Chapter 2:
Epistemic Possibilities

By 'epistemic possibilities', I shall mean possibilities of the kind that sentences of the form, "It is possible that P" (where the embedded P is in the indicative mood) typically express. I do not want to beg any questions by calling these possibilities 'epistemic': that such sentences express possibilities that have something to do with knowledge, evidence, etc., is something I will argue, not assume. I am following in the tradition of G.E. Moore, who, to the best of my knowledge, was the first philosopher to label a type of possibility 'epistemic', and whose views regarding epistemic possibility seem to me to be roughly correct.\footnote{See Moore's Commonplace Book, pp. 184–188. The type of possibility is termed 'epistemic' on p. 187. My affinities with Moore on epistemic possibility will become apparent as I defend several Moorean theses about epistemic possibilities below. I should note, however, that Moore may have had very different grounds for believing some of these theses and that I do disagree with several things that Moore wrote about epistemic modality.} Also following in Moore's footsteps is Ian Hacking, who developed and sharpened a Moorean line on epistemic possibilities in his 1967 paper,
"Possibility", and with whose views I wrestle in Part II of this chapter.

Other forms of sentences seem to express the same type of possibility as, and might plausibly be thought to be equivalent to, sentences of the form "It is possible that P", where P is in the indicative. The following forms are some of the candidates for expressions of epistemic possibility: "P may be true", "Maybe P", "Perhaps P". Additionally, sentences in which 'may' is attached to the verb of the sentence also seem to express epistemic possibility; thus, "I may be in trouble" seems to express the epistemic possibility that I am in trouble, just as "It is possible that I am in trouble" would. And many sentences which include the noun 'possibility', such as, "There is a slight possibility that the butler was in the mansion at the time of the murder," seem to express epistemic possibilities. I shall not, however, assume that such forms of sentences are equivalent to sentences of form "It is possible that P", where P is in the indicative. This is important because some of them (especially "Maybe P" and "Perhaps P") may seem to be more obviously related to properly epistemic matters, and, again, I do not want to be assuming that what I am calling 'epistemic possibilities' are properly so-called.

It is very important to remember that the embedded P in "It is possible that P" must be in the indicative mood in order for the sentence to be clearly an expression of epistemic possibility. Very different possibilities, it seems, are often expressed when what follows the "It is possible that..." is in the subjunctive mood. "It is possible that I should not have existed", which is not in the indicative mood, does not express the bizarre thought that would be expressed by "It is possible that I don't exist"; rather it expresses (roughly) the very sensible thought that I might not have existed, that there is a way things could have gone such that I would not have existed. (I am not here interested in any precise understanding of what these other possibilities are, only in the thought that they are different from epistemic possibilities.)

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2But not always, if Ian Hacking is right in his suggestion that sometimes the subjunctive form is used to express epistemic possibility. See "Possibility," pp. 147-148. Benjamin Gibbs makes this same point in "Real Possibility," p. 343.

3Ian Hacking has done some important work in dividing, on grammatical grounds, what he calls "L-occurrences" from what he calls "H-occurrences" of 'possible'. L-occurrences of 'possible' are those that express epistemic possibility. See Hacking's "Possibility" and his "All Kinds of Possibility."
My goal is to better understand those important possibilities expressed by sentences of the form "It is possible that P", where P is in the indicative (epistemic possibilities) by arguing for a number of points. In Part I of this chapter, I argue for e-relativism: the thesis that epistemic possibilities are relative to points of view. In Part II, I argue a number of points concerning how epistemic possibilities are relative to points of view, and propose truth conditions for epistemic modal statements. In part III, I defend a principle that connects epistemic possibilities very closely to the concept of knowledge: the principle that I don't know that P if (from my point of view) it is possible that not-P. In Part IV, I argue that another alleged entailment involving epistemic possibilities, one which would jeopardize the epistemic nature of 'epistemic' possibilities, does not obtain. Finally, in Part V, I extend contextualism so as to cover epistemic modal statements as well as knowledge attributions. Although some readers may find that they vary in their interest, I consider all of the theses I defend in this chapter to be quite important; in that denying any of them -- and they have all been denied -- involves one in a seriously distorted view of epistemic possibility and/or its connections to other concepts.

I. That Epistemic Possibilities Are Relative to Points of View

A. Moore's Claims. In his 1941 lecture, "Certainty", Moore writes the following, which expresses the thesis of e-relativism:

The expression 'It is possible that p is true' is, though it looks as if it were impersonal, really an expression whose meaning is relative to the person who uses it. If I say it, that I should not know that p is false, is a necessary, though not a sufficient, condition for the truth of my assertion; and hence if two people say it at the same time about the same proposition it is perfectly possible that what the one asserts should be true, and what the other asserts false: since, if one of the two knows that p is false, his assertion will necessarily be false; whereas, if the other does not know that p is false, his assertion may be, though it will not necessarily be, true. (p. 241)

Although I needed no convincing about the truth of e-relativism, some sensible people find it initially questionable. (Remember that it starts out as an open question whether there is anything epistemic about 'epistemic' possibilities. In a passage we are about to look at, Moore writes that "It is possible that p is true" "looks as if it were impersonal." Moore, then, thought of his e-relativism as going against initial appearances.) I did need to convince myself of the truth of the theses I defend in sections II and III, so I find them to be very interesting. And I was very surprised to discover that the thesis I defend in Part IV is true.
Although, as we will see in Part II, one must be very careful in explaining exactly how epistemic possibilities are "relative to the person" (how the meaning of an epistemic possibility sentence is "relative to the person who uses it"), in this section I will argue that at least in some way they are,⁵ and that the above statements by Moore that express e-relativism are correct. The following specific claims can be extracted from the above quotation:

1) If S says, "It is possible that P", that S should not know that P is false is a necessary condition for the truth of S's assertion.

2) If S says, "It is possible that P", that S should not know that P is false is not a sufficient condition for the truth of S's assertion.

3) If two people say, "It is possible that P" at the same time about the same proposition it is perfectly possible that what the one asserts should be true, and what the other asserts false.

4) The expression "It is possible that P" is an expression whose meaning is relative to the person who uses it.

I will leave the defense of claims (1)-(2) for sections III and II, respectively. (3)-(4) express Moore's e-relativism. But since I assume that (4) is meant in such a way that it is true if (3) is, I will only explicitly argue in this section for the truth of (3).

B. Can Something Be Both Possible and Impossible?
Before making a positive case for (3), I wish to prevent a possible misunderstanding of e-relativism and to defend e-relativism from a confused objection which might be based upon this misunderstanding. Saying that epistemic possibilities are relative to points of view may sound as if it committed one to the strange position that the same thing can be both possible and impossible at the same time. But this charge must be levelled and handled carefully, as is not always done. Alan R. White writes, for instance, of Moore's mistake...of supposing that, since what is not known to me may be known to you, the same thing can be both possible and impossible.

⁵To again use the Kaplan terminology that I made use of in Chapter 1, section B, we can say that epistemic modal statements can express different contents in the mouths of different people. Of course, there will also be a sense in which different people will mean the same thing by the same epistemic modal statement -- they will be using it in the same sense, or, in Kaplan's terminology, with the same character.

