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# Reasons and Rationality The Case of Group Agents

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#### Introduction

John Broome has been very influential in arguing for a distinction between requirements of rationality—for example, the requirement to be consistent—and reasons: that is, objective reasons of the kind that evidence provides for belief (Broome 1999, 2001a, 2001b, 2004, 2005). One of the many debates that he has opened up, then, bears on how the requirements of rationality relate to reasons and whether in particular there is any reason to fulfill those requirements. Niko Kolodny has argued that there is not, defending an error theory about requirements of rationality. His claim is that the only genuine requirement is sensitivity to reasons and it is a mistake to think that there are independent requirements of rationality (see Kolodny 2005, 2007a, 2008a, 2008b). After an exchange with Kolodny on the matter (Broome 2007; Kolodny 2007b), Broome's (2013: 213) current view is that, while the requirements of rationality may have an independent claim on us, it remains an open question whether this is so.

We do not try to resolve this difference of view in our chapter. What we want to do rather is to bring some independent material to bear on the issue, using recent work in the theory of group agency. It turns out that Kolodny's error theory, when applied to group agency, runs into conflict with some well-known results in that theory and we think that exploring the ways in which the conflict can be removed may be of interest. However the conflict is resolved, it will require a revision either to the error theory or to standard views of group agency.

# 1 Agency

Let an individual agent be a system that has certain purposes or goals and certain representations or beliefs—in particular, representations that are reliably responsive

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to evidence—and that acts reliably for those purposes according to those representations: that is, in a way that promises success if reality corresponds to the representations. An agent may occasionally fail to form representations in an evidentially reliable way or to act for its purposes in an executively reliable manner but such failure ought to be more or less unusual. And even if such failure does occur, the agent ought at least to be capable of recognizing the failure and so far as possible putting it right.

On the face of it, there are two types of requirements on agents. The first are requirements of reason or "reasons-sensitivity", the second requirements of rationality or "coherence". Requirements of reasons-sensitivity concern the relationship between what the world is like—how it presents itself as being—and which attitudes one should hold. For each attitude, there are reasons specific to that attitude that dictate whether one should hold it. In the case of belief, evidence for p provides a reason in favor of believing p, though there might be contrary reasons against believing p. If one's evidence gives one conclusive reason to believe that p, then one ought to believe that p. In the case of action and intention to act, the perceived attraction or desirability of realizing p0 might give one a reason to do p1. If one has conclusive reason to p2, then one ought to intend p3.

Requirements of coherence concern, not the relationship between what the world is like and what attitudes one should hold, but rather the relationship among one's attitudes themselves. One ought not believe p and at the same time believe not-p. One ought not at the same time believe p, believe p entails q, and believe not-q. One ought not at the same time intend A and believe that B is a necessary means to A, but fail to intend B.

That forming attitudes on the basis of attitude-specific reasons is a requirement of agency seems clear: an attitude ought to respond to the reasons that bear on whether one should hold it. More specifically, it ought to respond to the features of its object that make the attitude appropriate, not to features of the state itself that make holding it attractive or desirable (see Parfit 2001). Thus the belief that *p* ought to form on the basis of whether or not the evidence supports *p*, not on the basis of whether it is

 $<sup>^2</sup>$  These latter claims are controversial. In the case of belief, some argue that there are cases in which one ought to believe p for non-epistemic reasons: see, for example, discussions in Booth (2012), Marušić (2012), and Reisner (2008, 2009). In the case of intention, some have proposed that there are cases in which one has conclusive reason to not-A but nevertheless has conclusive reason to intend A rather than not-A. A classic example is Kavka's (1983) toxin puzzle, but more mundane examples appear in Morauta (2010). The primary focus of both discussions is cases in which one being in the state of believing, or in the state of intending, furthers one's goal—in contrast with cases in which one has evidence that the belief is true or in which the intended action furthers one's goal. However, in these cases, the way in which being in the relevant state furthers one's goal is not that being in the relevant state furthers the goal of coherence. Put succinctly: these cases concern an agent's response to facts about what the world is like, not the relationship among attitudes of a given type that the agent has. Thus, those who reject our above assumptions should still find something of interest in our argument.

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profitable or prudent to believe that *p*. The features of the world that provide reasons fit the aim of the attitude, as we might put it. Belief aims at truth, and a belief is more apt to be true insofar as one has evidence for it; intention aims at what is most attractive or desirable among available options, and an intention is more apt to achieve that aim insofar as it tracks perceived attraction or desirability.<sup>3</sup>

It is less obvious why agents ought to be coherent, as Kolodny points out. For example, when we consider the case of belief, it is not obvious that the coherent agent will be more apt to have true beliefs than an incoherent agent; coherence is as easily attained among false beliefs as among true. Similarly, for intention, it is not obvious that the agent with coherent intentions will be more apt to fulfill his desires or obtain the good. Nevertheless, we do all seem to feel the pull of coherence requirements: we think they ought to guide our behavior, and we think that in complying with them we have done something right.

Let us assume with Broome and Kolodny—and indeed with common sense—that we use both reasons-sensitivity and coherence to guide our attitudes. The puzzle, then, is to explain either how these two sets of requirements can coexist or to explain how one set of requirements (or apparent requirements) reduces to the other: most plausibly, how the (putative) requirements of coherence reduce to the requirements of reason. In pursuing this project here, we start from Kolodny's arguments in the case of individuals and show how they lead to problems in the case of group agents. We do not try to connect our suggestions to Broome's (2013) more recent work.

## 2 Individual Coherence

This chapter will focus only on belief, though the parallel issue for intention is also worth considering. Kolodny argues that the requirements of coherence for belief fall out of the requirements of reason, not in the straightforward sense that one has a reason to be coherent as such, but in the sense that requirements of coherence are a byproduct of requirements of reason: they are not genuine requirements in themselves, but the genuine requirements of reason make it possible to explain why we think in error that they are.

Let us consider his argument that focuses on the putative coherence requirement of non-contradiction:<sup>4</sup>

**Non-contradiction** (N). One is rationally required (if at t one believes p, then at t one does not believe not-p).

<sup>&</sup>lt;sup>3</sup> Does Broome (2013) agree? While he thinks that there are distinct requirements of rationality, the evidential and enkratic conditions that he mentions on page 98, in discussing 'Scanlon's condition', correspond well to our conditions here. He thinks that these need qualification but that they hold 'under suitable interpretations'.

<sup>&</sup>lt;sup>4</sup> This primarily follows Kolodny (2007a), and a similar argument can be found in Kolodny (2008b). All named principles in this section are Kolodny's.

