

## Externalism and the Memory Argument

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### Abstract

Paul Boghossian's 'Memory Argument' allegedly shows, using the familiar slow-switching scenario, that externalism and authoritative self-knowledge are incompatible. The aim of this paper is to undermine the argument by examining two distinct externalist responses. I demonstrate that the Memory Argument equivocates on the notion of forgetting.

Since Hilary Putnam presented the *Twin Earth* case in 'The Meaning of "Meaning"' (1975), the doctrine of externalism has held considerable interest for philosophers of mind and language. At first glance, externalism is incompatible with our ordinary conception of authoritative self-knowledge because, according to externalism, the contents of our mental states conceptually depend on external factors about which we do not have authoritative knowledge. Although a number of philosophers have attempted resolutions of this apparent incompatibility, Paul Boghossian (1989) introduces the 'Memory Argument' in order to place a further obstacle in the way of 'compatibilism', as it is often called. He argues that slow-switching, which Tyler Burge (1988) introduces with the intention of illustrating the compatibility of externalism and authoritative self-knowledge, can demonstrate their *incompatibility* instead. Boghossian's influential argument has not only deepened the discussion of the relationship between externalism and authoritative self-knowledge, but also revealed another aspect of the issue: externalism and the nature of memory.

The purpose of this paper is to undermine the Memory Argument by showing that it equivocates on the notion of forgetting. In Section 1, I introduce the Memory Argument. In Section 2, I discuss two externalist responses to the argument, provided by Peter Ludlow and

Anthony Brueckner. In Section 3, I show that those responses are based on two distinct conceptions of forgetting. In Sections 4 and 5, I argue that the Memory Argument equivocates on the notion of forgetting. In Section 6, I demonstrate that Boghossian cannot vindicate the argument even by adopting a different conception of forgetting. Finally, in Section 7, I improve on Brueckner's response to the Memory Argument.

### *1. The Memory Argument*

A slow-switching case is one in which an agent is switched from one environment to another and, according to externalism, the content of one or more of her/his beliefs shifts as a consequence. Let us consider a social externalist type of slow-switching case in which an agent *S* is switched between two linguistic communities. *S* is transported, without being aware of the transport, from Earth to Twin Earth, where people have slightly different individuating conditions for the meaning of the word 'chicory' from those on Earth.<sup>1</sup> That is, while people on Earth mean chicory by 'chicory', people on Twin Earth mean *twicory* by 'chicory'. Hence, after a certain amount of time on Twin Earth, *S*'s belief expressed as 'chicory is bitter' comes to have the content that *twicory is bitter*. Likewise, *S*'s second-order belief expressed as 'I think that chicory is bitter' comes to have the content that *I think that twicory is bitter*.

Boghossian argues that the slow-switching case can be used to derive a situation which entails the incompatibility of externalism and authoritative self-knowledge of the contents of our own beliefs: *S* believes at time *t*<sub>1</sub> that chicory is bitter and authoritatively knows what *S* is believing, then meanwhile forgets nothing, but at time *t*<sub>2</sub> does not authoritatively know that *S* believes at *t*<sub>1</sub> that chicory is bitter. Boghossian concludes:

The only explanation, I venture to suggest, for why *S* will not know tomorrow what he is said to know today, is not that he has forgotten but that he never knew. ... What other

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<sup>1</sup> The case of chicory was originally introduced by Ludlow (1995a) as a 'real life' example of slow-switching. See Section 7 of this paper.

reason is there for why our slowly transported thinker will not know tomorrow what he is said to know directly and authoritatively today? (Boghossian 1989, 23)<sup>2</sup>

The Memory Argument is nicely schematised by Ludlow:

(1) If S forgets nothing, then if S knows that P at t1 then S knows that P at t2.

(2) S forgets nothing.

(3) S does not know that P at t2.

Therefore,

(4) S does not know that P at t1. (Ludlow 1995b, 157)<sup>3</sup>

Obviously, Boghossian derives the conclusion (4) by *modus tollens* from (3) and the main consequent of (1).