⁶In all four claims, I have shortened Moore's "It is possible that P is true" to "It is possible that P"; I hope and assume that no serious distortion results from this shortening. Also, in the first two claims, I have abstracted from what Moore says about the truth conditions for what he would assert if he were to say, "It is possible that P is true" to the more general claims about the truth conditions of what any subject S would assert if S said, "It is possible that P".

⁷Modal Thinking, p. 52; emphasis added.
But one who claims that epistemic possibilities are relative to points of view (an "e-relativist") need not, and should not, say that any proposition is both possible and impossible, because from any one point of view, it is never both possible and impossible that P. Here, as with the objection to contextualist theories of knowledge that we looked at in Chapter 1, part C, it is important to distinguish object-level from meta-linguistic statements. A clearheaded e-relativist is not committed to any such absurd object-level statement as that "the same thing can be both possible and impossible", but only to meta-linguistic statements like the ones Moore made (claims (3) and (4)). Such meta-linguistic statements give the precise content of the e-relativist's claim that epistemic possibilities are relative to points of view. Proponents and opponents of e-relativism may, to save time, characterize the e-relativist as being one according to whom something can be both possible and impossible, but only if everyone remembers that, when he is being precise, the e-relativist will never say, "Something can be both possible and impossible"; he would only say such a thing as imprecise (and, in fact, quite inaccurate) shorthand for such meta-linguistic claims as the ones Moore made.

If one finds those meta-linguistic statements absurd in themselves (which they surely are not), then one should reject e-relativism; but it is not fair to try to discredit these meta-linguistic statements by claiming that the e-relativist holds to the strange view that something can be both possible and impossible, for the e-relativist believes no such thing: he only believes something which can be (imprecisely and inaccurately) abbreviated so as to sound that way. Consider the following unexciting and obviously true meta-linguistic statement:

One person can truly say of a physical object, B, "B is wholly in this room", while another person, in another room, can, at the same time and about the same physical object, truly say, "B is not wholly in this room."

It would be a mistake to conclude from this that a physical object can be both wholly in a room and not wholly in it at the same time. In drawing the conclusion, one would be overlooking the complications caused by the fact that the meaning of 'this room', in some sense, depends upon where it is spoken. Since Moore thought that the meanings of epistemic modal statements can depend upon who makes them (see claim (4)), he would think it equally mistaken to conclude from claim (3) that the same thing can be both possible
and impossible at the same time, and it is unfair to attribute this conclusion to him.

Elsewhere, White claims that Moore "alleged" that 'It is possible that X does V' and 'It is not possible that X does V' "are compatible." Here, at least, White is attributing a meta-linguistic position to Moore. But it is still not a fair attribution. It is very misleading to say that "B is wholly in this room" and "B is not wholly in this room" are compatible, despite the obvious principle indented above. It seems more natural to say that they are incompatible statements, since they can never both be truly asserted in the same room. And we should hold the room of assertion constant in checking for consistency, since that matter, in some sense, affects the meaning of the statements. Likewise, it seems more natural to attribute to the e-relativist the position that "It is possible that P" and "It is not possible that P" are incompatible, since they can never both be true from the same point of view. The only sense in which, according to Moore, the statements are compatible is the sense specified by claim (3); but, again, claim (3) is not absurd in itself.

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8Modal Thinking, p. 9.

C. The Positive Case. In arguing for e-relativism and, later, in Part II, in arguing various points concerning the nature of e-relativism, it will be helpful to consider a series of cases. These cases will all involve John, who has symptoms that indicate that he might have cancer, and a "filtering" test which John's doctors decide to run and which has two possible results: If the results are "negative", then cancer can be conclusively ruled out; if the results are "positive", then John might, but might not, have cancer: further tests will have to be done.

In our first case, the doctors have received the results of the test, which are negative, but have not told anyone else what the results are. The hospital's policy is that the results of this test are only given to the patient and his/her family in person, so that the results can be adequately explained and the patient can be counseled if this is necessary. When the doctors get the results back, they call the patient and make an appointment for the patient to come in to get the results. John's wife, Jane, has received the call, so she knows that the doctors know the results of the test, but she does not know what the results are. John's brother, Bill, who lives far away, but who was told by a
friend that John does have cancer, calls Jane to find out if it's true that John has cancer. Here, it seems, Jane might well say to Bill, "It's possible that John has cancer. He has some symptoms that indicate that he might. But it's by no means certain that he's got it. They've run a test on him, but they won't tell us the results of the test until tomorrow." However, one doctor might well say to another, "Since it's impossible that John has cancer, we should start planning tests for other diseases." Note that Jane knows that the doctors know the results of the test. She would not be at all surprised to learn that the doctors were saying such things as, "It is not possible that John has cancer" at the same time that she is saying that it is possible that John has cancer. Likewise, the doctors would not be at all surprised to learn that Jane was saying to Bill, "It's possible that John has cancer." Yet, Jane is not deterred from saying it's possible, and the doctors are not deterred from saying it's impossible.

If, as seems right, we think that Jane is speaking the truth to Bill, and that the one doctor is speaking the truth to the other, we can see that in some sense epistemic possibilities are relative to points of view, and, in particular, we can see that claim (3) is true. Moore's e-relativism is vindicated.

We can also begin to see why Moore termed the possibilities expressed by sentences of the form "It is possible that P", where P is in the indicative, epistemic possibilities: the only differences between Jane and the doctor which seem to be able to account for the fact that each of them is saying something true despite the apparent contradiction between their sentences have to do with what they know, what evidence they have, etc. The connections between epistemic possibilities and knowledge will be made more specific in Parts II and III, below.

It should be noted that in the case we have looked at, our two speakers are involved in distinct conversations with distinct sets of people who are in very different epistemic positions with respect to the issue in question. If two people are speaking to each other, for reasons we will see later, it is far more likely that the one's statement, "It's possible that P"
contradicts the other's statement "It's not possible that P," so that only one of them can be saying something true.\textsuperscript{10} We should not, then, get carried away with the thought that the meaning of "It is possible that P" "is relative to the person who uses it." But in some sense its meaning can be relative to the person who uses it, as can be seen by the fact that in some sense it must mean something different in the doctor's mouth than it does in Jane's mouth.

D. Some Methodology. The case I have presented looks like some form of ordinary language argument. I say that both Jane and the doctor seem to speaking the truth. But it will be claimed that my main reason for supposing that Jane and the doctor are both speaking the truth is that their assertions seem quite appropriate: each of them is saying what any speaker of English might very well say in their situation. And, as several philosophers have pointed out, one must not be careful about concluding theses about the truth conditions of sentences from facts about their conditions of

\textsuperscript{10}To use terminology that will be introduced later, when two people are speaking to each other, each will usually be member of the relevant community to which the other's statement is relativized.

appropriate utterance. Perhaps the most important reason for caution is that an assertion might be inappropriate under some conditions, not because it is false, but because asserting it under those conditions would, to use Grice's terminology, carry false implicatures. Moreover, although Grice does not so much stress this point, an assertion might be appropriate under some circumstances despite its being false because asserting it would carry true implicatures the conveying of which are more important than is avoiding the assertion of the falsehood. But Grice himself realizes that what is and is not asserted and/or what is and is not appropriate to assert under various conditions must be, to some extent at least, our guide to meaning and truth conditions. Considering "maneuvers" involving the use of facts about usage to support hypotheses about meanings or truth conditions, Grice writes that although various philosophical mistakes arise from "uncritical application" of such maneuvers,

if it is any part of one's philosophical concern, as it is of mine, to give an accurate general account of the actual meaning of this or that expression in nontechnical discourse, then one simply cannot afford to abandon this kind of maneuver altogether.\textsuperscript{11}

\textsuperscript{11}Studies in the Way of Words, pp. 3–4: emphasis added.
And to those who think that such maneuvers are "representative of an outdated style of philosophy", Grice writes, "I do not think that one should be too quick to write off such a style" (p. 4). What is needed, of course, is a critical use of such a style. For if we don’t allow facts about when sentences might or could not very well be used to describe cases to at least count for or against theses about truth conditions, if we don’t even acknowledge a prima facie presumption that what we would all say in describing a case would be a true description of it, then it seems fairly clear that we will never be able to discern the truth conditions of sentences in nontechnical discourse. After all, what else is there to go on?

