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Epistemic Value Theory and Judgment Aggregation

A foolish consistency is the hobgoblin of little minds. – Ralph Waldo Emerson

Introduction

We frequently make judgments about the world. Juries make judgments about whether defendants are guilty. Umpires make judgments about whether pitches are strikes. Tenure committees make judgments about whether professors deserve tenure. We typically want these judgments about the world to have good epistemic properties. We would like our judgments to be true rather than false, for example. We would also like our judgments to be consistent with each other; and we would like to have good reasons for our judgments. This paper will be concerned with how we can make judgments that have such good epistemic properties.

There are two provisos that should be noted at the outset. First, we are not *always* concerned that our judgments have good epistemic properties. There are judgments that are not intended to capture the way that the world is, but that are intended instead to make the world a particular way. For example, parents might judge that midnight is their child's curfew (cf. Gilbert 1994, 249). This is not something that the parents could be wrong about. Midnight is the child's curfew if and only if her parents judge that it is.[1] In this paper, however, I will focus on judgments that are intended to capture the way that the world is.

Second, even when we are concerned that our judgments have good epistemic properties, we are also concerned with the pragmatic consequences of our judgments. Nevertheless, epistemic considerations are an important part of deciding how we should make judgments (cf. Goldman 1999, 6, Fallis 2004, 102-103). In fact, the main reason that we would like our judgments to have good epistemic properties is that they tend to lead to good pragmatic consequences.[2] For example, accurate verdicts lead to the guilty being punished and the innocent going free. In this paper, however, I will bracket pragmatic considerations and focus on epistemic considerations.

As the examples above suggest, we often make judgments as groups rather than as individuals. This paper will be specifically concerned with how we can make group judgments that have good epistemic properties. We typically arrive at such group judgments by aggregating individual judgments in some way. For example, we might use majority vote to determine the group judgment.[3] In this paper, I will be evaluating such procedures for aggregating judgments in terms of their epistemic consequences.[4] In particular, I will be evaluating two procedures whose epistemic consequences have been studied by Philip Pettit (2001, 295–299) and Luc Bovens and Wlodek Rabinowicz (2004).

In order to evaluate a procedure in terms of its epistemic consequences, we need to know what its epistemic consequences are. For example, we need to know how likely it is that the procedure will lead to true judgments. But we also need to have an *epistemic value theory* (cf. Levi 1962, Paterson 1979, Maher 1993, Goldman 1999). In other words, we need to know which consequences are *good* epistemic consequences. The exercise of evaluating the aforementioned judgment aggregation procedures provides an opportunity to work out some of the details of such an epistemic value theory.[5]

As with any value theory, an epistemic value theory has essentially two parts (cf. Keeney 1992, 131). First, we need to know what sorts of things are epistemically valuable. The two epistemic objectives that are most often discussed are making true judgments and avoiding false judgments (cf., Chisholm 1977, 14, James

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1979, 24, Alston 1985, 59). However, in this paper, I consider several other epistemic objectives, such as being right for the right reasons and being consistent. And (contra Goldman 2001) I do not treat these objectives as simply being valuable as a means to making true judgments and avoiding false judgments.

Second, we need to know how these epistemic values are structured. Since there are at least two epistemic objectives, there is the potential for conflict. For example, one procedure may do better with regard to making true judgments while another procedure does better with regard to avoiding false judgments.[6] Thus, we need to know how the epistemic value of making true judgments compares with the epistemic value of avoiding false judgments. In this paper, I argue (contra Kaplan 1996) that the epistemic value of maintaining consistency does not always outweigh the epistemic value of making true judgments.

Doctrinal Paradox

As noted above, the obvious way to aggregate judgments is to go with the majority vote. I will refer to this as the *Majority Vote Procedure (MVP)*. This procedure has the advantage of making the group judgment responsive to the will of the individual voters (cf. Pettit 2003, 175). But this procedure also has *epistemic* advantages. For example, there are results like the Condorcet Jury Theorem that suggest that using this procedure is a good way to end up with judgments that are true rather than false (cf. Estlund 1994, 131).

However, several scholars (e.g., Kornhauser and Sager 1993, Pettit 2003, List and Pettit 2005) have noted that there can be a problem with MVP when the group has to make judgments on a logically interconnected set of propositions.[7] For example, suppose that a three-judge court has to answer the following three questions (cf. Pettit 2003, 168):

1. Did the defendant cause the injury to the plaintiff?
2. Did the defendant have a duty of care toward the plaintiff?
3. Is the defendant liable for the injury to the plaintiff (where tort law specifies that a defendant is liable if and only if the defendant caused the injury and had a duty of care)?

In typical cases, MVP will lead to a consistent set of judgments.

A typical case:

	P	Q	P&Q
voter 1	yes	yes	yes
voter 2	yes	yes	yes
voter 3	no	no	no
majority	yes	yes	yes

Another typical case:

	P	Q	P&Q
voter 1	yes	yes	yes
voter 2	yes	no	no
voter 3	no	no	no
majority	yes	no	no

However, there are also cases where MVP leads to an inconsistent set of judgments. In fact, this can happen even if the individual voters are all consistent in their judgments. The possibility of such cases is known as the *doctrinal paradox* or the *discursive dilemma*. In this paper, I will refer to such cases as *dilemma cases*. In a dilemma case, MVP will lead us to judge that P, that Q, and that not-P&Q.

A dilemma case:

	P	Q	P&Q
voter 1	yes	yes	yes
voter 2	yes	no	no
voter 3	no	yes	no
majority	yes	yes	no

In response to such dilemma cases, Pettit, Bovens, and Rabinowicz (PBR) suggest that, instead of using MVP, we should use a procedure that insures that we end up with a consistent set of judgments. In particular, we should still go with the majority votes on P and Q, but we should go with the judgment on P&Q that is logically implied by the judgments on P and Q. I will refer to this as the *Consistency-maintaining Procedure (CMP)*.[8] In a dilemma case, CMP will lead us to judge that P, that Q, and that P&Q.

As Pettit (2003, 177–178) points out, there

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are certainly pragmatic advantages to using this consistency-maintaining procedure. For example, other agents can make reliable predictions about what the group judgments are likely to be.[9] In fact, Pettit claims that a group needs to maintain consistency in order to be treated as an agent at all (cf. List and Pettit 2005). But PBR also point out that there are epistemic advantages to using CMP.