## 2. Two Responses to the Memory Argument

Ludlow and Brueckner provide two different externalist responses to the Memory Argument.<sup>4</sup>

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<sup>2</sup> As Brueckner (1994, 3) correctly points out, there is a small anomaly in Boghossian's presentation: since a *slow-switching* case, by definition, must take place over a very long span of time, it cannot be a matter of 'today' and 'tomorrow'. Thus, it is clearly not the case that 'S will not know tomorrow what he is said to know today'—unless the slow-switching situation involves an environment where a day is equivalent to many weeks!

<sup>3</sup> P stands for the proposition that S believes at t1 that chicory is bitter. In order to clarify the structure of the argument, I have slightly modified Ludlow's original formulation of (1). His formulation is: If S forgets nothing, then what S knows at t1, S knows at t2. I have also put (2) and (3) into the present tense.

<sup>4</sup> In the main text, I discuss only attempts to reject (1) and (2). It should be noted, however, that several attempts have been made to reject (3) as well. Warfield argues, for example, that Boghossian's slow-switching does not entail (3) but the following much weaker claim, which is, according to Warfield, essentially irrelevant to the compatibility of externalism and authoritative self-knowledge: if the slow-switching case is actual then S does not know at t2 that P (Warfield 1992, 235). Burge also argues that (3) is false because after slow-switching S is perfectly capable of having *both* chicory and twicory beliefs (Burge 1998, 357).

### Ludlow's Rejection of (1)

Ludlow (1995b, 1996, 1999) maintains that Boghossian's premise (1) is flawed. According to Ludlow it is natural for externalists to suppose that the content of S's *memory* depends on S's environment, just as the content of S's belief depends on S's environment. It follows, Ludlow claims, that the content of S's memory may shift over time as S's linguistic community changes. Therefore, Ludlow concludes, contrary to what (1) says, even if S forgets nothing, it is still possible that S does not know at t2 that P. Ludlow claims that this is the way 'the consistent social externalist' should respond to the Memory Argument (1995b, 158).

### Brueckner's Rejection of (2)

Brueckner argues instead that (2) is flawed. He argues that in order for S at t2 to remember what S thinks at t1 it must be the case that, at t2, S has a belief with the content expressed as 'I was thinking at t1 that chicory is bitter' (Brueckner 1997, 6). However, Brueckner says, this cannot be true. For, while S thinks at t1 that chicory is bitter, S's t2 utterance of the phrase represents S as having a belief that *twicory* is bitter. In other words: if S forgets nothing then S has to know at t2 that S thinks at t1 that chicory is bitter, but S does not know that at t2. For, at t2, S cannot even have a belief about chicory but only about *twicory*. The belief condition of S's alleged knowledge at t2 is, according to Brueckner, undermined.<sup>5</sup>

### 3. Two Conceptions of Forgetting

We have seen that both Ludlow and Brueckner believe that there is a successful externalist response to the Memory Argument. However, their responses seem to contradict each other. Ludlow maintains, "It is entirely consistent with the social externalist view of memory that [*S*] *forgot nothing*, but that the contents of [*S*'s] memories have nonetheless shifted" (my emphasis,

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<sup>5</sup> Although Brueckner's initial attempt is to reject (2) he eventually rejects (1) as well. I set aside this fact and focus on his attempt to reject of (2) for a moment. See Section 7 of this paper for his strategy to reject (1).

Ludlow 1995b, 159). Brueckner writes, on the contrary, “[I]t is hard to see how Ludlow’s externalism about memory shows that from t1 to t2, “[S] forgot nothing”. The externalism about memory establishes *exactly the opposite*. ... [I]f at t1 [S] knew what [S] was thinking (as Ludlow maintains), then by t2 [S] forgot something [S] knew at t1” (my emphasis, Brueckner 1997, 8). How should we resolve the conflict between Ludlow’s and Breckner’s responses? The obvious resolution is to reject one (or both) of them. However, once we realise that they are operating with two different conceptions of forgetting, there is no reason to reject either of them.

Ludlow agrees with Boghossian that (2)—S forgets nothing—is true, because he thinks that the shift of memory content is quite distinct from forgetting. According to his conception of forgetting, even if S does not know at t2 that P due to slow-switching, it does not simply follow that S forgets something. For S may still fail to satisfy a necessary condition for forgetting. What then is the necessary condition that plays a crucial role here?