A sensible methodology, then, will treat usage facts as a source of prima facie evidence for or against hypotheses as to meaning and truth conditions in the following way: If any of us might well describe a certain case in a certain way, then there is some presumption that the description would be a true description of the case; and if none of us would describe a certain case in a certain way, or that description would be quite inappropriate, then there is some presumption that the description in question does not truly describe the case. If there is a plausible explanation for why making an assertion might be appropriate in some situations despite the assertion’s being false, or why it might be inappropriate despite being true, then this prima facie evidence can be defeated to various degrees.

To give an example, it does not seem appropriate for someone who knows that P to say, "It is possible that P." This may lead one to think that it would be false for a speaker who knows that P to say, "It is possible that P." But here there may be a plausible Gricean explanation of why it would be inappropriate, under those circumstances, to say "It is possible that P," even though one would thereby be speaking the truth. If

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12 Some respond that, unlike Grice, it is no part of their philosophical concern "to give an accurate general account of the actual meaning of this or that expression in nontechnical discourse" and that they don't see the task as being philosophically important. But this seems very rash. While ordinary-language-philosophers-gone-mad may sometimes seem to think that there is nothing more to philosophy than analysis of the ordinary terms in which philosophical problems can be stated, one needn't be such a mad philosopher to see the undeniable truth that in treating a philosophical problem it is important to know the meanings of the terms in which the problem is phrased. And if a philosophical problem is not phrased in nontechnical terms, then, hopefully and most likely, it is phrased in technical terms that are explicated in nontechnical terms.
it can be argued that in saying, "I know that P," one says something that entails, but is not entailed by, what one would assert in saying "It is possible that P," then "I know that P" will have been shown to be a "stronger" assertion than "It is possible that P," containing all the information of the latter assertion, but more as well. Appeal could then be made to a conversational rule that, other things being equal, one should be as informative as possible. If I say, "It is possible that P," my listeners, who are assuming that I am being as informative as possible, will take it that I do not know that P, because if I did know that P, I would have said as much, rather than making the weaker assertion that P is possible. Thus, in Grice's terms, my assertion that it's possible that P would carry the false implicature that I don't know that P, and this may account for the inappropriateness of my saying, "It is possible that P" when I know that P.

But when the presumption is not defeated by the presence of such an explanation, we should conclude that what none of us would say would be false, and, it seems to me, we should be even more willing to conclude that what any of us might well say would be true. I have found no such explanation to plausibly defeat the presumption that both Jane and the doctor are speaking the truth.

II. How Epistemic Possibilities Are Relative to Points of View

A. The Knowledge of Others. I begin this section by defending claim (2) of the Moore passage, which, recall, is

2) If S says, "It is possible that P," that S should not know that P is false is not a sufficient condition for the truth of S's assertion.

Hacking writes the following about some remarks Moore made in his Commonplace Book:

Moore observed that if, at the time he was writing, he had said, "It's possible that Hitler is now dead" or "Hitler may be dead," some listener might have contradicted him by retorting, "I know that Hitler isn't dead." ("Possibility," p. 146)

Now I'm not sure that Hacking has Moore exactly right here. Moore speaks of "the fact that 'I know he's not' contradicts ['It's possible that Hitler is now (12 p.m. Oct. 26) dead']" (Commonplace Book, p. 187). But my feeling is that Moore is thinking that "I know he's not"

\[13\]But see the last paragraph of section G below, where my endorsement of claim (2) is qualified.
in his own mouth would contradict his statement that "It's possible that Hitler is now dead." But let's forget the issue of what Moore meant in this passage. If it's true that some listener might have contradicted Moore by saying "I know that Hitler isn't dead", then it is not sufficient for the truth of "It is possible that P" that the speaker not know that not-P, because if one of the speaker's listeners knows that not-P, then the speaker's statement, "It is possible that P" will be false, even if the speaker himself does not know that not-P. Thus, claim (2) would be vindicated. And that none of a speaker's audience know that not-P seems a plausible necessary condition for the truth of "It is possible that P". It does feel as if a listener is contradicting one's claim, "It is possible that P" if he retorts, "I know that not-P". In fact, it would not be unnatural for the listener, if he was being aggressive, to say, "No, you're wrong, I know that not-P." In the very first paragraph of this chapter, I wrote that Moore "to the best of my knowledge, was the first philosopher to label a type of possibility 'epistemic'". If it had occurred to me or had been suggested to me to instead write, "It is possible that Moore was the first philosopher to label a type of possibility 'epistemic'".

I would have rejected the suggestion. Why? Because, for all I know, some, and perhaps even most, of my readers know that some other philosopher used the label before Moore did. If, for some reason, I had felt very confident that none of us knows of any philosopher's using the label before Moore did, then I would not have hesitated to write, "It is possible that Moore was the first philosopher to label a type of possibility 'epistemic'". Hacking thinks that the following analysis is suggested:

It is epistemically possible that p within a certain community of speakers if and only if no one in the community knows that it is false that p. ("Possibility," p. 148)

Hacking later (and rightly) rejects this analysis. For reasons we will see in section C, that no one in the relevant community knows that it is false that P is not sufficient for the truth of "It is possible that P", but perhaps it is a necessary condition.

B. The Flexibility of the Relevant Community. But we must notice how flexible one can be about just what the relevant community is, as has been pointed out by Paul Teller.14 Recall the case involving the cancer test.

In our original version, Jane said to Bill, "It's possible that John has cancer." But it seems that Jane might equally well have said, "I don't know whether or not it's possible that John has cancer. Only the doctors know. They'll tell us tomorrow." What's going on here? It seems that in this new, revised case, the relevant community is wider than in the original case so that it now includes the doctors. The statements Jane makes in both versions of the case seem perfectly appropriate things for Jane to say, and either of them are things that any of us might very well say if we were in Jane's situation, and Jane would not be basing either statement on some mistake she is making about some relevant fact.

That Jane might say, "I don't know whether or not it's possible that John has cancer" provides better evidence for claim (2) than does the earlier observations that a listener seems to contradict one's statement, "It's possible that P" by saying, "I know that not-P." If it were a sufficient condition for the truth of Jane's saying "It is possible that John has cancer" that Jane not know that John doesn't have cancer, then since Jane knows very well that she doesn't know that John doesn't have cancer, she would never say, "I don't know whether or not it's possible that John has cancer." A sufficient condition for it's being possible would be obviously fulfilled.