Ideally, PBR would like to show that the epistemic consequences of using CMP are always better than the epistemic consequences of using MVP (cf. Pettit 2001, 291–292).[10] In other words, they would like to show that it is always *epistemically rational* to use CMP rather than MVP.[11] However, PBR do not make use of an explicit epistemic value theory. For example, PBR do not discuss what all of the possible epistemic objectives are or what happens when two or more epistemic objectives come into conflict. In this paper, I use epistemic value theory to suggest a number of ways in which their case for the epistemic superiority of CMP can be improved. However, I conclude that there are at least some circumstances in which it is epistemically better to use MVP.

There are two important things that should be noted at this point. First, the doctrinal paradox does not only arise with two-place conjunctions. It can arise with other logically interconnected sets of propositions, such as disjunctions and larger conjunctions (cf. Pettit 2003, 169-171). In this paper, however, I will follow PBR and focus exclusively on the particular case of two-place conjunctions. It is possible to make exactly the same points about these other forms of the doctrinal paradox (cf. Bovens and Rabinowicz 2004, 255). In other words, everything that I will say can be suitably generalized.

Second, CMP is not the only way to maintain consistency. For example, if going with the majority vote would lead to an inconsistent set of judgments, we could simply suspend judgment on one or more of the propositions. But suspending judgment may not always be an option in the case of group judgment.[12] For example, the aforementioned three-judge court may have to be in a position to say *why* they did not find the defendant liable. In fact, the doctrinal paradox arises because the group has to make a judgment on each member of the logically interconnected set of propositions.

There are also procedures that maintain consistency, but that do not involve suspending judgment. For example, we might go with the majority vote on P and P&Q and go with the judgment on Q that is logically implied by the judgments on P and P&Q.[13] As Pettit (2003, 174) notes, such a procedure may be preferable to CMP in some circumstances. However, there is no reason to think that it will be epistemically better (or worse) than CMP in all circumstances. Such a procedure will simply disagree with MVP about a different proposition (e.g., Q rather than P&Q) in dilemma cases. Thus, in this paper, I will follow PBR and take CMP as the representative of all consistency-maintaining procedures.

In order to evaluate MVP and CMP in terms of their epistemic consequences, PBR make certain idealizing assumptions:

a) The competence of the individual voters (with respect to P and Q) is greater than 0.5.[14]
b) The individual voters all have the same competence.[15]
c) The votes (on P and Q) are all independent.[16]
d) An individual voter's vote on P&Q is determined by her votes on P and on Q.[17]

By making these assumptions, we are clearly looking at a very special case. In practice, voters will rarely have the same competence. For example, there will be people who have greater expertise on some topics. Also, votes will rarely be completely independent. For example, there will be people whose views have an influence on other voters.[18] In fact, a lot of the literature on the Condorcet Jury Theorem (e.g., Estlund 1994) attempts to weaken these assumptions. However, for purposes of this paper, I will follow PBR and focus on this special case. The idea will be to see if we can establish that CMP is epistemically better than MVP at least in this case. If we cannot do it in this special case, then we will clearly not be able to do it in general.

Probability of True Judgments

PBR begin by looking to see if CMP is more likely to lead to true judgments. Since both procedures go by majority vote for P and Q, they have the

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same probability of leading to true judgments about those propositions. So, if there is going to be a difference between the two procedures, we have to look at P&Q. In fact, we really only have to look at those few cases where they disagree about P&Q.

It turns out that CMP is more likely than MVP to lead to true judgments about P&Q in many circumstances. For example, suppose that the probability of P being true is 0.7, the probability of Q being true is 0.7, and the competence of the voters is 0.6. (Call this **Scenario 1.**) In this scenario, the probability of MVP leading to a true judgment about P&Q is approximately 0.59, but the probability of CMP leading to a true judgment is approximately 0.61.[19] However, CMP is not more likely to lead to true judgments in all circumstances. For example, suppose that the probability of P being true is 0.5, the probability of Q being true is 0.5, and the competence of the voters is 0.6. (Call this **Scenario 2.**) In this scenario, the probability of CMP leading to a true judgment about P&Q is approximately 0.71, but the probability of MVP leading to a true judgment is approximately 0.73. Thus, we cannot show that it is epistemically better to use CMP in all circumstances simply by appealing to how likely the procedures are to lead to a true judgment.

But it is possible (and this will be important later) to say something about the circumstances where CMP is more likely to lead to true judgments about P&Q (cf. Bovens and Rabinowicz 2004, 249). There can only be a disagreement between the two procedures when there is a majority for P and for Q.[20] Thus, whenever they disagree, CMP will lead us to judge that P&Q and MVP will lead us to judge that not-P&Q. As a result, CMP will lead us to judge that P&Q whenever MVP does and CMP will lead us to judge that P&Q in other cases as well (i.e., it will simply lead us to judge that P&Q more often). Thus, if the initial probability that P&Q is true is sufficiently high, CMP will be more likely to lead to a true judgment.[21] However, if the initial probability that P&Q is true is sufficiently low, MVP will be more likely to lead to a true judgment.[22]

Even though CMP is not always more likely to lead to a true judgment, there is something to be said for CMP along these lines (not noted by PBR). Namely, being in a dilemma case is always evidence that P&Q is true. In other words, the probability of being in a dilemma case when P&Q is true is greater than the probability of being in a dilemma case when P&Q is false.[23] Thus, being in a dilemma case is always evidence that CMP is right. As a result, there is a sense in which CMP, unlike MVP, is *sensitive to the truth*.[24]

By contrast, MVP does not look like such a great procedure epistemically speaking. There are circumstances where MVP is more likely to lead to true judgments. But this is only because MVP leads us to judge that not-P&Q more often than CMP does. Compare a witness who reports that any cab that he sees is blue. Such a witness may be very reliable as long as a sufficient number of blue cabs are on the roads (cf. Tversky and Kahneman 1982). But such a witness is epistemically suspect (cf. List forthcoming). In addition, there is another count against MVP. The first typical case and the dilemma case above provide the same amount of evidence that P&Q is true. But, unlike CMP, MVP treats them differently. In one case, it judges that P&Q. But, in the other case, it judges that not-P&Q.

Even so, sensitivity to the truth does not establish the epistemic superiority of CMP. Sensitivity to the truth is certainly valuable as a means to the truth. However, it is not clear that it has any epistemic value beyond this. In a similar vein, many philosophers (e.g., BonJour 1985, 7-8, Kvanvig 1998, 433-434, Zagzebski 2003, 13-14) have argued that justification is only valuable if it is a means to truth. As a result, in those circumstances where MVP is more likely to lead to true judgments, it is not clear why the greater sensitivity to truth of CMP should be of much concern to us.