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Notice that (N) has a wide-scope character. It ought to be, according to (N), that one does not believe p at t or that one does not believe not-p at t; the requirement bears on the disjunction, not on the disjuncts it contains (Broome 1999). The puzzle, Kolodny explains, is that (N) seems to us like a rational requirement but that we lack a good argument for why this is so: it seems that we have no reason to conform to the dictates of (N). However, if we can explain the seeming force of (N) by appeal to principles about reasons, then we can resolve the puzzle by concluding that (N) is not a genuine requirement.

Recall that reasons concern the relationship between an agent's evidence and her beliefs. Kolodny points out that an evidential situation can tell three ways with respect to p. First, it could be the case that the evidence supports p strongly enough that reason dictates one ought to believe p, and that the evidence fails to support not p strongly enough, so that reason dictates one ought not to believe not-p. Second, the reverse might hold. Or, finally, the evidence could be such that it fails to support p strongly enough and fails to support not-p strongly enough, so that reason dictates one ought not to believe either proposition. That these possibilities are exhaustive means that no evidential situation gives one conclusive reason to believe p and at the same time gives one conclusive reason to believe not-p; there will be conclusive reason to believe only one, or to believe neither. The following principle, in which the disjunction is inclusive—the "or" has the sense of "and/or"—sums up the lesson:

**Reason patterns** (R). In any given situation, either it will be the case that (one is required by reason not to believe p), or it will be the case that (one is required by reason not to believe not-p).

(R) is easily confused with (N), so if (R) explains all the data about why we might be inclined to accept (N), then we can reject (N) but also explain why we mistakenly thought it was correct. So, we might say that the data we thought pointed to a separate requirement of structural coherence are explained by a structural feature of the norms of reason.

Unfortunately, as Kolodny points out, this is too simple: (R) does not explain all the data that we thought justified (N). According to Kolodny, the data that we thought justified (N) are that we seem to accept the following two principles:

Violation claim about non-contradiction (VN). If one believes at t that p and believes at t that not-p, then one violates some requirement.

Satisfaction claim about non-contradiction (SN). Suppose that one believe p and believes not-p. If one either ceases to believe p, or ceases to believe not-p, then one thereby satisfies some requirement that one would not satisfy if one continued both to believe p and to believe not-p.

(R) can certainly explain (VN): if one is correctly responding to reasons, then one can never believe at t that p and believe at t that not-p, since one of these two beliefs must violate the dictates of reason. So it seems like we can explain (VN) without

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appeal to (N). But what about (SN)? The problem is that one satisfies some requirement by giving up one of two conflicting beliefs even if one gives up the *wrong* belief: the belief unjustified by one's evidence. Therefore, one can satisfy the requirement outlined by (SN) without satisfying the requirements that reason places on responding to one's evidence.

However, there is another way to explain how satisfying the requirements of reason has (SN) as a byproduct. Kolodny points out that if one finds oneself believing both p and not-p, and one realizes this, then (because one accepts (R)) one has a "second-order" reason to believe that one either believes p without sufficient reason, or one believes not-p without sufficient reason. One will respond to this either by concluding of one of these two beliefs that one lacks sufficient reason to hold it, in which case one must revise that belief on pain of defying one's own judgment; or by not reaching a conclusion about which belief(s) one lacks sufficient reason for, in which case one must suspend judgment on pain of defying one's own judgment. It is irrational to defy one's own judgment in this way, as codified by:

Believed reason (BR). If one believes at t that reason requires one to have attitude A, then one is rationally required to form or sustain, going forward at t, on the basis of this belief, A, and if one believes at t that reason does not permit one 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, then one is rationally required to revise or refrain from forming, going forward from t, A.

So, in revising one of the contradictory beliefs, even in revising the wrong one, one fulfills a second-order requirement of reason in conjunction with (BR).<sup>5</sup>

In passing, it may be worth remarking the following. Suppose that you realize that you believe that p and that not-p, recognize that this shows you that as yet you do not have sufficient reason to believe p or do not have sufficient reason to believe not-p, but on reflection cannot find any new evidence or any reason to re-construe your existing evidence. In that case the fact of your incoherence is going to give you reason to suspend belief on whether or not p. We mention this point now because it will be relevant to discussion later in the chapter.

Thus, Kolodny concludes, (N) does not describe a real requirement, but the fact that we are inclined to think it does can be explained by real requirements: the

<sup>&</sup>lt;sup>5</sup> An argument that (N) follows directly from the requirements of reason is due to Reisner (2011). His argument rests on the assumption that if evidence gives one reason not to believe  $p \otimes q$ , then evidence gives one reason not to (believe p and believe q). We follow Kolodny in taking the requirements of reason to pertain to particular beliefs, rather than to conjunctions of beliefs.

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requirements of reason. In other words he defends an error theory about the coherence requirement of non-contradiction that (N) formulates. And although (N) is only one of the purported requirements of coherence, presumably a parallel dialectic shows that other purported coherence requirements can be explained by the requirements of reasons-sensitivity. The coherence requirement we will employ in later argument is conjunction: one ought not at the same time (believe p, believe q, and believe not-(p & q)). The parallel argument in this case would again invoke a structural feature of evidence-based reasons: that one's evidence cannot simultaneously give one conclusive reason to believe that p and conclusive reasons to believe that p, but also give one conclusive reason to believe not-(p & q). Thus, so the argument would go, finding out that one is in the incoherent state gives one second-order reason to revise one's judgments, and reason requires that one adopt the attitude that one thinks is correct during and after the revision process.

We recognize that conjunction is a more controversial requirement than non-contradiction, because of paradoxes like the preface paradox and the lottery paradox (see Kolodny 2007a: 253–7). For example, someone who holds that belief is credence above a certain threshold, would deny that conjunction is a requirement of coherence precisely because evidence lacks the relevant structural feature: assuming the threshold is low enough, evidence can sometimes simultaneously justify credence above the threshold for p, q, and not-(p & q). Suppose a theory sets the threshold for belief at 0.6 and that you give a credence of just that threshold level to p and to q. That will mean that the credence you should give to p & q, assuming they are independent, is 0.36, and the credence you should give to not-(p & q) is 0.64. Thus you ought not believe p & q and you ought to believe not-(p & q).

While recognizing that our discussion will have less to say to those who deny conjunction, we note two things in mitigation. First, all that we need for the discussion here is that if you believe each of two atomic propositions, you ought not to believe the negation of their conjunction—which is a much weaker assumption than that needed to generate the preface and lottery paradoxes. Second, the discursive dilemma (which will be discussed in the next section) can be run for modus ponens, and other inference rules, in addition to conjunction; since the group impossibility results are stated in terms of judgments about conjunctions of propositions, it makes things simpler to focus on conjunction.