Take a paradigm case of forgetting: John forgets his friend’s phone number that he memorised a week ago. In this case, John’s failure to know the phone number supervenes on his relevant brain states. Thus, we may regard forgetting as a kind of neurophysiological event that occurs in one’s brain. When S undergoes slow-switching, on the other hand, S’s failure to know that P at t2 *does not* supervene on S’s relevant brain states. S’s failure is not a neurophysiological event in S’s brain, but merely a shift of memory content caused by slow-switching. S’s relevant brain states remain constant throughout. Hence, we may distinguish shifting of memory content from forgetting by adopting the following conception of forgetting, which Ludlow seems to endorse:

*Narrow Conception of Forgetting:* If S’s relevant brain states remain the same then S forgets nothing.

I submit that there is no other plausible way to derive (2)—S forgets nothing—in the slow-switching case than by adopting this conception of forgetting.

Brueckner thinks, contrary to Ludlow, that (2)—S forgets nothing—is false, because he holds that the shift of memory content may constitute forgetting. He contends that if S does not know, due to slow-switching, that P, which S knows earlier, then it follows that S forgets something. For, according to Brueckner’s conception of forgetting, the function of memory is, roughly speaking, to preserve the content of one’s knowledge in an appropriate way. Hence Brueckner’s conception of forgetting, which focuses solely on the content of one’s memory, may be formulated as follows:

*Wide Conception of Forgetting:* If S knows that P at t1 and S does not know that P at t2, then S forgets something.<sup>6</sup>

The wide conception of forgetting is more externalist than the narrow conception in the sense that it focuses on the content of memory, which is sensitive to S’s external environment, in determining whether or not S forgets something.

To summarise: According to the narrow conception of forgetting *S does not forget anything* because S’s relevant brain states remain constant throughout the slow-switching case. According to the wide conception of forgetting, on the other hand, *S forgets something* because S knows that P at t1 and does not know that P at t2.

#### 4. Boghossian’s Equivocation

Now the important question is which conception of forgetting Boghossian adopts in the Memory Argument. As I have claimed (2)—S forgets nothing—is true only according to the narrow conception of forgetting, and false according to the wide conception of forgetting. Thus,

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<sup>6</sup> While Brueckner initially accepts this conception of forgetting, he later provides a much more sophisticated conception of memory. See Section 7 of this paper. While the wide conception of forgetting provides a sufficient condition for forgetting, the narrow conception does not. In this sense, one might think that the narrow conception of forgetting that I formulate in the main text is incomplete. However, I do not attempt to provide a complete

Boghossian seems to endorse the narrow conception of forgetting. However, the problem is that *Boghossian cannot sustain the Memory Argument with the narrow conception of forgetting.*

Recall the first premise of the Memory Argument:

(1) If S forgets nothing, then if S knows that P at t1 then S knows that P at t2.

Boghossian derives the conclusion—S does not know that P at t1—by using the consequent of the main conditional of (1). Hence (1) is indispensable for the Memory Argument. Now, take the contraposition of (1):

(1\*) If S knows that P at t1 and S does not know that P at t2, then S forgets something.

As the reader may notice, (1\*) is identical to the wide conception of forgetting! This is problematic for Boghossian because, as Brueckner shows, the wide conception of forgetting entails *the negation of (2)*. Therefore, while Boghossian needs the narrow conception of forgetting to establish that (2) is true, he also needs, in order to derive the conclusion of the argument, the wide conception of forgetting, which entails that (2) is *false*.

At this point, the problem with the Memory Argument is clear. Boghossian equivocates on the notion of forgetting. On the one hand, he declares in establishing (1) that he adopts the wide conception of forgetting. On the other hand, however, he adopts the narrow conception of forgetting when he claims in (2) that S forgets nothing.

### 5. *The Catherine Case*

In order to illustrate Boghossian's equivocation, consider the following fallacious argument that is parallel to the Memory Argument: If Catherine forgets nothing, then if she knows that P in 1999 then she knows that P in 2002. She knows in 1999 that Bill Clinton is the President of the United States. However, unbeknownst to Catherine, George W. Bush becomes the new President in 2001. This case generates a contradiction: Although Catherine 'forgets nothing' she

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formulation of the narrow conception. For, as I demonstrate, the one that I formulate is enough to show that Boghossian equivocates on the notion of forgetting.

does not know in 2002 that Bill Clinton is the President of the United States. Therefore, we must conclude, she does not know in 1999 that the President of the United States is Bill Clinton!