Why would Jane confidently say in the first case that it is possible that John has cancer, but profess not to know whether or not it's possible that John has cancer in the second case? The explanation for this seems to be that in the first case, Jane is (truly) saying that it is possible that John has cancer relative to the epistemic situation of a fairly small relevant community -- perhaps John's family -- while in the second case, Jane, it seems, is professing to be ignorant as to whether or not it's possible that John has cancer relative to the epistemic situation of a somewhat larger group of people that includes the doctors. For all she knows, the doctors may now know that John does not have cancer, and she is assuming that if they do know that John does not have cancer, then it is not possible that John has cancer. I will not address the issue of how we

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15 Here it may be objected that Jane would only be prevented from saying, "I don't know whether or not it's possible" if her ignorance of the fact that John doesn't have cancer were a sufficient condition for the truth of her saying, "It's possible that John has cancer" and she knew that this was a sufficient condition. But, of course, the objection continues, this may very well be a sufficient condition without an ordinary speaker like Jane knowing it. But see footnote 17 below.
can determine what the relevant community is for a given utterance, but at least in this case, what Jane says after "It is possible that..." and "I don't know whether or not it's possible that..." makes it fairly clear that the relevant community in the second case is larger than it is in the first case.

C. Practicable Investigations. But even if we keep in mind how flexible one can be about what the relevant community is, an analysis like:

It is epistemically possible that p within a certain community of speakers if and only if no one in the community knows that it is false that p (Hacking, p. 148)

cannot be correct, because, as Hacking argues, "It is possible that P" can be false even though nobody knows that not-P. The following is Hacking's attempt to show that this is so:

Imagine a salvage crew searching for a ship that sank a long time ago. The mate of the salvage ship works from an old log, makes some mistakes in his calculations, and concludes that the wreck may be in a certain bay. It is possible, he says, that the hulk is in these waters. No one knows anything to the contrary. But in fact, as it turns out later, it simply was not possible for the vessel to be in that bay; more careful examination of the log shows that the boat must have gone down at least thirty miles further south. The mate said something false when he said, "It is possible that we shall find the treasure here," but the falsehood did not arise from what anyone actually knew at the time. ("Possibility," p. 148)

I agree with Hacking's judgement that the mate said something false when he said "It is possible that we shall find the treasure here," but I don't think that this judgement is very obviously correct.

I would prefer to argue for the thesis that "It is possible that P" can be false even though nobody knows that not-P in a slightly different way. Consider another version of the cancer test case. In this case, the test has been run, but not even the doctors know the results of the test. A computer has calculated the results and printed them out. A hospital employee has taken the print-out, and without reading it, has placed it in a sealed envelope. The policy of the hospital is that the patient should be the first to learn the results. So, when the computer determines the results, the patient is called and an appointment is made so that the patient can come in and pick up the results. Jane knows all about this policy. She knows that the envelope with the results has been generated and that nobody knows what the results are. Still, if Bill were to call her to find out the latest news, she might very well say, "I don't yet know whether or not it's possible

16For reasons I give in the last paragraph of section E below.
Hacking writes:

Why was the mate speaking falsely when he said, "It is possible that the hulk is here"? Because one could have found out from the data that the wreck took place a good deal further south. ("Possibility", p. 149)

and suggests the following "working hypothesis":

A state of affairs is possible if it is not known to obtain, and no practicable investigations would establish that it does not obtain. (p. 149)

I take it that "it is not known to obtain" is supposed to be relativized to the relevant community. Note, however, that even if we agree with Hacking's judgement that the mate spoke falsely, the salvage ship case does not support the above hypothesis. The hypothesis would only explain why the mate speaks falsely if the 'if' in the hypothesis were changed to an 'only if'. Hacking clearly meant for his hypothesis to express both necessary and sufficient conditions for a state of affairs being possible; a few pages later, Hacking's working hypothesis has become a definition of "It is possible that P," according to which it means "that P is not known to be false, nor would any practicable investigations establish that it is false" (p. 153). This definition could also explain why, in the case in

possible that John has cancer. I just know that the test results are negative," then she would have said something false.

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77Here one may be tempted to object that Jane would only know that it's possible that John has cancer if the above analysis were correct and she knew it was correct. But, of course, the objection continues, the analysis could very well be correct without ordinary speakers like Jane knowing that it's correct. I am assuming, however, that if the analysis were correct, ordinary speakers like Jane would judge that things were possible, not possible, very likely possible, very likely not possible, etc., when the conditions of the analysis seemed to them to be satisfied, not satisfied, very likely satisfied, very likely not satisfied, etc. I am assuming, not that ordinary speakers have explicit knowledge of the truth conditions of "It is possible that P", but rather that they know when and how to use the expression, and that one job of analytic philosophers is to make explicit the conditions of such expressions that ordinary speakers show implicit knowledge of in their use of the expressions.

88So, if instead of truthfully professing ignorance as to whether or not it's possible that John has cancer, she had hopefully and incautiously said, "It's not
which not even the doctors know the test results, Jane would profess ignorance as to whether or not it's possible that John has cancer. Jane realizes that for all she knows, the results of the test are negative. Thus, for all she knows, a very practicable investigation (opening the envelope and reading the results) will reveal that John does not have cancer. Thus, if Hacking's definition were correct, then for all she knows, it is not possible that John has cancer. Thus, Jane's profession.

D. Teller's Revision. But Hacking's definition cannot handle the fact that in our original case of section I.C, Jane very appropriately says to Bill, "It's possible that John has cancer." If Hacking's definition were correct, then Jane would be saying something false, for there is hardly any investigation more practicable than driving to the hospital and opening an envelope. Of course, Jane (like everyone else) doesn't know that the results are negative, so even if Hacking's definition were correct, she wouldn't know that she would be saying something false if she were to say "It's possible that John has cancer." But Jane is aware that there is a very good chance that the results are negative. Thus, if Hacking's definition were correct, she would know that there was a very good chance that it's not possible that John has cancer.19 So, if Hacking's definition were correct, she would not assert, "It's possible that John has cancer."

In his 1972 paper, "Epistemic Possibility," Paul Teller rejects Hacking's definition on the basis of a similar case. Teller writes:

At the time of writing I am an expectant father, and one will grant that I speak truly when I say, "It is possible that my child will be a boy," and "It is possible that my child will be a girl." Most readers are probably informed here for the first time that there is a practicable, in fact quite easy test which will establish the sex of my expected child. . . . On Hacking's definition one of my two statements must be false. But I submit that they are both true, and that our judgment that they are true is not affected by knowledge that a test for sex is available before birth. The doting grandmother who agonizes, "It's possible it will be a boy, it's possible it will be a girl. Should I buy blue or pink?" is not shown by the availability of the test to have said anything false. Nor will grandmothers who learn about the test abandon such locutions. (p. 307)

Teller explains why both of his possibility statements are true as follows:

I suspect the key feature of the case of the expectant father to be this: there are facts (about the chromosome types of the cells in the

19. If one is tempted to object that Jane would only know that there is a very good chance that it's not possible that John has cancer if Hacking's definition was correct and she knew that it was correct, see footnote 17.
amniotic fluid) which could be brought to light by an easy investigation and which would then serve to establish p to be false, for one of the relevant propositions p; but none of these facts are yet known to any of the people concerned. (p. 308; emphasis Teller's)