Kolodny's argument concerning the relationship between reasons and coherence, if it is correct, reveals three important facts about individual rationality. First, coherence itself is not a rational requirement: there is no reason to be coherent as such. Second, we only think coherence is a requirement because being incoherent is evidence that you have failed to satisfy a genuine requirement and because noticing one's own incoherence gives one a reason to revise one's judgment in some way that will make one coherent. And finally, if we look after reasons, coherence will look after itself.

# 3 Group Coherence

Reducing the purported norms of coherence to those of reason seems plausible in the case of individual agents. But can a similar argument be run in the case of group agents? We think of group agents as collections of people who organize their relationships and roles—presumably, on a jointly intentional basis—in such a way that they mimic individual agents (see French 1984; List and Pettit 2011). They form representations of their environment that are responsive to how that environment presents itself, they endorse purposes that they aspire to achieve together, and they act in a way that advances those purposes according to those representations: the individuals who are given the role of acting for the group are constrained to meet this condition. Or at least they do so in general and, when they fail, they are responsive in general to correction. Such group agents may utilize many different procedures, some inclusive of all members, some more hierarchical in character, in determining what it is they endorse, pursue, and enact. And so examples of group agents range from the democratic association or club to the corporation or university, to the oligarchical church or state.

As with individual human beings, there seem to be two types of requirements on group agents: those of reasons-sensitivity, and those of coherence. A group forms its beliefs—its judgments or opinions—in a way that responds to the evidence: presumably, the evidence available through its eyes and ears, that is, in the judgments or opinions of its members. And just as reasons-sensitivity requires that the beliefs of individuals should be responsive to evidence, so it requires that the beliefs of a group agent should be responsive to the beliefs of its members: they are the "evidence-channels" that mediate the relationship between the group's attitudes and the world. But, moving from reasons to coherence, it is also essential for group agency that the entity sustained by its members should be capable of responding to challenges of incoherence. It will not function well as an agent, and will be incapable of forming contracts with other individual or group agents, if it is not organized in a way that guards against the formation of incoherent attitudes or that makes it sensitive, at the least, to evidence of incoherence.

Let us consider the suggestion, then, parallel to Kolodny's suggestion with individual agents, that coherence requirements for group agency are not genuine requirements and that their appeal can be explained away as a byproduct of the requirement of sensitivity to reasons. In pursuing this line, we will focus on conjunction, as already advertized: that is, the requirement that you ought to believe the conjunction of what you believe. This focus is convenient for our purposes, as will become apparent, and it does not significantly reduce the interest of the observations we make.

Here are the relevant claims for the group case. The "coherence" claim is as follows:

**Group-conjunction (GC).** A group agent is rationally required (if at t the group believes p and believes q, then at t the group does not believe not-(p&q).

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Again, the data justifying our acceptance of (GC) seem to be:

**Group violation claim about conjunction (GVC).** If a group believes at t that p and believes at t that q and believes at t that not-(p&q), then the group violates some requirement.

**Group satisfaction claim about conjunction** (GSC). Suppose that a group believes p and believes q and believes not-(p & q). If the group either ceases to believe p, or ceases to believe q, or ceases to believe not-(p & q), then the group thereby satisfies some requirement that it would not satisfy if it continued to believe p and to believe q and to believe not-(p & q).

Note, again, that in the case of (GSC), the group satisfies some requirement regardless of which belief it drops.

In order to explain away (GC), showing that it is not a real requirement, we need to explain both of these other claims, (GVC) and (GSC), that constitute the data for (GC). The parallel move to that made in the individual case would be to explain (GC) by relying on the following claim about (group) reasons:

Group reasons pattern (GR). In any given situation, either it will be the case that (the group agent is required by reason not to believe p), or it will be the case that (the group agent is required by reason not to believe q), or it will be the case that (the group agent is required by reason not to believe not-(p&q)).

Take now a group in which the members play more or less equal parts, at least in the formation of attitudes. Presumably, for such a group to be required by reason to believe p is for the profile of member judgments or opinions to give the group conclusive reason to believe p. Here, the profile of individual opinions plays the role in the group case that evidence plays in the individual case: group votes in favor of p are evidence for p in the group case (they make it more likely that p), just as perceptual evidence and the like are evidence in the individual case. Thus, the suggested explanation requires that no profile of individual judgments or opinions—no pattern in group evidence—could give the group conclusive reason to believe p, conclusive reason to believe p, and conclusive reason to believe not-(p & q)

Unfortunately, the discursive dilemma presents a problem for this suggestion (see Pettit 2001a, 2001b: ch. 5). Let us assume to begin with that what it is for an opinion profile to give the group conclusive reason to believe a proposition is for the majority to believe that proposition. Under that majoritarian assumption, there are some situations in which the group does have conclusive reason to believe each of the three relevant, inconsistent propositions. Consider a group with three members, facing the task of passing judgment on p, q, and not-(p & q), where the opinions of the members are as shown in Table 14.1. Note that the opinions of each of the group members are

 $<sup>^{6}</sup>$  The discursive dilemma is a generalization of the doctrinal paradox in legal theory (see Kornhauser and Sager 1993).

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Table 14.1.

	p	q	not-( <i>p&amp;q</i> )
Member 1	Yes	No	Yes
Member 2	No	Yes	Yes
Member 3	Yes	Yes	No

consistent. And yet majority rule implies that the group has conclusive reason to believe p, to believe q, and to believe not-(p&q); each proposition gets two out of three votes. Thus, (GR) is false when we take the requirements of reason for groups to correspond to what the majority of individual group members believe. Furthermore, unlike in the individual case, if a group finds itself believing p, q, and not-(p&q), then noticing that it has these beliefs will not give the group second-order reason to believe it holds one of them without sufficient reason: that is, without the majority believing all three propositions. So (GSC) cannot be explained by the requirement that a group be responsive to its members, if being responsive to its members means believing what the majority of its members believe.

This case illustrates the basic sort of conflict between the theory of group agency and the view that requirements of coherence can be explained away in terms of the requirements of reasons-sensitivity. But it is obvious that the case is relevant only given special assumptions: in particular, the assumption that responsiveness to reasons means conformity of the kind illustrated to the majority opinion of the membership. It turns out, however, that the conflict remains in place even when we broaden those assumptions.