The structure of this argument is the following:

(C1) If Catherine forgets nothing, then if she knows in 1999 that the President of the United States is Bill Clinton then she knows it in 2002.

(C2) Catherine forgets nothing.

(C3) Catherine does not know in 2002 that the President of the United States is Bill Clinton.

Therefore,

(C4) Catherine does not know in 1999 that the President of the United States is Bill Clinton.

This is exactly the same structure as that of the Memory Argument. The problem with this argument is that, just like the Memory Argument, it adopts two distinct conceptions of forgetting at the same time.

(C1) is equivalent to the following, which is an instantiation of the wide conception of forgetting:

(C1') If Catherine knows in 1999 that the President of the United States is Bill Clinton and she does not know it in 2002, then Catherine forgets something.

Given that Catherine knows in 1999 that the President of the United States is Bill Clinton and that she does not know it in 2002 due to Bush's inauguration, (C1') entails that *Catherine forgets something*. However, (C2) states that *Catherine forgets nothing*. (C2) clearly presupposes the narrow conception of forgetting, according to which if Catherine's relevant brain states remain the same she forgets nothing. This argument displays the same equivocation on the notion of forgetting that Boghossian commits in the Memory Argument.

So long as the Memory Argument includes the premise that S forgets nothing, Boghossian has to adopt some conception of forgetting. If he adopts the narrow conception of forgetting, he

will have to give up (1). However, if he adopts the wide conception of forgetting, he will have to give up (2). Therefore, no matter which conception of forgetting Boghossian adopts, he cannot establish the Memory Argument. The Memory Argument fails, at least as it stands.

#### *6. A New Conception of Forgetting?*

In order for Boghossian to improve on the Memory Argument, he has to give up (1) and replace it with a new conception of forgetting which entails (4) while being consistent with (2) and (3). Is there such a conception? As I said earlier, the only possible way to derive (2)—S forgets nothing—is to appeal to the fact that, unlike the paradigm case of forgetting, S's relevant brain states remain the same in the slow-switching case. Hence, Boghossian cannot dispense with the narrow conception of forgetting. On the other hand, however, in order to derive (4)—S does not know that P at t1—from the facts that S forgets nothing and that S does not know that P at t2, Boghossian cannot dispense with the wide conception of forgetting. Therefore, it seems that, in order to improve on the Memory Argument, Boghossian has to combine the narrow and wide conceptions of forgetting. However, those two conceptions *cannot* be combined. Take the narrow conception of forgetting:

If S's relevant brain states remain the same then S forgets nothing.

And take the contraposition of the wide conception of forgetting:

If S forgets nothing, then if S knows that P at t1 then S knows that P at t2.

Combining those we can derive the following:

If S's relevant brain states remain the same, then if S knows that P at t1 then S knows that P at t2.

However, as the slow-switching and the Catherine cases show, this is clearly false. In the slow-switching case, although S's relevant brain states remain the same, S does not know at t2 that P, even though S knows that P at t1. Similarly, in the Catherine case, although her relevant brain

states remain the same she does not know in 2002 that the President of the United States is Bill Clinton, even though she knows it in 1999.

One might suggest that while those conceptions cannot be combined, Boghossian can still vindicate the Memory Argument by embedding the notion of a change in S's relevant brain states to the wide conception of forgetting. So, for instance, according to this suggestion, Boghossian might revise the wide conception of forgetting as follows:

*Revised Wide Conception of Forgetting:* If S knows that P at t1, S does not know that P at t2, and S's relevant brain states change then S forgets something.

The revised wide conception of forgetting is equivalent to the following, which is parallel to (1):

(1R) If S forgets nothing then either if S knows that P at t1 then S knows that P at t2 or S's relevant brain states do not change.

If we replace (1) with (1R) in the Memory Argument then we can derive the following from (1R) and (2) by *Modus Ponens*:

(1R\*) Either if S knows that P at t1 then S knows that P at t2 or S's relevant brain states do not change.

