionable. To a very great extent, we succeed in believing and intending as reason requires not by consciously applying rules but instead by relying on unconscious mechanisms. And while these unconscious mechanisms must be tailored to our limitations, it is far from obvious that this means that they must somehow correspond (whatever "correspond" might mean) to rules that we consciously find simple to apply. In any event, if we do need such rules, then requirements of formal coherence as such cannot be among them—or so as I have tried to show.