A number of recent results in the theory of judgment aggregation combine to support the following more general claim (see List and Pettit 2002; List and Polak 2010). If the members of a group have to make judgments on logically interconnected propositions like p, q, and p & q, then even when the judgment sets of each member are complete and consistent, there is no satisfactory function, majoritarian or otherwise, for generating a group judgment on each proposition from the member judgments on that proposition. The set of group judgments generated on such a bottom-up, proposition-by-proposition basis is liable not to be complete or not to be consistent. Or if the function for generating group judgments escapes that problem, then it is bound to breach some independently plausible constraint. It may treat some individuals as special, for example, perhaps giving one of them the status of a dictator; it may breach anonymity, as the constraint is sometimes known. Or it may treat some propositions as special, perhaps letting votes on those propositions dictate the group view on any proposition that follows from them; it may breach systematicity, as it is sometimes called, or more broadly, independence (for an overview, see List and Pettit 2011: ch. 2).

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The upshot of these theorems in the theory of judgment aggregation is that a group agent cannot rely on a bottom-up, proposition-by-proposition way of generating a complete and consistent set of judgments on any interconnected set of propositions from the judgments of its members. And that is to say, to return to the conflict that concerns us here, that as long as we want our voting procedure to guarantee completeness, there is always liable to be a profile of individual opinions among group members that gives the group conclusive reason to believe that p, conclusive reason to believe that p, and conclusive reason to believe that not-(p&q). It appears, then, that there is no way of explaining away the requirement of group coherence (GC) as a byproduct of purportedly the only real requirement on a group agent: that it should act on the reasons, satisfying the group reasons pattern (GR). Let the group be responsive to member votes on each proposition, as required by reasons-sensitivity, and it may well generate an incoherent set of group attitudes.

It seems, then, that the claims about group agents and conjunction analogous to those about individual agents and non-contradiction at the end of the previous section are all false. We cannot explain away the intuition that coherence itself is a rational requirement—that there is reason to be coherent as such. Incoherence is not evidence that a group agent has failed to satisfy a requirement concerning the relationship between the opinions of its members and its group judgment. And it is not that case that if we look after reasons, coherence will look after itself. In a word, satisfying coherence is not a byproduct of satisfying reasons-sensitivity.

# 4 Group Agency

One reaction to the discursive dilemma, and to the theorems in judgment aggregation, might be to think that group agency is impossible and so that the problem raised for analogues of Kolodny's claims is spurious. It is important, however, to recognize that the theorems do not show that it is impossible to have group agents. They show only that if group agents are to form, then that cannot be on the basis of the bottom-up, proposition-by-proposition aggregation of member judgments into group judgments.

We saw earlier that if a group is to constitute an agent then it must have purposes and representations—in particular, representations that are more or less reliably responsive to evidence—and must act so as to execute those purposes reliably, using the representations to guide its behavior. It must in general be evidentially and executively reliable. Or at the least it must display a sensitivity to failure, being able to acknowledge criticism for failures and being ready, when possible, to put them right.

If a group is to constitute an agent in this sense, then it had better have a way of generating judgments or opinions that are more or less coherent, since incoherent judgments will cause it to seize up in some situations for action and will present it in any case as an entity with which it is impossible for other agents, individual or

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corporate, to do business. Yet not only should those judgments be coherent; they should also be reasons-sensitive, in particular sensitive to evidence: in the case of the group, sensitive to the evidence provided by the judgments of its members. We have seen that it cannot hope to secure the desired coherence if it seeks to form its judgments on the basis of a bottom-up, proposition-by-proposition method of letting them reflect member judgments—if it seeks to be reasons-sensitive in that particular manner. So how then ought a group to proceed?

Abstractly, what it must do is to make sure that as its judgments form in response to member judgments, they constitute a coherent whole. It must register the possibility that the judgments produced in a bottom-up, proposition-by-proposition way are liable not to make a coherent whole. And it must introduce a top-down, feedback procedure for checking on how far coherence is emerging and for inhibiting the bottom-up generation of judgments when it is likely to lead to incoherence. This abstract requirement may be concretely implemented in any of a number of ways, but the most straightforward and salient involves recourse to a straw-vote procedure (List and Pettit 2011: ch 2).

Under a straw-vote procedure, the group would take a majority vote on each issue—or indeed a vote of any kind—as it comes up for resolution. But it would allow this bottom-up, proposition-by-proposition method to generate only candidates for group endorsement in judgment, not the final judgments themselves. After each vote it would check on whether or not the result would lead it into incoherence, as in the example of our group of three voting on whether (p&q); it would introduce top-down feedback about where the bottom-up procedure is leading. And given the threat of incoherence, it would isolate the minimal set of inconsistent propositions and decide as a group—there is no algorithm for how it might do this—to reject one member of that set; this might involve revising a past judgment or rejecting the judgment to which the most recent vote would lead it. Thus in the case of our sample group, it would lead the group to reject p or to reject q or to reject q or to reject q.

Such a straw-vote procedure would not only revise the bottom-up aspect of the standard approach in judgment aggregation; it would also revise that approach in its proposition-by-proposition character. Did the group decide to hold that p, that q, and that (p&q), then its judgment that (p&q) would not be a majoritarian function of the judgments of members; after all, two of the members judge that not-(p&q). The procedure would lead the group to form a judgment on at least one proposition in a way that treats that proposition as less special than others; in the case envisaged, it would allow its judgment on (p&q) to be dictated by member judgments on p and on q, not by member judgments on that proposition itself. In technical terms, it would breach systematicity and independence.

There are many other ways in which a group might allow the judgments of members to make an impact on its own judgments, thereby honoring reasonssensitivity, broadly speaking, yet still remain capable of achieving coherence in its

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judgments overall. Thus it might let different subgroups decide on different sorts of propositions, for example, but authorize a particular subgroup to ensure that the propositions supported all constitute a consistent whole; this key subgroup might be capable of reversing the proposals of other subgroups or of sending back the proposals for reconsideration. Or it might authorize all the subgroups to debate with one another in the event of incoherence threatening. Or it might constrain the subgroups so that nothing can pass into effect until coherence is achieved.<sup>7</sup> And so on; the possibilities are legion (List and Pettit 2011: ch 3). There will be no problem so long as the group as a whole has some procedure in place to ensure top-down feedback and correction in order to guard against incoherence.