If the second disjunct of (1R\*)—S's relevant brain states do not change—is true then the Memory Argument fails. For Boghossian cannot derive the conclusion (4) from (3) and (1R\*). However, if the second disjunct is false then Boghossian loses the motivation to hold (2)—S forgets nothing—and the Memory Argument fails. Therefore, in either case, Boghossian cannot establish the Memory Argument with the revised wide conception of forgetting.

The Memory Argument fails to refute the compatibility of externalism and authoritative self-knowledge.

### 7. A Simpler Strategy to Reject (2)

We have seen that Brueckner rejects (2)—S forgets nothing—in saying that S does not know that P at t2 even though S knows it at t1. According to Brueckner, the *belief condition* of S's

alleged knowledge at  $t_2$  is undermined. For, given that  $S$  is transported to a twicory environment,  $S$  cannot even have a chicory belief at  $t_2$ .  $S$ 's belief at  $t_2$  expressed as 'I was thinking at  $t_1$  that chicory is bitter' is a twicory belief rather than a chicory belief. While Brueckner's reasoning makes perfect sense in the slow-switching case at issue, it involves an unwelcome complication. Let me close this paper by introducing the complication that Brueckner's argument encounters and providing a simpler way of rejecting (2) that is free from the complication.

The complication arises from the fact that Brueckner's reasoning is not applicable to what we may call the 'double slow-switching' case. The double-slow-switching case is the one in which  $S$  has a chicory belief at  $t_1$ , a twicory belief at  $t_2$  and a second chicory belief at the later time  $t_3$  due to the repetition of slow-switching.<sup>7</sup> In this case, we must say that  $S$  forgets that  $P$ , even though  $S$ 's  $t_3$  utterance of 'I remember that I was thinking at  $t_1$  that chicory is bitter' does correctly represent a chicory belief and the belief condition of  $S$ 's alleged knowledge is *not* undermined. Brueckner is indeed aware of this point and examines two kinds of double slow-switching case (Brueckner 1997, 8-10). The first is one in which  $S$  is informed that  $S$  has been switched. Here  $S$  remembers  $P$  but has reason to doubt the accuracy of  $S$ 's memory. In order to accommodate this case Brueckner revises (1) as follows:

(1') If at  $t_2$ ,  $S$  has forgotten nothing that he knew at  $t_1$ , and  $S$  has no reason to doubt the accuracy of his apparent memories regarding propositions that he knew at  $t_1$ , then what  $S$  knows at  $t_1$ ,  $S$  knows at  $t_2$ . (Brueckner 1997, 8)

In the second double slow-switching case that Brueckner examines,  $S$  is not informed that  $S$  has been switched. In this case, while the antecedent of (1') is satisfied, according to Brueckner, we are still "inclined to suppose that  $S$  fails to satisfy some necessary condition for having knowledge that is based on memory" (Brueckner 1997, 9). Hence, Brueckner says, (1') should be further revised as follows:

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<sup>7</sup> For an application of double slow-switching see Nagasawa (2000).

(1'') If at t2, S has forgotten nothing that he knew at t1, and if S satisfies all the m-conditions for memory knowledge of those propositions S knew at t1, then what S knows at t1, S knows at t2. (Brueckner 1997, 10)

By an 'm-condition' Brueckner means a condition that 'S must satisfy if he is to know that P on the basis of his memory that P' (Brueckner 1997, 9).

Brueckner's reasoning is inelegant, if not problematic. First, while his initial goal is to undermine the Memory Argument by rejecting (2) he ends up rejecting (1) as well, in order to handle the double slow-switching case. Second, it is not entirely clear exactly what an m-condition is. In the following, I introduce a simpler way of undermining (2) that does not involve this sort of complication.

I noted earlier that if S at t2 is to know that P, then S's belief expressed as 'I was thinking at t1 that chicory is bitter' has to be a justified true belief at t2. However, now, I claim, the *justification condition* (or warrant condition) of S's alleged knowledge at t2 is undermined. Given the actual occurrence of slow-switching, *twicory* is a relevant alternative to chicory that S cannot exclude. If S cannot exclude it and cannot justify at t2 that S has a chicory belief at t1, then S does not know at t2 that P.