This diagnosis leads Teller to eventually adopt the following definition:

It is possible that p if and only if
a) p is not known to be false by any member of community C
nor
b) is there a member, t, of community C, such that if t were to know all the propositions known to community C, then he could, on the strength of his knowledge of these propositions as basis, data, or evidence, come to know that p is false. (pp. 310-311)

Since Teller presents his expectant father case very soon after explaining Hacking's salvage ship case and agreeing with Hacking's judgement regarding the salvage ship case, I suppose the "key feature" of the expectant father case, mentioned two quotations above, is supposed to differentiate the two cases. Teller is probably quite plausibly thinking that the mate in the salvage ship case, having read the old log, knows various propositions which, if he thought them over carefully enough, could establish that the wreck is not in the bay. That the mate knows such propositions is strongly suggested by Hacking's portrayal of the mate as making some mistakes in his calculations. The fact that the mate knows propositions on the basis of which it could be established that the wreck is not in the bay would explain, on Teller's definition, why the mate speaks falsely when he says, "It is possible that we shall find the treasure here." But in the expectant father case, there is no set of propositions known to members of the relevant community which could establish the sex of the child.

Hacking might well reply, however, that if the salvage ship case were altered a little, Teller's definition would give the wrong result and we would have to appeal to practicable investigations to get the right result. Suppose that the mate doesn't know any set of propositions that would establish that the wreck is not in the bay (and that nobody on the ship knows any propositions which could establish it). Rather, many of the key facts that would be needed to establish this result are recorded in a section of the log that the mate has rashly judged to be irrelevant and has neglected to read. I think that Hacking would still claim that the mate, who has been put in charge of determining, on the basis of what's in the log, whether or not it's possible that the wreck is in the bay, says something false if he claims, "It's possible that the
wreck is in this bay." But the mate is saying something true on Teller's definition. It seems that, pace Teller, sometimes we cannot base an impossibility upon what is known by members of the community: sometimes, it seems, we must appeal to what they could come to know in certain ways. Again, I concur with the judgement I suppose that Hacking would make about this slightly revised salvage ship case: The mate would be speaking falsely. But again, I don't find this judgement obviously correct.

But we already have other resources for rejecting Teller's definition. In the cancer test case variation in which nobody knows the results of the test, it is not only true that nobody knows that John doesn't have cancer, it is also clear to all that there is no set of propositions known to the relevant community which would establish that John doesn't have cancer. If Teller's definition were correct, Jane would clearly know (and know that she knows) that it is possible that John has cancer,20 so she would not profess to be ignorant as to whether or not it's possible that John has cancer. But, as I've already claimed, Jane might very well say, "I don't yet know whether or not it's possible that John

20See footnote 17.

has cancer. I'm going to find that out tomorrow when the results of the test are revealed." Again, it seems that she might say this because of the existence of the investigation that's underway and which, for all she knows, will establish that John does not have cancer.

So, we're left with a problem. Teller's expectant father case, together with the original cancer test case in which Jane says, "It's possible that John has cancer," shows that Hacking's definition is incorrect. But the modified salvage ship case (in which the mate does not know some key facts), together with the cancer test case in which no one knows the results and Jane says, "I don't know whether or not it's possible that John has cancer," shows that Teller's definition is incorrect.

B. The Flexibility of Relevant Epistemic Situations.
Let's suppose that the computer has generated the results of John's test, that no one knows the results, and that Bill now calls Jane for the first time after being told that John has cancer. Note that, as in our original case of section I.C, Jane might very well say, "It's possible that John has cancer. He has some symptoms that indicate that he might. But it's by no
means certain that he's got it. They've run a test on him which may rule it out, but we won't get the results until tomorrow," but that she might also very well say, "I don't yet know whether or not it's possible that John has cancer. I'm going to find that out tomorrow when the results of a test are revealed." Why would either utterance be appropriate? Here the Flexibility of Relevant Communities doesn't help us. We cannot account for both utterances by saying that when Jane professes ignorance as to whether or not it's possible that John has cancer, she is relativizing the possibility to a larger community than when she asserts that it is possible that John has cancer, because, first, it does not seem that the relevant community is larger in the one case than in the other. Second, and more decisive, since, as I've pointed out, Jane knows that nobody knows that John doesn't have cancer, she knows that nobody in the relevant community (no matter what that community is) knows that John doesn't have cancer -- nor do they know any propositions which could establish that fact.

We need to postulate a certain Flexibility in Relevant Epistemic Situations. That is, we can claim that when Jane says, "I don't yet know whether or not it's possible that John has cancer. I'm going to find that out tomorrow when the results of the test are revealed," she is saying that she doesn't know whether or not it's possible that John has cancer relative to an epistemic situation that includes more than the epistemic situation relative to which it clearly is possible that John has cancer. When Jane says, "It's possible that John has cancer. He has some symptoms that indicate that he might. But it's by no means certain that he's got it. They've run a test on him, but they won't tell us the results of the test until tomorrow," she is making it clear that the epistemic situation relative to which she is saying that it's possible that John has cancer does not include what she and the other members of the relevant community can come to know by means of the practicable investigation of opening the envelope. But because of the Flexibility of Relevant Epistemic Situations, she can also express her ignorance as to whether or not it's possible that John has cancer relative to the larger relevant epistemic situation of the relevant community which includes not only what the members of the community know, but also what a very practicable investigation will enable them to know.\footnote{This appeal to the Flexibility of Relevant Epistemic Situations is, I think, anticipated to some degree by a brief remark Benjamin Gibbs makes in "Real Possibility," p. 144, about "the flexibility of
Other cases that I will not take the space to construct would show that even more flexibility of Relevant Epistemic Situations is needed than the simple flexibility as to whether or not to include what practicable investigations will reveal, for sometimes we can indicate that something is or is not possible relative to what is known and to what only very simple investigations will establish, while at other times we can indicate that something is or is not possible relative to what is known and what even quite difficult investigations can establish. Sometimes, in fact, we may have very specific investigations in mind relative to which our epistemic modal statements are made, while investigations simpler than these specific ones are not.

'available' in his following definition: "A thing is epistemically possible if and only if there is no available way of verifying that there is something which is incompatible with the actuality of that thing." Interestingly, Teller was aware of Gibbs' paper; after using his expectant father case against Hacking, Teller writes the following in a footnote: "This counterexample tells equally against the definition of epistemic possibility proposed by Benjamin Gibbs in "Real Possibility". . . Gibbs' definition is in important respects similar to Hacking's" (p. 319, fn 5). To be fair to Teller, Gibbs does not use the flexibility of 'available' in order to escape such counterexamples, nor does he explain this flexibility sufficiently to make it clear how it can be so used. But if my arguments have been correct, something very close to the flexibility Gibbs has in mind is what is needed to account for all the cases. Thus, Gibbs was on to the key insight needed to handle the examples.

counted as relevant to the epistemic situation. Also, we should not fix our attention solely upon investigations: other ways of coming to know can play the same role that Hacking assigns to investigations. Sometimes, for instance, we may suspect that some evidence that will enable us to know that not-p will fall into our laps without our having to conduct anything that could be plausibly called an investigation. In such cases, as in the cancer test case, one might say, "I don't know whether or not it's possible that P," because, as in the cancer test case, one doesn't know whether or not there is a contextually relevant way by which we will come to know that not-P.