In fact, if we simply want to maximize the probability of making true judgments, there is a procedure that is better than either MVP or CMP. Namely, we could go with the judgment on each proposition that is most likely to be true given the evidence (i.e., given the competence of the voters and how they voted).[25] I will refer to this as the *Evidence-following Procedure (EFP)*.

Despite the advantages of EFP, I will follow PBR and continue to compare CMP against MVP. But briefly considering EFP serves to highlight an

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important fact about the doctrinal paradox. Like MVP, EFP will sometimes lead to an inconsistent set of judgments.[26] For example, in scenario 2 above, the posterior probabilities of P, Q, and P&Q will be 0.6, 0.6, and 0.36 in a dilemma case. Thus, there are circumstances where we have good reason to judge that P, that Q, and that not-P&Q. This shows that dilemma cases can have exactly the same structure as the standard epistemic paradoxes (cf. Levi 2004). In the lottery paradox (see, e.g., Kyburg 1970), you have good reason to believe of each ticket in a fair lottery that it will lose, but you also have good reason to believe that one of these tickets will win. In the paradox of the preface (see, e.g., Makinson 1965), you have good reason to believe of each claim that you make in a carefully researched book that it is true, but you also have good reason to believe that at least some of these claims are false. In all three paradoxes, you have good reason to judge that each member of an inconsistent set of propositions is true.[27]

Value of True Judgments

So far, we have only taken into account the probability of making true judgments, but not the *utility* or *value* of making true judgments. PBR do not discuss the epistemic value of making true judgments, but it might have an impact on whether it is epistemically better to use CMP or to use MVP.[28] After all, whether it is rational to adopt a particular course of action depends on the utilities as well as the probabilities of the possible outcomes (cf. Resnik 1987, 81).

A number of philosophers (e.g., Levi 1962, 57, Lehrer 1975, 71, James 1979, 31–32) have noted that the epistemic value of making a true judgment is not necessarily the same as the epistemic value of avoiding a false judgment. In fact, most philosophers (e.g., Hume 1977, 111) seem to think that the epistemic value of avoiding a false judgment is significantly larger.[29] Descartes (1996, 12) even thought that the epistemic value of avoiding a false judgment *trumps* (or *lexically dominates*) the epistemic value of making a true judgment. In other words, he thought that avoiding a false judgment is *infinitely* more valuable than making a true judgment (cf. Griffin 1986, 83).

But it turns out that we need not take a definite position in this debate. How the epistemic value of making a true judgment compares with the epistemic value of avoiding a false judgment does not matter in the case at hand. CMP and MVP do not allow for suspending judgment. As a result, if one of these procedures is more likely to lead to a true judgment, it is also less likely to lead to a false judgment. How these two epistemic values compare only matters if suspending judgment is an option.[30]

But there is a way that the epistemic value of making true judgments does matter. A number of philosophers (e.g., Paterson 1979, 95, Maher 1993, 140, Nozick 1993, 67, Goldman 1999, 88–89) have pointed out that different true judgments can have different epistemic values. For example, one true judgment might have greater information content, simplicity, explanatory value, or cognitive richness than another. In particular, a conjunction might easily have greater information content than its negation (cf. Lehrer 1975, 67). Thus, the epistemic value of making a true judgment that P&Q might be greater than the epistemic value of making a true judgment that not-P&Q.[31]

How the epistemic value of making a true judgment that P&Q compares with the epistemic value of making a true judgment that not-P&Q can have an impact on whether it is epistemically better to use MVP or to use CMP. Since CMP is more likely than MVP to lead to a true judgment *that P&Q*, it is epistemically better to use CMP if the epistemic value of a true judgment that P&Q is sufficiently high relative to the epistemic value of a true judgment that not–P&Q.[32] For example, in scenario 2 above, even though MVP is more likely to lead to a true judgment, if the epistemic value of a true judgment that P&Q is twice the epistemic value of a true judgment that not-P&Q, then the expected epistemic value of using CMP is greater than the expected epistemic value of using MVP.

However, it is not necessarily epistemically better to use CMP even if the epistemic value of a true judgment that P&Q is much higher than the epistemic value of a true judgment that not-P&Q. For example, suppose that the probability of P being true is 0.4, the probability of Q being true is 0.4, and the competence of the voters is 0.6.

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(Call this **Scenario 3.**) In this scenario, the expected epistemic value of using MVP is greater than the expected epistemic value of using CMP even if the epistemic value of a true judgment that P&Q is twice the epistemic value of a true judgment that not-P&Q.

Of course, an agent (group or individual) may not always know that she is in this particular scenario. As a result, she may reasonably decide to use CMP because it is epistemically better in a wider range of circumstances. In this paper, however, my goal is to establish that there are circumstances where it is epistemically better to use MVP. For this, it is sufficient to show that MVP has a higher expected epistemic value in a particular scenario because an agent *could* know that she is in this particular scenario.

In fact, no matter how big the epistemic value of a true judgment that P&Q is relative to the epistemic value of a true judgment that not-P&Q, there will be circumstances where it is epistemically better to use MVP than to use CMP. While CMP is more likely to lead to a true judgment that P&Q, MVP is more likely to lead to a true judgment that not-P&Q. Thus, if the probability of P&Q is sufficiently low, any difference in the two epistemic values will be swamped. In fact, the worst case scenario for CMP is when the probability of P&Q is zero.[33] As a result, even if we take into account the epistemic value as well as the probability of making true judgments, there are still circumstances where it is epistemically better to use MVP.

Right for the Right Reasons

So far, we have only focused on making true judgments and avoiding false judgments. But, as noted above, there seem to be other epistemic objectives that are not simply valuable as a means to making true judgments and avoiding false judgments. It is possible that some of these other epistemic objectives might give the edge to CMP. In fact, PBR seem to have found just such an epistemic objective: viz., the objective of making a true judgment *for the right reasons*.

We can think of the judgments on P and on Q as the reasons for the judgment on P&Q. We are then right about P&Q for the right reasons if and only if our judgments about P and about Q are true as well as our judgment about P&Q.[34] It turns out that CMP is always more likely than MVP to be right about P&Q for the right reasons (cf. Bovens and Rabinowicz 2004, 248).[35] For example, in scenario 2 above, the probability that MVP is right about P&Q for the right reasons is approximately 0.39, but the probability that CMP is right for the right reasons is approximately 0.42.