Could this top-down procedure be mechanized, thereby removing the need for active consideration of feedback by members or subgroups? The most obvious proposal would be to put a mechanism in place, should that be possible, to detect whether any vote introduces incoherence with past judgments and, in the event that it does, to reverse that most recent vote. But this proposal would mean that the group could never revise its past judgments and that what it came to believe would depend on the path it followed in considering issues. Such path-dependence would run against the spirit of reasons-sensitivity and argue against any proposal of that kind. It looks very likely that any group agent that hopes to achieve coherence in its attitudes—specifically, in the judgments or opinions it forms—must allow for active consideration of top-down feedback by its members.

The upshot of these observations is that if a group agent is to form, then its members must not only pay attention to what reasons require, as they form their individual judgments and vote accordingly; they must also pay attention independently to how far sensitivity to those reasons is likely to lead them into incoherence as a group. What they do as a group has to be the product of their seeking on the one hand to meet the requirement of reasons-sensitivity and on the other to make sure that they fulfill this requirement only to the extent that that this allows them to achieve coherence in their group judgments.

This result reinforces the upshot of our considerations in the last section. We saw in the last section that meeting the requirement of reasons-sensitivity does not ensure fulfillment of the requirement of coherence. We have seen in this section that the project of group agency, in a natural way of modeling it, positively demands that the members of a group agent should treat the requirement of coherence as important in its own right, indeed sufficiently important to argue for downgrading the requirement of reasons-sensitivity.

<sup>&</sup>lt;sup>7</sup> Or it might go quite a different path and introduce 'distance-based aggregation functions' which like the procedures described would also reject bottom-up, proposition-by-proposition determination of group attitudes (List and Pettit 2011: 57).

# 5 Escape Route 1: Group Agents Should be Practically Restricted

We have seen that Kolodny's claims for the requirement of reasons-sensitivity in relation to the requirement of coherence run into problems when extended in a natural way to the case of group agents. In this and the following two sections we look at three different ways in which those claims might be sustained in face of the threat. Each of these escape routes is associated with a debunking thesis about group agents. Putting them in order of increasing strength, the first holds that group agents should be practically restricted to an extent that removes the problem; the second that group agents should be epistemically restricted in way that removes the problem; and the third that, despite appearances, groups cannot constitute agents, or not at least agents in any proper sense. We turn now to the first of these theses.

In outlining the means whereby a group agent might aggregate the judgments of members and yet avoid incoherence, we made the assumption that when the group confronts member votes that would support a set of incoherent judgments according to majority rule, it ought not to hesitate about forming judgments on the matters in question. Assuming that it has to form judgments one way or the other, we argued that the group ought to modify the judgments that member votes would support so that they constitute a consistent set. And we maintained that in doing this, it should take its guidance from the requirement of coherence, allowing this to combine with the requirement of reasons-sensitivity—in effect, the requirement of sensitivity to member votes—to determine what set of judgments it ultimately endorses.

But it should be obvious that there is an escape route available at this very point for those like Kolodny, who want to argue that the only real requirement is that of reasons-sensitivity. They can say that the proper response for a group to take in face of the fact that majority rule is apt to lead to incoherent judgments is to use another rule, which in the case above will recommend suspending the group judgment on each of the propositions at issue. Let the member votes provide evidence (according to majority rule) that p, that q, and that not-(p & q), as in our example, and the line proposed is that the group should simply suspend judgment on each of those issues, because majority rule is too weak to capture the requirement of reasons-sensitivity, and so the group does not in fact have strong enough reason to believe any of the three propositions.

There is no doubting the availability of this response for those who wish to stick with the claim that the only real requirement on any agent, individual or corporate, is reasons-sensitivity. But the cost associated with the response is to deny the usefulness, in effect, of incorporation and group agency. On the assumption that the members of any plausible group are likely to disagree in their judgments on particular propositions, even when they are each presented with the same evidence, the possibility of their facing discursive dilemmas under even very strong voting rules is ineradicable. And that means that a group agent that prioritizes reasons-sensitivity in

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the manner recommended and that wants a procedure that guarantees that the discursive dilemma will not arise is likely to face many situations where it cannot make up its mind and must settle for neither accepting nor rejecting conflicting propositions.

At first, this may not seem so bad: after all, most of us suspend judgment on a range of propositions we confront as individuals. Why not settle for the same line here?

When people organize themselves as a group agent, they generally do so with a view to achieving purposes that are unavailable to them individually; these may be the purposes of a political party, a business corporation, a trade union, a voluntary association, a commission of inquiry, or an evangelical church. And that means that the judgments they wish to form as a group will almost all bear on theoretical questions that their purposes require them to resolve or on practical questions to do with how to prioritize those purposes, whether there are opportunities available for pursuing them and what are the best means to adopt in their pursuit. Thus the permanent possibility of not being able to form judgments on the issues the group confronts is likely to make for a serious vulnerability.

Not only does the typical group agent endorse the pursuit of purposes that this possibility would jeopardize; it also has aspirations to being able to make contractual and other commitments that the possibility would undermine. Like individuals, group agents make promises and enter contracts with other agents, individual and corporate, and their credibility in this role is bound to be important for meeting the goals of their members. But if the fulfillment of any contract depends on the fortuity of the group's not facing a discursive dilemma in processing relevant information—if fulfillment is not more or less robustly guaranteed—then the group is going to seem like a very unattractive partner in exchange.

There are conditions that a group might satisfy such that under one of those conditions the group would have a robust capacity to form judgments on problematic propositions.<sup>8</sup> But no such condition is itself likely to be robustly satisfied. To take the most obvious example, if the members were unanimous in their judgments on relevant propositions, then a bottom-up procedure in which the group judgment on any proposition is fixed by the member judgments on that proposition would work fine.<sup>9</sup> But the chances that the members of a group could be effectively held to a

<sup>&</sup>lt;sup>8</sup> See List and Pettit (2011: 51–2) on unidimensional alignment.

<sup>&</sup>lt;sup>9</sup> More generally, a similar result will hold if there is a certain supermajority in favor of each proposition: specifically, if more than (k-1)/k of its members believe that proposition, where k is the number of propositions to be voted on. See List and Pettit (2002: 106), who also cite List (2001). Imposing this requirement with our group of three would mean requiring that the group should believe a proposition only if more than two-thirds of its members agree to it, i.e. only if there is unanimous assent. This supermajority requirement will coincide with the unanimity requirement in any case where there are at least as many propositions as group members.

unanimity requirement without reducing their capacity to form judgments on the propositions they have to decide as a group must be very low indeed.