To the extent that it is not clear what the relevant epistemic situation is relative to which someone is claiming that something is possible, it is not clear exactly what the person means by saying, "It is possible that . . ." Thus, the reader can construct a case in which Jane does not make it clear whether she is saying that it is possible that John has cancer relative to the

22Suppose, for instance, that developing severe stomach cramps by a certain point in time were analogous to a positive result in our cancer test case: if one develops the cramps one may have a certain disease, but if one does not develop them, then that one has the disease can be decisively ruled out.
smaller or the larger epistemic situation. In such a case, it will also seem unclear exactly what Jane is claiming in saying that it's possible that John has cancer, and poor Bill will have to ask something like, "What'ya mean it's still possible that John has cancer? Do you mean that you haven't yet gotten the results, or that you have got the results but they are positive?"

Here Bill is trying to discover which epistemic situation it is relative to which Jane is saying that it is still possible that John has cancer.

To return to Hacking's salvage ship case, if the crew knows that the mate is working from an old log, and the mate steps out from his investigation and declares, "It is possible that we shall find the treasure here," he is not simply saying that none of them knows that the treasure is not in the bay, but the context makes it fairly clear that he is also claiming that a study of the log will not establish that the treasure is not in the bay. This is why Hacking seems to me to be making the right judgement in saying that the mate says something false if a study of the log can establish that the treasure is not in the bay. But while Hacking is right in claiming that what practicable investigations can establish is often relevant to the issue of what is and is not possible, the Flexibility of Epistemic Situations shows that it is not always relevant, and that there is a good deal of flexibility in just what ways of coming to know are to be counted as part of the relevant epistemic situation.

F. A New Biconditional Hypothesis. I propose, then, the following hypothesis as to the truth conditions for sentences of the form "It is possible that P":

"It is possible that P" is true if and only if (1) no member of the relevant community knows that not-P and (2) there is no relevant way by which members of the relevant community can come to know that not-P,

where it is remembered that there is a good deal of flexibility in what the relevant community is and what is to count as a relevant way of coming to know.

This rendering of the truth conditions for epistemic modal statements may be thought so elastic as to be useless -- it is certainly not of the kind one hopes for when one sets out to discover an "analysis" of something. I respond that the notion being treated is a flexible notion. This flexibility makes for wimpy truth conditions, but it also accounts for much of the usefulness of the locution "It is possible that P": If we wanted to express what can be expressed by this
useful locution with more precise, inflexible terms, we would have to come up with a huge battery of new epistemic terms (or content ourselves with long explanations of what is not known by such-and-such people and could not come to be known in such-and-such ways).

But some might have another worry regarding the flexibility I have postulated. It may be objected that my cases do not support my hypothesis: That the hypothesis can be made to yield the right results provides no evidence for its truth when it is so flexible as to yield almost any desired result: Just tinker enough with the relevant community and what's to count as a relevant way of coming to know, and the analysis can always be made to yield the intuitively correct result.

But the cases seem to make the hypothesis plausible not because the hypothesis yields the right results in the cases, but because the hypothesis provides an intuitively correct explanation for why certain statements involving epistemic possibility are true, false, appropriately said, not appropriately said, etc. The issues to which the hypothesis points us seem to be precisely the issues on which questions of epistemic possibility turn. Why would Jane say that she doesn't know whether or not it's possible that John has cancer? Because, for all she knows, the doctors know that John doesn't have cancer, or, in another case, because for all she knows a relevant investigation could reveal that John doesn't have cancer. Why would Jane say that it is possible that John has cancer? Because nobody (in one case) and no one in the family (in the case dealt with in Part I) knows that John does not have cancer. Why (in the Part I case) do the doctors say that it's impossible that John has cancer? Because they do know that John doesn't have cancer. Furthermore, the issues for which the hypothesis allows a good deal of flexibility seem to be precisely the things one must know (what is the relevant community? what is to count as a relevant way of coming to know?) in order to clearly understand what's being said when a speaker says, "It's possible that P."\textsuperscript{23} In short, my quest has

\textsuperscript{23}Of course, these matters can be more-or-less precisely specified: In some cases, for instance, we might have a fairly imprecise idea of what's to count as a relevant way of coming to know, and still feel that we clearly understand the meaning of "It's possible that P." In such cases I claim that we have only an imprecise grasp of the meaning of "It's possible that P." When we have only an imprecise understanding of what's to count as a relevant way of coming to know, the situation can be such that even such an imprecise grasp makes it clear that there is (or is not) a relevant way by means of which we could come to know that not-P. In
not been for a hypothesis that spits out the intuitively correct results regarding uses of "It's possible that P." Rather, I have sought, and I think that I have found, a hypothesis that gives intuitively correct explanations for why "It is possible that P" is used as it is.

One way to make the hypothesis less wimpy is to fill it out by determining certain side-constraints upon who is and is not a member of the relevant community or what is and what is not a relevant way of coming to know, given various aspects of the situation in which an epistemic modal statement is made. In sections G and H below, I make a beginning on this task by examining some important possible side-constraints. But, if my conclusions in these sections are wrong, that will not affect the truth of the hypothesis itself.

G. A Solitary Use of "It's Possible that P". It seems that, besides the speaker, the relevant community for such cases we can feel that we clearly understand the meaning of "It's possible that P" because we understand enough to see clearly that it is true or false. But the imprecision of our understanding of the meaning of "It's possible that P" can be shown by our inability to answer many questions of the form "Would it be possible that P if . . . ."

24See section H below.

a given epistemic possibility usually, but not always, includes at least the speaker's listeners or the writer's audience. There are exceptions. Consider a witness being cross-examined. The defense attorney asks, "You claim to have seen my client stealing the car on that dark, foggy night. But isn't it possible that it was someone else who stole the car?" The witness has a strong suspicion that at least one of her listeners -- the defendant -- knows that it wasn't someone else. But the defendant obviously is not to be understood as a member of the relevant community. If it is epistemically possible relative to what the witness himself knows that it was somebody else who stole the car, then the witness should honestly and forthrightly declare, "Yes, I suppose it is possible that it was somebody else," rather than saying, "I suspect that it's impossible that someone else stole the car, for I suspect that your client knows that he was the one who stole the car." Or consider Descartes's Meditations. He clearly meant what he wrote to be read by others, but he also makes it clear that his readers are only being invited to listen in on his meditations, and that the relevant community is limited to Descartes himself: When Descartes says (at least in translation) "It is possible
that P", he seems clearly to be stating that P is epistemically possible relative to his own epistemic situation. This I will call a "solitary" use of "It is possible that P" -- a use relative to a community of one. These may be thought to be very rare, since, as a general rule (exceptions aside), the relevant community for a given epistemic possibility includes at least the speaker's listeners or the writer's audience.

However, nothing prevents one from considering what's possible when one is thinking or even talking to oneself. In such cases, which I do not think to be either uncommon or unimportant, it may well occur that the relevant community consists entirely of the speaker. Also, although I think this occurs only very rarely, if ever, I see nothing to prevent the relevant epistemic situation to include only what the speaker presently knows and to exclude what even the most simple investigations and other ways of coming to know might allow him to know.25 Thus, I see nothing to prevent there being instances of "It is possible that P" in which the speaker's not knowing that not-P is a sufficient condition for the truth of the assertion. Moore's claim (2),

2) If S says, "It is possible that P", that S should not know that P is false is not a sufficient condition for the truth of S's assertion, then, must be qualified. On some occasions, that S should not know that P is false may be a sufficient condition for the truth of S's assertion. But the condition is not always sufficient for the truth of a speaker's assertion, "It is possible that P." In fact, it fails to be a sufficient condition in all but for, at most, only a very few cases.