It is fairly easy to see that this holds in general. Whenever CMP and MVP disagree, MVP leads to an inconsistent set of judgments whereas CMP leads to a consistent set of judgments. Since we can only reach the right conclusion for the right reasons if our judgments are consistent, it is not surprising that CMP is more likely to be right for the right reasons.[36]

Being right for the right reasons is certainly valuable. And, unlike sensitivity to the truth, it is not necessarily merely valuable as a means to the truth. In fact, many philosophers say that having a true belief based on the right reasons is necessary for knowledge (cf. Bovens and Rabinowicz 2004, 250). And knowledge is typically said to be more valuable than a true belief. Thus, this epistemic objective improves the case for the epistemic superiority of CMP.[37]

Of course, whether being right for the right reasons is necessary for knowledge depends upon the details of our account of knowledge. For example, we might want to say that a Ptolemaic astronomer knows that there will be an eclipse of the sun on a particular day even though this true belief is based in part on a false belief (viz., that the sun goes around the earth).[38] After all, his beliefs about when eclipses will occur have been produced by a reliable process. Nevertheless, even if it is not necessary for knowledge, being right for the right reasons is still probably more valuable than simply being right.

Even so, while CMP is always more likely to be right about P&Q for the right reasons, there are still circumstances where MVP is more likely to simply be right. Scenario 2 above is a case in point. Thus, there are circumstances where these two epistemic objectives come into conflict. As a result, even if being right for the right reasons is more valuable than just being right, whether it is epistemically better to use CMP or to use MVP in a particular circumstance depends on exactly how much more valuable it is. For example, in

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scenario 2 above, if the epistemic value of being right for the right reasons is twice the epistemic value of simply being right, the expected epistemic value of using CMP is greater than the expected epistemic value of using MVP. However, if the epistemic value of being right for the right reasons is only 50% greater than the epistemic value of simply being right, the expected epistemic value of using MVP is greater than the expected epistemic value of using CMP.

However, it is not necessarily epistemically better to use CMP even if the epistemic value of being right for the right reasons is much higher than the epistemic value of simply being right. For example, in scenario 3 above, the expected epistemic value of using MVP is greater than the expected epistemic value of using CMP even if the epistemic value of being right for the right reasons is twice the epistemic value of simply being right.

In fact, no matter how big the epistemic value of being right for the right reasons is relative to the epistemic value of simply being right, there will be circumstances where it is epistemically better to use MVP than to use CMP. MVP is more likely than CMP to be right if not-P&Q is true. Also, it was not quite true to say that CMP is *always* more likely than MVP to be right for the right reasons. CMP is actually no more likely than MVP to be right for the right reasons if not-P&Q is true.[39] Thus, if the probability of P&Q is sufficiently low, any difference in the two epistemic values will be swamped. In fact, the worst case scenario for CMP is when the probability of P&Q is zero.[40] As a result, even if we take into account the epistemic objective of being right for the right reasons, there are still circumstances where it is epistemically better to use MVP.

Consistency

PBR only discuss the probability of making true judgments and the probability of making true judgments for the right reasons. But there are a number of other things that are epistemically valuable. For example, one obvious advantage of CMP over MVP is that it is more likely to lead to a consistent set of judgments. In fact, CMP is guaranteed to lead to a consistent set of judgments

Pretty much everyone agrees that consistency is epistemically good and inconsistency is epistemically bad (cf. Rescher 1988, 76, Foley 1993, 168).[41] For example, an inconsistent set of judgments is guaranteed to include at least one false judgment. Also, it is possible to derive everything (including, of course, everything false) from an inconsistent set of judgments. But, as I will argue below, this is not enough to establish that it is always epistemically better to use CMP than to use MVP.

Just as with the issue of being right for the right reasons, even though CMP is more likely to lead to a consistent set of judgments, there are still cases where MVP is more likely to lead to a true judgment about P&Q. Scenarios 2 and 3 above are cases in point. Thus, there are cases where these two epistemic objectives come into conflict. In other words, we have a choice between a consistent set of judgments and a higher probability of a true judgment. So, whether it is epistemically better to use CMP or to use MVP in a particular circumstance depends on how the epistemic value of maintaining consistency compares with the epistemic value of making true judgments (and the epistemic value of avoiding false judgments, for that matter).

Once we take into account the epistemic objective of maintaining consistency, it is not trivial to show that there are circumstances where it is epistemically better to use MVP than to use CMP. In the last section, I showed that no matter how much more valuable being right for the right reasons is compared with simply being right, there are circumstances where it is epistemically better to use MVP. But the strategy that I used there will not work here. If the probability of P&Q is very low, MVP is more likely than CMP to lead to a true judgment about P&Q. But MVP is also less likely (and to the same degree) than CMP to lead to a consistent set of judgments.

Does Consistency Trump True Judgments?

In order to establish that it is always epistemically better to use CMP than to use MVP, we might argue that the epistemic value of maintaining consistency trumps the epistemic value of making true judgments. In fact, there are philosophers who essentially argue for this claim. The

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philosophers who write about the epistemic paradoxes can be roughly divided into two camps. The philosophers in the first camp (e.g., Kyburg 1970, Lehrer 1975, Klein 1985, Rescher 1988, 73-91, Foley 1993, 162-173) think that it is sometimes epistemically rational to make an inconsistent set of judgments. The philosophers in the second camp (e.g., Maher 1993, 134-135, Pollock 1994, Kaplan 1996, 112-121) think that it is never epistemically rational to make an inconsistent set of judgments. In other words, these philosophers take it that the epistemic value of maintaining consistency trumps the epistemic value of making true judgments.

In some cases, such as the lottery paradox, the philosophers in the second camp recommend maintaining consistency by suspending judgment on certain propositions (cf. Kaplan 1996, 139-140). In other cases, they recommend maintaining consistency without suspending judgment. For example, in the paradox of the preface, you should believe of each claim in your book that it is true and you should believe that the conjunction of these claims is true (cf. Kaplan 1996, 121).[42] In other words, they actually recommend the analogue of CMP.

As Saul Kripke (1979, 257) points out, "we regard individuals who contradict themselves as subject to greater censure than those who merely have false beliefs." In this section, however, I will argue that the epistemic value of maintaining consistency does not trump the epistemic value of making true judgments.[43] In other words, I will argue that consistency is just one epistemic value to be traded off against other epistemic values (cf. Sorensen 1988, 23, Rescher 1988, 76).