The upshot of this discussion is that if group agents are to be effective systems for discharging their goals, thereby meeting the rationale for forming group agents in the first place, then they cannot be subject to the practical restriction that the purely epistemic use of coherence would impose. Those who are intent on maintaining that reasons-sensitivity is the one and only requirement on the formation of beliefs, and more generally of attitudes, can certainly stick to their position, availing themselves of this first escape route. But the cost they have to pay is that of rejecting the feasibility of group agents, or at least the feasibility of group agents that can claim to be more or less apt to reach a judgment on every issue relevant to their purposes.

# 6 Escape Route 2: Group Agents Should Be Epistemically Restricted

The second escape route available to those who prioritize the requirement of reasons-sensitivity, dismissing the requirement of coherence, holds that the votes of its members should not be allowed to count as evidence (except possibly derivatively) for what it ought to believe; they do not represent the demands of reason on the judgments or opinions it ought to form. And so the picture of group agency sketched in Section 3, in which member votes are the primary data to which the group must respond in making judgments, ought to be ruled out. Group agents should be not be given a license to invest the votes of members with such an evidential status; they ought to be epistemically more restricted.

This approach comes in two forms, the first more moderate, the other more radical. The moderate form maintains that the evidence at the disposal of a group for the truth of a proposition ought not to be equated with the on-off votes of members on that proposition, but rather with the degrees of belief, ranging between 1 and 0, that members invest in it. The idea is that when members report just "yes" or "no" votes on each proposition they consider, they do not thereby furnish the group with the evidence that ought to determine the beliefs it forms. Rather they provide it with a second best: on-off votes that lose much of the information that would be available to the group, did it have access to their degrees of belief. Rather than learning that members vary in their degrees of belief in a range between 0.3 and 0.7, for example, the group envisaged forms beliefs that are shaped by an impover-ished version of that information. When it responds to the votes of members, then, it should not be thought to be tracking the reasons that ought to determine its beliefs, only some highly standardized counterparts of such reasons.

This first complaint suggests that group agents of the type traditionally envisaged are infeasible, or at least that they are not properly sensitive to the demands of evidence and reason. That pessimistic position would be enough to serve as an escape

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route from the challenge posed for the view that there is no genuine requirement of coherence on agents: that it is merely a byproduct of the requirement of reasons-sensitivity. It means after all that the group agents that seemed to pose a problem for that view are not really fitted to do so: they are not sensitive to evidence proper.

It is natural to ask at this point whether there is a way in which group agents might be led to act on the basis of the degrees of belief that their members hold. But it turns out that the proposal faces serious problems. One problem is that there are well-known difficulties associated with aggregating degrees of belief, as there are difficulties in aggregating on–off beliefs, albeit not perhaps difficulties of the same seriousness (see Genest and Zidek 1986; Russell et al. (forthcoming)). A second problem with the proposal is even more striking. This is that in the vast majority of cases members cannot put fine-grained credences at the disposal of the group, offering them as inputs to a suitable aggregation function. By one analysis (Harman 1986), this is due to the fact that individuals do not have access to their degrees of belief at any fine level of grain. By another, it is due simply to the practical infeasibility of retrieving individual degrees of belief and using them in the formation of a group's beliefs. But in any case it seems to tell quite strongly in favor of rejecting the idea that a group agent might operate by responding to the degrees of belief of its members when these must be stated explicitly and precisely.

The second, more radical version of the claim that group agents ought to be epistemically restricted denies that the reports or votes of members, whether reflective of on-off judgments or degrees of belief, constitute the evidence on the basis of which a group ought to form its beliefs. The idea is that what reason requires of a group is that it should form its beliefs, not on the basis of the outputs from individuals in response to their own evidence, but on the basis of that very evidence itself: on the basis, in short, of the inputs that individual members confront. Recall that requirements of reasons-sensitivity concern the relationship between how the world presents itself and which attitudes one should hold. While evidence must be mediated through the votes of individuals in order to be accessed by the group, the demands of reasons-sensitivity require a group agent to respond appropriately to the inputs confronting its members, not to the voting outputs for which those individuals are responsible. Those evidential inputs bear directly on the truth or falsity of any relevant proposition, where the voting outputs of members have only a derivative bearing on that issue.

The first approach suggested that a group agent that operates on the model of Section 4 does not avail itself of all the evidence it has at its disposal. This second approach, by contrast, would suggest that such a group agent does nothing wrong, rather that the model has been incorrectly applied to the phenomenon of reasons-sensitivity, because we have incorrectly characterized what group agents are doing when they seek to take account of the votes of their members. According to our earlier characterization, the group agent purportedly tracks the demands of reason or evidence when it takes account of the votes of its members because those votes

constitute the evidence. However, according to the approach under consideration, in tracking the votes of its members, that group agent is not directly tracking the relevant evidence, but rather factors that tend to serve as indicators of what the evidence actually is. Support for this position comes from noticing that group members seek to bring their votes in line with how the world appears to them: the votes are meant to be an indication of what the evidence is, not the evidence itself.

Does this re-characterization of the demands of reasons-sensitivity show that coherence need not play more than an epistemic role? Assume for simplicity that the same evidence is at the disposal of each member of a majoritarian group and that the votes support the incoherent triad: p, q, not-(p & q). On the proposed view of the evidence relevant for the group agent, this means that in parallel to the individual case, the group is entitled to conclude that, on some proposition, a majority of individuals must be failing to respond to the reasons the evidence provides, even if each member is individually coherent and the group is responding to the votes of its members. Thus, the group is failing to respond to the reasons on at least one proposition. As conceived within the proposal, the group agent should be concerned, not with the votes of members as such, but only with the evidence at the disposal of members that leads them to vote in this way. And if each member is exposed to the same evidence, and yet a majority vote in the manner that gives rise to a discursive dilemma, then on this view that means that there is at least one proposition on which a majority are failing to respond properly to the evidence at their individual disposal.

Following this procedure, a group might be entitled to reject the majority view on one or other of the conflicting propositions, provided it could find independent evidence for determining the proposition on which the majority are mistaken. And in that case the procedure might show us a way for a group to deal with discursive dilemmas, form a group agent of the kind envisaged in Section 4, and yet not have to give the incoherence of the majority views anything other than an epistemic role. It would give it the role of indicating that there is some proposition on which a majority of the members are failing to respond to the evidence that is available in common to them, as in the individual case.

Those who maintain this response argue that incoherence should not play the practical role envisaged in our account, guiding the group on the matter of how far it should respond to member votes—how far it should be reasons-sensitive—in actually forming beliefs on the propositions at issue. They say that incoherence should play the purely epistemic role that Kolodny ascribes to it in the case of the individual agent. It should serve to indicate to the group that it has a second-order reason in the case of each of the conflicting propositions to maintain that it believes that proposition without sufficient reason. In our simple example, it believes that p without sufficient reason, or it believes that p without sufficient reason, or it believes that not-p & q without sufficient reason.