H. The Necessary Inclusion of the Speaker. But it seems that the speaker is always at least a part of the relevant community. This makes room for Moore's claim (1),

1) If S says, "It is possible that P", that S should not know that P is false is a necessary condition for the truth of S's assertion.

to be correct, in the sense that what he claims is a necessary condition is always a necessary condition.

But before defending (1) in part III, I want to note the existence of a very special possible exception to the principle that the speaker is always a member of the relevant community. Rogers Albritton has pointed out to me what he has called a "playful" or "coy" use of 'maybe'. This is the use according to which, while I

hold my hands behind my back and ask you to guess which hand a certain object is in, I might say, "Maybe it's in my left hand, but maybe it's in my right." Likewise, I can say, "It's possible that it's in my left hand, but it's possible that it's in my right." Here, the speaker expresses a possibility that is relative only to the listener, and the speaker himself is not a member of the relevant community. I don't know how seriously to take this use of "It's possible that P." I tend to ignore it as insignificant and dismissively think of it as "the exception that proves the rule," the rule being that the speaker is always a member of the community. The reader must decide for herself how seriously she wants to take this use. Below, in Part III, I argue that "It's possible that not-P, but I know that P" is inconsistent. But this case should be taken as having an understood exception for such "playful" uses. For clearly the speaker's knowing that P is perfectly consistent with the possibility that not-P that the speaker expresses by such a playful use of "It is possible that not-P."

III. If It's Possible that I'm Wrong, Then I Don't Know

A. Genuine and Merely Apparent Inconsistencies. In this section I defend claim (1) from the Moore "Certainty" passage, which, you will recall, is as follows:

1) If S says, "It is possible that P", that S should not know that p is false is a necessary condition for the truth of S's assertion.

This principle is important not only in that it ties the notion of epistemic possibility fairly closely to the concept of knowledge, but also because it can apparently be put to powerful use in sceptical arguments: If the principle is true, then all a sceptic would have to do is get you to admit that it's possible that not-P in order to force you to the conclusion that you don't know that P.\textsuperscript{26}

I will argue for (1) by arguing that sentences of the form "It is possible that not-P, but I know that P" are inconsistent, that either conjunct entails the negation of the other. But how can one discover that such a sentence is inconsistent? A simple, but good, place to start is by noticing that such sentences sound

\textsuperscript{26}I argue in Chapter 3 (see esp. section K) that this principle does not really have disastrous sceptical consequences.
inconsistent. The two halves of the sentence seem to most of our ears, to somehow cancel each other out or to inexorably clash with each other. It has the feel of a contradiction about it.

But one must be careful of such feelings. I get very much the same feeling when I consider the Moorean sentence *It is raining, but I don’t know that it is*, and as we all know, that it is raining is perfectly compatible with my being ignorant of that fact. I don’t have a special feeling for inconsistencies; I can sense some kind of clash, but cannot discern my sensing of an inconsistency from my sensing of whatever it is that’s wrong with the Moorean sentence. And, as we will see, it is very important to discern genuine from merely apparent inconsistencies.

If the Moorean sentence produces the feeling of a clash, then how do we know that it isn’t inconsistent? Part of the answer is that it seems crazy to infer that it is not raining from the fact that I don’t know that it is raining. If *it is raining* and I don’t know that *it is raining* were inconsistent, then each would entail the negation of the other: *it is raining* would entail I know that *it is raining* and I don’t know that *it is raining* would entail *it is not raining*. But, clearly, neither entailment holds.

Furthermore, there is another explanation for the clash. Peter Unger explains the Moorean clash as follows. When one flat-out asserts that P (as opposed to saying "I think that P" or "I'm pretty sure that P" or "Maybe P", etc.), one is representing oneself as knowing that P. To put it more propositionally, one is representing it as being the case that one knows that P. Thus, when one flat-out asserts the first half of the Moorean sentence, one is representing it as being the case that one knows that it is raining. Therefore, when one goes on to say in the second half of the Moorean sentence that one does not know that it is raining, one is saying something inconsistent -- not with what one asserted in the first half of the sentence -- but with what one represented as being the case in asserting the first half. Part of the power of this explanation is that it supports our sense that there is an inconsistency producing the clash. According to this explanation, there is an inconsistency producing the clash, but it is

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27 I call this a "Moorean sentence" because of its resemblance to the famous sentence form which constitutes Moore's paradox: "P, but I don't believe that P."

28 See Ignorance, pp. 252-265.
not an inconsistency between what one asserts in the two halves of the sentence (a genuine inconsistency), but rather between something one asserts and something one represents as being the case.\footnote{As Unger has pointed out to me, this can also be construed as an inconsistency between two things one represents as being the case, because surely one of the things one represents as being the case in asserting that \( P \) is that \( P \) is the case.}

One may wonder why the distinction is important: As long as there is an inconsistency involved in saying the sentence, what difference does it make whether the inconsistency involves only what one asserts or if it partly involves what one represents as being the case? One important difference is that if the inconsistency is between the two things that one asserts, then each half of the sentence will entail the negation of the other. Thus, if the inconsistency of sentences of the form "It is possible that not-\( P \), but I know that \( P \)" is between the two things that one asserts, then it is a legitimate for the sceptic to force you to conclude that you don't know that \( P \) if she gets you to admit that it is possible that not-\( P \). Compare this with the illegitimacy of someone trying to force you to conclude that not-\( P \) from the premise that you don't know that \( P \). If "\( P \), but I don't know that \( P \)" were a genuine inconsistency (an inconsistency between two things you assert), then this move would be legitimate, because each half of the sentence would entail the negation of the other. If the sceptic wants to defend her maneuver as legitimate, she will have to show that the inconsistency involved in "It is possible that not-\( P \), but I know that \( P \)" is an inconsistency between the two things that one asserts, or what I am calling a genuine inconsistency.

In the issue of whether or not sentences of the form \( P \), but I don't know that \( P \) are inconsistent, the existence of the above explanation for the clash we sense (according to which the sentence is not inconsistent) is not needed in order for us to see that the sentence is not inconsistent; rather, it is the fact that the sentence is obviously not inconsistent which makes the explanation for the clash acceptable: since the sentence is consistent (as the entailment failures show), why else would it strike us in such a way?\footnote{For further support for the hypothesis that one represents oneself as knowing that \( P \) when one asserts that \( P \), see \textit{Ignorance}, pp. 260-265.} But that one represents oneself as knowing that \( P \) if one flat-out asserts that \( P \) (as opposed to saying "I think that \( P \)" or "I'm pretty sure that \( P \)" or "Maybe \( P \)", etc.)
will be important to our evaluation of other putative inconsistencies.