First of all, there is reason to be suspicious of any claim that one value trumps another value (cf. Broome 2004, 24-25). For example, as the ethical theorist James Griffin (1986, 83) notes, despite the immense value of liberty and autonomy, "nearly all of us would sacrifice some liberty to avert a catastrophe, or surrender some autonomy to avoid great pain." Such claims are also suspect in the realm of epistemology. For example, other than Descartes, few philosophers think that the epistemic value of avoiding false judgments trumps the epistemic value of making true judgments (cf. Kaplan 1996, 98). Also, it is probably not the case that the epistemic value of being right for the right reasons trumps the epistemic value of simply being right. Thus, the claim that the epistemic value of maintaining consistency trumps the epistemic value of making a true judgment is immediately suspect.[44]

I will now consider three of the main arguments for the claim that the epistemic value of maintaining consistency trumps the epistemic value of making true judgments. I will argue that none of them are successful. These arguments do show why maintaining consistency is very important. Thus, these arguments indicate why it may often be epistemically better to use CMP than to use MVP. But they do not establish that maintaining consistency is infinitely more valuable than making true judgments.

Preserving the Epistemic Ideal

First, it has been suggested that maintaining consistency has a huge epistemic benefit. Namely, maintaining consistency preserves the possibility of our having achieved the epistemic ideal of only making true judgments.[45] In other words, while maintaining consistency does not insure that we have made no false judgments, it keeps alive the *possibility* that we have made no false judgments. This is certainly something that may have great epistemic value. As Keith Lehrer (1975, 67) notes, "the pursuit of ideals, such as accepting all true statements and only true statements, is a powerful epistemic motivation."

However, it is not clear why the mere possibility of our having achieved this epistemic ideal is so valuable that it trumps the epistemic value of making true judgments. If we do not maintain consistency, we can be absolutely certain that we have not achieved the ideal of making only true judgments. As noted above, an inconsistent set of judgments is guaranteed to include at least one false judgment. However, even if we maintain consistency, we can still be pretty sure that we have not achieved this ideal. It is possible that we have made no false judgments, but it is not very likely. If we make very many judgments about the world, we are almost certain to make some false judgments.[46]

In addition, if striving to achieve this ideal is so important, we should not just try to maintain consistency. We should also refrain from making

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any judgments that are not completely certain. However, such a practice would seriously impede inquiry. This is why very few philosophers think that Descartes was right that the epistemic value of avoiding false judgments trumps the epistemic value of making true judgments.

Finally, even if striving to achieve this ideal is extremely important, it is still not clear that the epistemic value of maintaining consistency trumps the epistemic value of making true judgments. We have to consider whether we want to achieve this ideal now or in the long run. Making an inconsistent set of judgments now might sometimes be the best way to achieve this ideal in the long run.[47] For example, scientists often accept inconsistent scientific theories that are well confirmed by the data (cf. Brown 1990, 281). This is arguably the best way for them to ultimately end up with comprehensive error-free theories.

Not Inferring Everything

Second, it has been suggested that failing to maintain consistency has catastrophic epistemic costs. For example, it is possible to derive a contradiction (and, thus, anything at all) from an inconsistent set of judgments. As a result, if we fail to maintain consistency, we could end up with a lot of false judgments. This would certainly be catastrophic from an epistemic perspective

However, while we *could* derive a lot of false judgments, this will not necessarily happen in practice (cf. Wittgenstein 1976, 219). For example, it is more difficult (and certainly more time consuming) to derive a contradiction if the inconsistency is "large" rather than "small" (cf. Sorensen 1988, 25, Foley 1993, 168). In other words, an inconsistent set that includes an explicit contradiction is much more problematic than one where a large number of propositions from the set are needed to derive a contradiction (cf. Kyburg 1970, 60, Klein 1985, 110).[48] Also, it is more difficult to derive a contradiction if the inconsistency is "global" rather than "local" (cf. Rescher 1988, 75). For example, even though relativity theory and quantum mechanics are inconsistent, they can peacefully coexist most of the time because their usual domains of application are sufficiently distinct (cf. Brown 1990, 284-285).

In addition, if we know that there is an inconsistency, we can try to avoid deriving a lot of false judgments (cf. Wittgenstein 1976, 223, Harman 1986, 15).[49] As Robert Nozick (1993, 78) puts it, we can "engage in damage control, isolating inconsistencies and taking steps not to infer any and every statement from explicit contradictions." In fact, we seem to do a pretty good job of avoiding this potential bad consequence of inconsistency. For example, most of the theorems of naïve set theory could still be proved (and in much the same way) once the inconsistency of universal comprehension had been removed (cf. Azzouni 2003, 345). Thus, since we will not necessarily end up with a lot of false judgments even if we fail to maintain consistency, the epistemic value of making a true judgment now might sometimes outweigh the epistemic value of maintaining consistency.

Of course, the doctrinal paradox often involves small sets of propositions on the same topic. As a result, maintaining consistency may be especially important in this context. However, as noted above, doctrinal paradoxes can involve very large conjunctions. Also, it is not only possible to derive falsehoods from a contradiction. It is also possible to derive falsehoods from other falsehoods. So, if we maintain consistency by judging that P&Q when P&Q is unlikely to be true, we are still putting ourselves at risk of ending up with numerous false judgments.[50]

Preserving the Force of Arguments

Third, it has been suggested that, unless we are committed to maintaining consistency, we are not subject to the force of rational arguments. For example, one way in which we get people to change their views is by showing that their current judgments imply a contradiction. However, as Mark Kaplan (1996, 96-97) points out, if we did not treat inconsistencies as being epistemically bad, people would be under no pressure to change their views in the face of such arguments. This would certainly be catastrophic from an epistemic perspective.

However, Kaplan's argument does not show that the epistemic value of maintaining consistency trumps the epistemic value of making true judgments. Kaplan is correct that we would have a problem if we did not treat inconsistencies

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as being epistemically bad. But inconsistencies can be epistemically bad even if the epistemic value of maintaining consistency does not trump the epistemic value of making true judgments. In fact, for the reasons already discussed, inconsistencies are quite bad from an epistemic perspective. As a result, pointing out an inconsistency does put pressure on people to change their views.[51]

It is important to note that showing that their current judgments imply a contradiction is not the only way to get people to change their views. Showing that their current judgments imply a proposition that is likely to be false is often sufficient (cf. Priest 1998, 422-423). Since false judgments are epistemically bad, this puts pressure on people to change their views. And it does so even though (contra Descartes 1996) the epistemic value of avoiding false judgments does not trump the epistemic value of making true judgments.