Notice that, contrary to Brueckner's argument to undermine (2), this argument *is* applicable to the double-slow-switching case. Even if S's t3 utterance of 'I was thinking at t1 that chicory is bitter' correctly represents a chicory belief, it does not erroneously follow from this argument that S knows at t3 that P, because, given the occurrence of slow-switching, S cannot justify at t3 that he thinks at t1 that chicory is bitter.<sup>8</sup>

Now I examine two possible objections to my argument.

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<sup>8</sup> In fact, Brueckner seems to doubt the justification condition as well. He writes, "If one thinks that [S] lack[s] knowledge in the case at hand ... , then this may well be because one holds some sort of relevant alternatives view of knowledge" (1997, 9). However, Brueckner uses this case to motivate, not the rejection of (2) but, the revision of (1').

First, one might argue that my reasoning is unacceptable because it is parallel to scepticism: I cannot know that a dime is in my hand because I cannot exclude the possibility that there is no counterfeit money in the vicinity; I cannot know that there is fire in front of me because I cannot exclude the possibility that I am a brain in a vat; and so on.

However, as the following passage by Boghossian suggests, this worry is needless:

[*S thinks at t1 that twicory is bitter*] is now a relevant alternative. He, of course, is not aware of that, but that doesn't change matters. Epistemic relevance is not a subjective concept. Someone may not be aware that there is a lot of counterfeit money in his vicinity; but if there is, the hypothesis that the dime-looking object in his hand is counterfeit needs to be excluded before he can be said to know that it is a dime. Similarly, S has to be able to exclude the possibility that his thought involved the concept [*chicory*] rather than the concept [*twicory*], before he can be said to know what his thought is. (Boghossian 1989, 14)<sup>9</sup>

Notice that Boghossian describes the slow-switching case as a real experience that S has. S must at t2 regard twicory as a relevant alternative to chicory, not because S may *imagine* a counterfactual situation in which he becomes a victim of the slow-switching case, but because he does actually become a victim after t1. Therefore, the slow-switching case is fundamentally different from sceptical hypotheses.

Second, one might argue that twicory is not a relevant alternative to chicory by appealing to the realistic view of relevance. According to the realistic view of relevance the relevance depends on the frequency of actual occurrences of slow-switching.<sup>10</sup> Hence, assuming that slow-switching does not occur often, this objection says, the justification condition of S's alleged knowledge is not undermined.

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<sup>9</sup> Boghossian uses an example of arthritis versus *tharthritis* in the passage, but I have changed it to the example of chicory versus twicory to make it consistent with our discussion.

<sup>10</sup> For the realistic view of relevance see Dretske (1981, especially 61-63).

However, this objection is not successful. For, we can always block this objection by simply stipulating that slow-switching *is* altogether commonplace where S lives. Indeed this is, as the above passage implies, what Boghossian assumes when he sets up the Memory Argument. Moreover, even the assumption of this objection, that slow-switching does not occur frequently *in our lives*, is questionable. Ludlow (1995a) argues that slow-switching may generate relevant alternatives in our lives because it does occur quite often. For instance, international travellers from the United States may actually become victims of slow-switching if they stay in England, where people have slightly different individuating conditions for the meanings of the words ‘chicory’ or ‘arugula’. Or to take another example, absentminded philosophers may actually experience slow-switching when they move from a philosophy community to a non-philosophy community, where people have slightly different individuating conditions for the meanings of the words ‘realist’ or ‘pragmatist’.<sup>11 12</sup>

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<sup>11</sup> For the issue of slow-switching and relevance see Brueckner (1997), Ludlow (1995a, 1997), Warfield (1992, 1997).

<sup>12</sup> Earlier versions of this paper were given at the Australasian Association of Philosophy (New Zealand Division) Conference in Wellington in 2000, the ANU Philosophy Society in Canberra in 2001 and the Joint Session of the Aristotelian Society and the Mind Association in York in 2001. I would like to thank the Aristotelian Society and the Philosophy Program at the Australian National University for their financial support. I would also like to thank the audiences on those occasions including Karen Bennett, Jessica Brown, James Chase, Daniel Cohen, Philip Percival, Stewart Saunders, and Laura Schroeter. I owe a considerable debt to Martin Davies and two anonymous referees for *Dialectica* for their constructive criticisms and suggestions. Finally, I am very grateful to Daniel Stoljar for his invaluable remarks and encouragement.

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