It is hard to be optimistic, however, about this proposal. First of all, the proposed procedure would work for sure only in the special case where the evidence at the

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disposal of members is the same. Let that assumption be lifted and it will no longer be clear that an incoherence in majority voting indicates that a majority are responding improperly to their evidence. The incoherence may simply be the result of the fact that different members confront different bodies of evidence; and yet it may be that those bodies of evidence, considered as a whole, would resolve the conflict. Second, it is highly optimistic to think that even in the simplified case where all members confront the same evidence, there will be a way for the group agent to determine the particular proposition on which a majority of members are failing to respond appropriately. In both cases, the group will not have evidence sufficient to conclude that it believes one of the three conflicting propositions without sufficient reason. And so the response supported by reasons-sensitivity is that of suspending judgment, and the problems for this approach for group agents in particular were noted in the previous section.

These considerations suggest that those who adopt this escape route will have to abandon the idea that forming group agents is a feasible project, or at any rate that forming group agents that are evidentially reliable systems is a feasible project. Defenders of this radical proposal, like defenders of the moderate proposal—and like defenders of the idea that group agents should be practically restricted—must treat group agents as seriously deficient in comparison with the individual agents who make them up.

# 7 Escape Route 3: Group Agents Are a Fiction

The first escape route suggests that group agents should not be allowed to act on the basis of votes that would give rise to a discursive dilemma, only on a more demanding basis, implying in effect that group agents should be practically restricted in a way that would make them infeasible. The second escape route, which comes in two versions, suggests a parallel result. Arguing that group agents should not be allowed to treat on–off votes properly as evidence (either as non-derivative evidence or as evidence at all), they imply that group agents should be epistemically restricted in a way that would also make them infeasible.

Both of these escape routes suggest that group agents provide no real challenge for the view that the requirement of coherence is merely a byproduct of the requirement of reasons-sensitivity. They suggest that the group agents that might be formed on the template described in Section 4 cannot be a source of challenge for that view. The third escape route we should mention is even more radical than the other two. It argues that the group agents that might be formed on the Section 4 model do not count as agents at all, or not at least as agents in more than a fictional sense.

This escape route is potentially more interesting than the other two. Those escape routes start from a thought that is close to the view that reasons-sensitivity is the only appropriate requirement on agents. The thought is that group agents should not be allowed to act on on-off votes, or to treat on-off votes as evidence, or to think that

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responding to on-off votes articulates the demands of reasons. And the motivation for that thought is presumably that if such votes are taken as articulating those demands, then that will mean that tracking reasons may fail to ensure coherence. Thus those escape routes may seem to presuppose the very thesis they are designed to preserve. No such difficulty would attend the third, for it argues on quite independent lines against the very reality of group agents.

The argument against the reality of such agents may be that groups cannot be agents at all or that they cannot be agents in a real as distinct from a fictional sense. The argument that they cannot be agents at all, which abounds in some economics textbooks, and in some legal discussions, routinely cites the observation that group agents come into existence in virtue of contractual relations among their members, as if that in itself meant that they could not also count as agents. This approach views commercial companies—and by extension other forms of group agent—as sites of contracts akin to the market, which are distinguished only by the fact that the nexus of contracts between parties is much more pervasive than in markets more generally. One commentator formulates the core idea as follows: "the Nexus of Contracts Theory... treats the company as little more than a collective noun for the web of contracts that link the various participants, which include shareholders, management, employees and creditors. The function of company law is thus conceived of as the facilitation of the parties' bargains" (Grantham 1998: 579).

The assumption in this approach seems to be that since group agents are made out of the same material as markets-individuals in contractual relations with one another—they have no more claim to be agents than markets themselves have. But while markets are certainly not agents—while it is mere metaphor to speak of what the markets think or expect—corporate bodies certainly are (List and Pettit 2011). Unlike markets, they fit the functional characterization of agency given earlier. They have discernible purposes and representations such that in general they reliably pursue those purposes in accordance with reliably formed representations. They may occasionally fail, as we all fail, but when they do so they are generally ready to recognize the failure and even, if appropriate, to make amends. To say that they are not agents on the grounds that they are composed out of individuals in contractual relationships with one another would be as unconvincing as saying that you and I are not agents because we are composed out of cells in biological relationships with one another. What makes a system an agent is not the stuff out of which it is composed but the purposive-representational function that it is capable of discharging. Group agents can function in a distinctively agential way, embracing goals, forming views about how best to realize those goals, and pursuing the goals on the basis of those views. And moreover they can make commitments to other agents, individuals or corporate, by speaking in a self-committal way about what they hold or what they will do.

It might be said that there are some clearly non-agential systems, such as the heating system in a building, that nonetheless fit the template for agency: they act

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reliably for a goal on the basis of a reliable representation, as the heating system maintains the temperature of a building above a certain level on the basis of registering any fall below the threshold. Perhaps group agents are like that, it may be objected; perhaps they fit the template but still fail in an intuitive manner to count as agents. The suggestion is absurd, for two reasons. One, the group agent can commit itself in words, which the heating system cannot (Pettit 2014b). And two, there are indefinitely many ways in which a given goal or representation may be realized in a group, whereas the system realizes its goal and representation on the sole basis of a simple mechanical construction; thus, the language of goal and representation is extravagant in the latter case, but not in the former.

Turning now to a second form of this third escape route, group agents may be said to be agents but not agents proper; not agents in anything more than a fictional sense. The best interpretation of this line on group agents, which goes back to Thomas Hobbes (1994 [1651]: ch. 16), holds that a group agent comes into existence by fiction insofar as a pre-existing agent or agential system is recruited to an extra role over and beyond the role of enacting and speaking for their or its own attitudes (see Pettit 2008: ch. 5, 2014a; Skinner 2009). In Hobbes's picture, a group agent may come into existence in either of two ways. It may exist in virtue of a particular individual being authorized or accepted by the members of the group as speaking for them: this authorization will involve a readiness on the part of members to act as required in order for the commitments made by that individual in the name of the group to be fulfilled. Alternatively, a group agent may exist in virtue of the fact that an independent, more or less mechanical agential system like a majoritarian committee is authorized or accepted in the same way by the members of the group. The idea is that in neither case is the group agent anything other than a fiction. It makes commitments, by courtesy of its spokesperson, and it generally lives up to those commitments, holding by the beliefs avowed and keeping the promises made. But it does so in a way that is wholly parasitic on an independent, pre-existing agent or agency: hence that agent or agency can count as the real agent, with the group counting only as an agent by fiction.