Living with Inconsistency

There are undoubtedly other arguments for the claim that the epistemic value of maintaining consistency trumps the epistemic value of making true judgments.[52] But the arguments considered above seem to be the main ones. In any event, there is also a strong positive reason to think that the epistemic value of maintaining consistency does not trump the epistemic value of making true judgments. Namely, we can point to actual cases where the epistemic benefit of making true judgments outweighs the epistemic benefit of maintaining consistency. As noted above, scientists, who are usually taken to be the epitome of epistemic rationality, often make inconsistent sets of judgments (cf. Brown 1990, Kitcher 1992, 85, Nozick 1993, 78, Kaplan 1996, 113-114).[53]

Even the philosophers in the second camp think that it is rational for scientists to live with such inconsistencies. However, they do not think that this is because the epistemic benefit of making true judgments outweighs the epistemic benefit of maintaining consistency. These philosophers claim that it is rational because the scientists do not know how to eliminate the inconsistency (cf. Maher 1993, 134-135, Kaplan 1996, 113-114).[54] Admittedly, the scientists might be able to figure out how to eliminate the inconsistency, but it would be too time consuming. In other words, the epistemic benefit of maintaining consistency is outweighed by its pragmatic cost. Thus, these philosophers claim that this case is importantly different from the case of the paradox of the preface— or the case of the doctrinal paradox— where we do know how to resolve the inconsistency.

But these philosophers are just wrong about the scientists. The scientists do know at least one way to eliminate the inconsistency. Namely, they could simply suspend judgment on some or all of the propositions that make up the inconsistent set. By doing so, they would be forgoing an opportunity to make a lot of true judgments. But, if the epistemic value of maintaining consistency trumps the epistemic value of making true judgments, epistemic rationality would seem to require them to suspend judgment (or to eliminate the inconsistency in some other way). However, scientists are often unwilling to suspend judgment on inconsistent scientific theories. As Nozick (1993, 78) notes, scientists sometimes refuse "to renounce the many exact predictions of a theory known to generate inconsistencies."[55] Thus, unless we have some reason to think that the scientists are wrong in their estimates of the epistemic costs and benefits, these are cases where the epistemic benefit of making true judgments outweighs the epistemic benefit of maintaining consistency.[56]

Of course, there are some important differences between inconsistencies in science and the doctrinal paradox. Scientific theories like relativity theory and quantum mechanics have great epistemic significance. Thus, achieving consistency by suspending judgment on these theories looks like it involves a huge epistemic cost. By contrast, not-P&Q will typically have little epistemic significance.[57] As a result, it might be suggested that the epistemic benefit of maintaining consistency always outweighs the epistemic benefit of making true judgments in the case of the doctrinal paradox.

However, it is not clear that the epistemic cost of maintaining consistency is so negligible in the case of the doctrinal paradox. Scientists only have to suspend judgment on some scientific

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theories in order to achieve consistency. By contrast, if we use CMP in order to achieve consistency in a dilemma case, we have to judge that P&Q is true when it is likely to be false. In other words, we do not just lose the opportunity to make a true judgment; we have to increase our risk making a false judgment. And, as noted above, the epistemic cost of making a false judgment might be much greater than the epistemic cost of simply failing to make a true judgment.[58]

Conclusion

I have only argued here that the epistemic value of maintaining consistency does not trump the epistemic value of making true judgments. And even if one value does not trump another value, the first might always outweigh the second in a restricted domain of circumstances. In particular, it could be that the epistemic value of maintaining consistency always outweighs the epistemic value of making true judgments *in the case of the doctrinal paradox*. But it looks like this is something that we would have to check on a case-by-case basis. I see no prospect for arguing that this is going to happen in all circumstances. Thus, at the moment, there does not seem to be a decisive argument for the claim that it is always epistemically better to use CMP than to use MVP.[59] In any event, as I have argued, the epistemic objectives that PBR discuss (e.g., being right for the right reasons) do not yield such an argument.

Even so, in looking for such an argument, we have identified a number of epistemic advantages of CMP over MVP beyond those that PBR discuss. For example, there is a sense in which CMP is more sensitive to the truth and it preserves the possibility of only making true judgments. Also, in looking for such an argument, we have learned some interesting things about the structure of epistemic values. For example, the epistemic value of maintaining consistency does not trump the epistemic value of making true judgments.[60]

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Notes

1 There is a sense in which a pitch is a strike if and only if the umpire judges that it is a strike, but there is also sense in which a pitch is a strike if and only if it passes through the strike zone (cf. Goldman 1999, 274-275, Russell 2004, 88-91). The second is something that the umpire could be wrong about.

2 True judgments can also sometimes have bad pragmatic consequences (cf. Zagzebski 2003, 21-22, Fallis 2004, 103). But since I will be focusing on epistemic considerations, I will set this issue aside.

3 There is much discussion about whether groups *per se* can perform actions or have beliefs (cf. Gilbert 1994, Pettit 2003). But for purposes of this paper, if there is any question about whether groups can make judgments, we can simply think of a "group judgment" as a special sort of individual judgment. For example, it might actually be the dean that makes the decision about tenure. The dean just uses the votes of the members of the tenure committee to reach this decision.

4 This is special case of evaluating social practices in terms of their epistemic consequences (cf. Goldman 1999).

5 It is not clear that we have direct voluntary control over what we *believe* (cf. Alston 1985, 64-65). As a result, there may be some question about whether it is useful to apply epistemic value theory to the case of belief. But we do have direct voluntary control over what we *judge*.

6 Discussions of epistemic objectives often focus on our epistemic ideal. For example, we would like to make all and only true judgments (cf. Chisholm 1977, 14). But we often need to evaluate procedures that fall short of this ideal.

7 These can be judgments that a group has to make at one time or over an extended period of time (cf. Pettit 2003, 173).

8 CMP essentially uses majority vote to determine the group judgment on basic propositions and logic to determine the group judgment on complex propositions. PBR refer to MVP as a "conclusion-based procedure" and CMP as a "premise-based procedure." Bovens and Rabinowicz (2004, 250-253) also study the epistemic consequences of a "sophisticated premise-based procedure" that takes into consideration the size of the majorities for P and for Q. But, in this paper, I will focus exclusively on MVP and CMP.

9 This is especially important in the case of federal courts.

10 For comparisons of several other social practices in terms of their epistemic consequences, see Fallis 1997, Goldman 1999, and Fallis 2004.

11 For purposes of this paper, I am assuming that it is *epistemically* rational to use a procedure if doing so brings about good *epistemic* consequences (cf. Foley 1993). Some philosophers (e.g.,

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Kelly 2003) have argued that epistemic rationality cannot be reduced to instrumental rationality in this way. But there is not enough space to go into this debate here.

[12] Sometimes suspending judgment will be an option in the case of group judgment. For example, juries that cannot reach a unanimous verdict are essentially allowed to suspend judgment (cf. Foley 1993, 173). When suspending judgment is an option, it might be the epistemically best procedure. But a fully articulated epistemic value theory should still be able to say which is epistemically better, CMP or MVP.

[13] If the judgments on P and P&Q do not imply a particular judgment on Q, we would simply go with the majority vote on Q as well.

[14] For example, the probability that a voter will judge that P, given that P is true, is greater than 0.5.

[15] In addition, their competence with respect to a proposition is assumed to be the same regardless of whether the proposition is true or false.

[16] More precisely, the votes are all *conditionally independent* (cf. Jeffrey 1987, 392-393). For example, the probability that a voter is correct about P is the same as the probability that she is correct given that another voter is correct. Also, the probability that P is true is assumed to be independent of the probability that Q is true.

[17] With the exception of the final assumption, these are the same sorts of assumptions often made in discussions of the Condorcet Jury Theorem (cf. Estlund 1994, 131). The final assumption insures that the individual voters are consistent.

[18] Some people may not even have consistent views (see below).

[19] I will follow PBR and talk about the *objective* probability that a judgment aggregation procedure will lead to a true judgment. This requires assuming that P and Q have objective probabilities between zero and one. However, there is some question about whether P and Q will have objective probabilities other than zero or one (cf. Fallis 2002, 228-229). But everything that I say in this paper can be interpreted as referring instead to the *subjective* probability that an agent (group or individual) should assign to a procedure leading to a true judgment. (P and Q can certainly have subjective probabilities between zero and one.)

[20] Suppose that there is a majority against P or against Q. In such cases, CMP will lead us to judge that not-P&Q. Also, since we are assuming that individual voters make consistent judgments, there will be a majority against P&Q. Thus, MVP will lead us to judge that not-P&Q as well.

[21] Bovens and Rabinowicz (2004, 249) also found that CMP is more likely than MVP to lead to a true judgment if the voter competence is sufficiently high and/or if the number of voters is sufficiently high. (In my examples, I assume that there are exactly three voters.)

[22] By weakening some of the idealizing assumptions of PBR, Christian List (forthcoming) has identified some other plausible circumstances where MVP is more likely to lead to a true judgment.

[23] Since they determine the votes on P&Q, let us refer to the six votes on P and on Q as the *critical votes*. If P&Q is true, four of the critical votes are correct in a dilemma case. However, if P&Q is false, at most three of the critical votes are correct. For example, if P is true and Q is false, three of the critical votes are correct. Since we are assuming that the competence of the voters is greater than 0.5, it is more likely that four of the critical votes are correct than that only three are correct. More formally, if $p > 0.5$ is the competence of the voters, then $\Pr(\text{dilemma case} | \text{P\&Q}) = p^4(1-p)^2 > p^3(1-p)^3 \geq \Pr(\text{dilemma case} | \text{not-P\&Q})$.

[24] This property of CMP actually serves to explain some of the results of Bovens and Rabinowicz (see footnote 21). If voters are more competent, being in a dilemma case will be even better evidence that P&Q is true. Also, if there are more voters, being in a dilemma case will be even better evidence that P&Q is true. Either way, CMP will be more likely to lead to a true judgment about P&Q.

[25] I am assuming here that we assign prior probabilities to P and Q. According to Pettit (2003, 182), a group "is incapable of forming degrees of belief … its beliefs are recorded as on-off

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judgments." However, degrees of belief are typically defined in terms of betting behavior (cf. Resnik 1987, 69). Thus, if a group can make on-off judgments, it can have degrees of belief.

[26] Christian List has pointed out to me that there is a similar procedure that does insure consistency. Namely, we could go with the *set* of judgments whose *conjunction* is most likely to be true given the evidence. (The probability of the conjunction of an inconsistent set of propositions is zero.)

[27] In fact, in all three paradoxes, the inconsistent set can be made up of a series of propositions and the negation of their conjunction.

[28] Bovens and Rabinowicz (2004, 255) do note that *pragmatic* utilities might have an impact on which procedure is preferable, but they do not study the impact of these utilities.

[29] Alvin Goldman (1999, 89) is a notable exception. He takes these two epistemic values to be the same (cf. Fallis 2002, 231-234).

[30] Similarly, suppose that you are *forced* to bet $X on either the Lakers or the Celtics and that you will win $Y if you pick the winning team. How your potential loss ($X) compares with your potential gain ($Y) will not affect how you bet. You will just want to bet on the team that is most likely to win.

[31] Similarly, the epistemic cost of making a false judgment about P&Q need not be the same as the epistemic cost of making a false judgment that not-P&Q.

[32] Strictly speaking, we should be talking about the benefit of a true judgment that P&Q minus the cost of a false judgment that not-P&Q as compared with the benefit of a true judgment that not-P&Q minus the cost of a false judgment that P&Q (cf. Godfrey-Smith 1991, 716). But this complication can safely be ignored for the points made here.

[33] Strictly speaking, given the PBR results (see footnote 21), the worst case for CMP would be when the probability of P&Q is zero, there are only three voters, and their competence is not much greater than 0.5. But a low probability of P&Q is sufficient by itself to make it epistemically better to use MVP than to use CMP.

[34] By contrast, if we judge that P, that not-Q, and that not-P&Q when P is false and Q is true, then we are right about P&Q for the wrong reasons.

[35] Bovens and Rabinowicz (2004, 247) actually say that MVP is only right for the right reasons if a majority of the voters are right for the right reasons. But MVP can lead to true judgments about P, Q, and P&Q even if only a minority of the voters make true judgments about all three propositions (e.g., in the second typical case above when P is true and Q is false). As a result, there are at least two problems with PBR's definition. First, they are unfairly holding MVP to a higher standard than CMP when it comes to being right for the right reasons. Second, they are really looking at an epistemic property of the judgments of the individual voters rather than an epistemic property of the group judgment.