The main examples of group agents that operate on the model of Section 4 are not agents by fiction in this sense. They rarely have a single, dictatorial spokesperson who is entitled to speak for all members, and that case may be regarded as irrelevant. And they cannot operate on the basis of recruiting an independently agential committee— a committee that mechanically generates statements of purpose and representation fit to be authorized by a group agent—for reasons with which we are now familiar. A mechanical procedure like majority voting is not a reliable source of statements that the members of a group agent might endorse, being ready to act as the commitments embodied in those statements require. Any sort of committee, majoritarian or otherwise, that uses a bottom-up procedure to generate candidate commitments is liable, as Hobbes failed to see, to produce statements that are inconsistent with one another.

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This means that in order for a group agent to come into existence, or at least a group agent that does not operate via a dictator, its members have to construct that agent from scratch, using procedures with a top-down as well as a bottom-up component in order to produce statements of purpose or representation that can mediate the commitments of an agent. This means that the agent constructed will be a distinct agent from its members—there will be no pre-existing agent with which it might be identified—even though it is composed entirely out of those individuals and their relationships. Once established as a group agent, the body in question may serve in a Hobbesian fashion as a spokesperson that the members of a wider group can authorize, thereby constituting themselves as an agent by fiction. But in order for such parasitic forms of group agency to materialize, there have to be group agents that exist and function in a non-parasitic way.

### Conclusion

We do not think that the considerations mustered over the last three sections establish definitively that the case of group agents undermines the case for treating the requirements of reasons-sensitivity as the only real requirements on agents. Nor do we believe that the escape routes described necessarily are the only avenues that those attached to that view might explore. We hold only that the case of group agents provides new data in light of which to consider the argument for and against an error theory about the requirements for coherence. But suppose we decide that the escape routes for the error theory really are closed, maintaining that the group agents cannot be dismissed as relevant and that they do operate in a way that give coherence requirements a real, guiding role. What in that event should we conclude about the error theory?

One potentially attractive line is to hold that the need for group agents to rely on the coherence requirements, using their non-satisfaction to guide its attitudes, teaches us that a corresponding lesson holds with individual agents too and that the error theory is not quite right, after all (at least in the case of conjunction). When I as an individual look to the evidence for and against a particular proposition, I have to look to what my eyes and ears tell me, to what I learn by testimony, and to what accumulated experience and theory support. But these channels of evidence may speak to me with many voices, as the votes of members speak with many voices to a group. Just as group agents have to listen to the voices of members in constructing the view they form on any proposition, so individual agents often have to listen to

 $<sup>^{10}</sup>$  It is worth noting that Kolodny does not claim that the error theory will explain all purported coherence norms (Kolodny 2007a: 253–7), and conjunction may be among those to which it does not apply. Those who take the view that the individual error theory does not apply to conjunction may consider the case of group judgment to be support for their view.

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various voices—the different sensory, testimonial, and memory-based channels of evidence—in determining the view that they ought to take on a proposition. And the suggestion would be that in forming the required view, both group agents and individual agents have to rely on coherence in a way that does not merely amount to treating incoherence as additional evidence about what they have reason to believe. They have to silence the evidence available at any moment in support of a proposition when they check and find that it would give them an incoherent profile of views. And they then have to consider how to resolve the conflicting bodies of evidence that occasion the incoherent views.

This suggestion, which turns on an epistemic analogy between the position of individual and group agents, may be buttressed by consideration of a further analogy on the practical side. This is that just as group agents are going to fail the rationale for establishing them unless they are prepared to form beliefs in the absence of conclusive evidence, so something similar holds of individuals. Those who defend an error theory about the requirement of coherence suggest that in the absence of conclusive evidence for believing that p, or for believing not-p, we individual agents ought to suspend judgment. But this may well look like an unworkable constraint. If as individuals we were to form beliefs only in the presence of conclusive evidence—only when the facts spoke to us in an unambiguous way—then we would have to suspend belief on a great range of matters. As individuals we would be in much the same position as group agents that were required to form beliefs only when a unanimity constraint is satisfied.

Like such group agents, we would be unimpeachable in epistemic terms. But, like such groups, we would also be rendered more or less ineffective as centers of agency. We would be incapable of making up our minds on so many matters that we would be deprived of the beliefs essential for resolving most of the choices that arise in ordinary life: most of the choices that the pursuit of our goals requires us to make. Nor is that all. We not only need to have a rich set of beliefs in order to be able to pursue the purposes that are important for us as individual and group agents. We also need to be able to speak for such a set of beliefs in establishing relationships with one another and in presenting ourselves to others as agents with whom they can do business: agents they can expect to be willing to stake out positions on various issues and to prove generally reliable in acting in the manner associated with those positions. Suppose we were to shrink from forming opinions in the absence of more or less conclusive evidence. Or suppose we were to form such beliefs without practical guidance from the requirement of coherence. In any such event we would prove to be less than fully conversable, as we might put it; less than fully capable of relating to one another reliably in avowing beliefs or intentions or in promising to perform one or another action.

These two analogies are less than perfect, of course, and even if we reject the escape routes described in the last three sections, they do not make an irresistible case for applying the lesson of group agents to individuals. When we try as individuals to

make sense of various evidential inputs in order to determine our view on a proposition, we do not employ a rote procedure of tallying the "votes" of our individual sources of evidence. Rather, we consider how reliable each source is apt to be in the given case, and how the deliverances of one source bear on the deliverances of the other. And, unlike the group case, in which degrees of belief would need to be explicitly expressed in order to be used by the group to determine the group's opinion on the proposition, we can take degrees of support offered by various evidential sources into account in a largely automatic, subpersonal manner. Furthermore, the second-order evidence that we are mistaken in some judgment is easier to employ, since as individuals we often have a clear view about where mistakes are more apt to occur. By contrast, the group agent has no privileged vantage point from which to adjudicate the views of the various members, or to judge the relative reliability of members on a particular question.

As we do not say that the escape routes available to those who hold an error theory about the requirement of group coherence are definitively closed, then, so we do not say that even if they are closed, that means that the error theory should be given up on all sides: not just for groups but for individuals too. All we claim to have established is that there is an interesting tension between the error theory of coherence, on the one side, and the theory of group agency on the other. The two theories are associated with different literatures and different traditions and what we hope to have shown is that it may well be profitable to being them more closely into contact.

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