[36] In fact, in dilemma cases, CMP will be right for the right reasons if it is right at all.

[37] This is not just because, in being right for the right reasons, we will be right about P and about Q. CMP and MVP have the same probability of being right about P and about Q.

[38] This example is due to Peter Klein (forthcoming). The fact that this belief was produced by a reliable process also suggests there is no undefeated defeater of this belief.

[39] CMP only has an advantage over MVP because of those cases where they disagree (viz., the dilemma cases). In dilemma cases, CMP judges that P, that Q, and that P&Q. Thus, CMP will only be right for the right reasons when MVP is not if P&Q is true.

[40] It is doubtful that the epistemic value of being right for the right reasons trumps the epistemic value of simply being right. But even if it did, this would still be a circumstance where it is epistemically better to use MVP.

[41] There are a few philosophers (e.g., Priest 1998) who disagree.

[42] Kaplan claims that, even though you think that it is very likely that at least some of these claims are false, you should still believe that the conjunction of these claims is true. This is because he thinks that rational belief should be closed under logical consequence. In other words, he takes it

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that the epistemic value of maintaining closure also trumps the epistemic value of making true judgments.

[43] Other philosophers (e.g., Lehrer 1975, Rescher 1988, 73-91, Foley 1993, 162-173) have argued for this sort of claim.

[44] It may even be the case that epistemology has nothing to say about how the epistemic value of maintaining consistency compares with the epistemic value of making a true judgment. A number of philosophers (e.g., Levi 1962, 57, Lehrer 1975, 71, Field 1982, 565, Godfrey-Smith 1991, Kitcher 2001, 264) have suggested that epistemology has nothing to say about how the epistemic value of making a true judgment compares with the epistemic value of avoiding a false judgment. Making a true judgment is clearly epistemically better than not making a true judgment. Also, not making a false judgment is clearly epistemically better than making a false judgment. But beyond this there may be nothing to say from an epistemic perspective. In other words, epistemology does not necessarily provide a complete ordering of outcomes in terms of epistemic betterness. If these philosophers are correct, we can only decide whether making a true judgment or avoiding a false judgment is better on the basis of pragmatic considerations (i.e., based on what is at stake in the case at hand). Similarly, we may only be able to decide whether maintaining consistency or making a true judgment is better based on what is at stake in the case at hand. In line with this, Kornhauser and Sager (1993, 33) suggest that whether CMP or MVP should be used in a dilemma case depends on the details of the case at hand.

[45] Strictly speaking, MVP might also preserve this epistemic ideal. We could get lucky and never face any dilemma cases. But CMP preserves this epistemic ideal even in dilemma cases.

[46] Indeed, even if we try to maintain consistency, we are almost certain to make some judgments that are inconsistent with each other (cf. Rescher 1988, 81).

[47] Similarly, making a false judgment now might sometimes be the best way to achieve this ideal in the long run (cf. Nozick 1993, 67). Of course, Descartes (1996, 63) would say that the best way to achieve this ideal is never to make any false judgments in the first place.

[48] A number of philosophers (e.g., Brown 1999, Knight 2002) have measured the *degree of inconsistency* of a set of propositions based on how many propositions are needed to derive a contradiction. Kaplan (2002, 459-460), however, argues that even very large inconsistencies can be bad from an epistemic perspective.

[49] Several philosophers (e.g., Klein 1985, 126, Brown 1999) have developed formal theories that explain why we are not warranted in deriving everything from an inconsistent set of propositions. Also, since natural languages seem to be inherently inconsistent (consider the liar paradox), we always have to be trying to avoid this potential bad consequence of inconsistency (cf. Azzouni 2003).

[50] In fact, if we are committed to only using MVP to determine the group judgment, this worry about proving everything does not even arise. We make new group judgments by majority vote. We do not make new group judgments by deriving new propositions.

[51] In an argument that is analogous to Kaplan's, List and Pettit (2005) claim that a group "cannot aspire to personified status and claim to be indifferent to inconsistencies in the propositions it endorses." Their argument also shows that maintaining consistency is an important consideration, but does not show that it trumps other considerations.

[52] It is possible that, just like making true judgments, maintaining consistency simply has *intrinsic* epistemic value (cf. Lehrer 1975, 72). But we still need some argument for why it is so valuable that it trumps the epistemic value of making true judgments.

[53] I am assuming (along with Levi 1962, Maher 1993, Kaplan 1996, and many others) that scientists judge that theories are *true*. However, some philosophers (e.g., Jeffrey 1956, 245) claim that scientists only assign *degrees of confidence* to theories. Also, other philosophers (e.g., van Fraassen 1980) claim that scientists only judge that theories are *empirically adequate*. Either of these positions might be used to argue that scientists do not really make inconsistent sets of

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judgments. But it is not clear that either of these positions successfully capture actual scientific practice (cf. Maher 1993, 162-181, 240-244).

[54] There is some difficulty interpreting these passages from Maher and Kaplan. Maher is not clear about whether it is the existence of the inconsistency or how to eliminate the inconsistency that is "nonobvious." Kaplan is not clear about whether scientists do not know how to eliminate the inconsistency or do not know how to eliminate the inconsistency in "the right way." As a result, they may not actually be in disagreement with what I say below. After all, their main concern is to refute the "Lockean thesis" that a high degree of confidence is a sufficient condition for belief or acceptance. And this can still be done even if the epistemic value of making true judgments sometimes outweighs the epistemic value of maintaining consistency.

[55] Ideally, scientists would accept comprehensive error-free theories rather than either suspend judgment or make inconsistent sets of judgments. But, unfortunately, that is not always one of their options.

[56] There may be more mundane cases from everyday life as well (cf. Harman 1986, 15-16, Nozick 1993, 78).

[57] It can certainly have great pragmatic significance. For example, the judgment of the three-judge court on P&Q can determine whether the plaintiff gets paid a large sum of money.

[58] In addition, not-P&Q might have great epistemic significance in at least some cases.

[59] I have been tacitly assuming that the relevant epistemic values for individual judgments are the same as the relevant epistemic values for group judgments. However, even if this is not the case, it will probably not improve the case for the epistemic superiority of CMP. If anything, maintaining consistency is less critical in the case of group judgments. We often have explicit mechanisms for dealing with inconsistencies in group judgments. For example, Supreme Court decisions only have the force of law in subsequent cases if a majority agrees, not just on the result of the case, but on a consistent set of reasons for that result (cf. Warnken and Samuels 1997).

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