Finally, in discerning that the Moorean sentence is not inconsistent, we can use the old trick of checking a third-person analogue of the Moorean sentence, and find that it does not involve any clash at all: *It is raining, but he does not know that it is* seems perfectly alright. But it seems plausible that if the first person sentence were inconsistent, then the third person sentence would be also. If there were some inconsistency in somebody's not knowing that it's raining when in fact it is, this inconsistency should show up in both sentences. That it doesn't show up in the third person sentence makes it even more plausible to suppose that the clash involved in the first person sentence is not a genuine inconsistency, but is rather a "pragmatic" inconsistency: an inconsistency between what one says in the second part of the sentence and how one represents oneself in asserting the first part of the sentence. That the clash would disappear in the third person sentence is exactly what we would expect if our above explanation of the clash, according to which the clash involves what we represent as being the case, were correct.3

So, when we check for inconsistencies, we should not only check for whether we get a feeling of contradiction, but we should also investigate whether the relevant entailments might plausibly be thought to hold and whether there are other explanations of the clash. In particular, we should check to see if the clash may be the result of *what one is representing as being the case* in asserting the sentence rather than only being the result of what one is asserting. This is especially relevant if the sentence is in the first person, because in these cases, the position one represents oneself as being in by asserting part of the

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3 It would be a mistake, I think, to use the trick of third-person reformulations as one's main guide for discerning genuine from merely apparent first-person inconsistencies. One should not, that is, simply recast first-person sentences into the third person and determine that the original is a genuine inconsistency if the clash remains in the reformulation and that it is not if the clash disappears. One must at least consider the question of why the clash remains or disappears. In the present case, I consider the fact that the clash disappears in the third person reformulation to be evidence that the original sentence is not a genuine inconsistency largely because this fact fits in well with the "pragmatic" explanation of the clash, and makes that explanation more plausible. However, for reasons given in footnote 32 below, it would be wrong to think that there is a genuine inconsistency behind a given clash just because the clash does not disappear in a third-person reformulation.
sentence may be in conflict with the position that, in the other part of the sentence, one asserts oneself to be in. In checking for whether the clash in such a case is of such a nature, it may sometimes be helpful to consider whether the clash disappears if the sentence is reformulated in the third person. So we now have a method for discerning true form apparent contradictions. If there is a clash in a sentence, if it is not clearly implausible to suppose that the entailments hold, and if we can find no other good explanation for the clash, then we have good reason to suppose that the sentence really is inconsistent.

B. An Alternative Explanation for the Clash. When we apply this method to "It is possible that not-P, but I know that P", I think we find that the sentence does seem to clash or cancel itself, and that, unlike "It is possible that not-P, but P", it seems reasonable to suppose that the clash one senses might be a genuine inconsistency, because the required entailments (from It is possible that not-P to I don't know that P and from I don't know that P to It is not possible that not-P) don't seem crazy.

But it may be objected that there is a good explanation for the apparent clash of "It is possible that not-P, but I know that P", an explanation according to which there is no genuine inconsistency in the sentence. Since "It is possible that not-P, but P" also seems to cancel itself, and since I know that P entails

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32We may also notice that the clash of "It is possible that not-P, but I know that P" does not disappear when the sentence is reformulated in the third person: "It is possible that not-P, but he knows that P" seems about as paradoxical as the first-person original. This may be thought to lend some extra credibility to the thesis that the original is a genuine contradiction. I have not noted this apparent piece of evidence in the text, however, because I do not think that the third-person reformulation is a genuine inconsistency. If "It is possible that not-P, but he knows that P" were a genuine inconsistency, then It is possible that not-P would entail He does not know that P. But it doesn't. Just because not-P is (epistemically) possible does not necessarily rule out the chance that P is true and that he (whoever he is) knows that P. Thus, although the third-person reformulation does clash, it does so for different reasons than does the first-person original (which is a genuine inconsistency). In short, I think that "It is possible that not-P, but he knows that P" clashes because in asserting the second half of the sentence, one represents it as being the case that one knows that he knows that P, and since he knows that P entails P, one is representing it as being the case that one knows that P. But that one knows that P is inconsistent with one's assertion, in the first half of the sentence, that it is possible that not-P. Thus, the inconsistency is not between what one asserts in the two halves of the sentence, but rather between what one asserts in the first half and what one represents as being the case in asserting the second half.
P, the apparent clash of "It is possible that not-P, but I know that P" may derive from the clash of "It is possible that not-P, but P". If this were so, then there would be no genuine inconsistency in "It is possible that not-P, but I know that P", since there is no genuine inconsistency behind the clash of "It is possible that not-P, but P", as can be seen by the fact that It is possible that not-P clearly does not entail not-P, as it would if "It is possible that not-P, but P" were inconsistent.

C. A Genuine Inconsistency. The problem with this explanation, however, is that it does not leave us with a good explanation of why "It is possible that not-P, but P" seems to clash, despite its obvious consistency. The best explanation for both clashes ("It is possible that not-P, but P" and "It is possible that not-P, but I know that P"), it seems, has the result that there is a genuine inconsistency in "It is possible that not-P, but I know that P". According to this explanation, the apparent clash "It is possible that not-P, but P"

derives from the clash in "It is possible that not-P, but I know that P", and not the other way around. "It is possible that not-P, but P" clashes because in flat-out asserting that P in the second half of the sentence, one is representing it as being the case that one knows that P, which conflicts with one's assertion in the first half of the sentence that not-P is epistemically possible. This explanation requires that there be an inconsistency between one's knowing that P (what one represents as being the case in asserting the second half of the sentence) and its being epistemically possible that not-P (what one asserts in the first half of the sentence). Of course, this explanation assumes that one represents it as being the case that one knows that P in flat-out asserting that P. I am supposing that the explanation for the clash in "P, but I don't know that P", given several pages above, according to which one does so represent oneself in flat-out asserting that P, is plausible enough to lend some credibility to the thesis.

Perhaps the case can best be made by considering all three forms of sentences together:

1) P, but I don't know that P.
2) It is possible that not-P, but P.

33This possible explanation was suggested, but not endorsed, by Rogers Albritton in an unpublished paper. I am responsible, however, for the argument given below that this is not the best explanation.
3) It is possible that not-P, but I know that P. While all three forms of sentences seem paradoxical, the relevant entailments required for genuine inconsistencies clearly fail for (1) and (2) and seem somewhat reasonable only for (3). Thus, we want an explanation for the clashes that has the result that neither (1) nor (2) is genuinely inconsistent; we hope that this explanation will help us to decide whether (3) is genuinely inconsistent. I have been considering an explanation built upon two claims:

a) In flat-out asserting that P, one represents it as being the case that one knows that P
b) "It is possible that not-P" is inconsistent with "I know that P"

Claim (a) seems to be forced upon us by sentence (1): it seems to provide the only good method of explaining the paradoxical nature of that sentence. Given (a), we can explain the clashes involved in both (2) and (3) by supposing that (b). This explanation has the desired result that neither (1) nor (2) is genuinely inconsistent. Thus, this explanation has a good claim to being the best explanation for the clashes involved in the three forms of sentences, and since this explanation requires claim (b), it is very plausible to suppose that (b) is true and that (3) therefore is genuinely inconsistent. Thus, Moore's claim (1) looks quite plausible.

IV. Possible that and Possible for:
An Alleged Entailment

A. The Threat. Throughout this discussion, a thoroughly epistemic picture of "epistemic" possibility has emerged. (This is made most apparent by the truth conditions proposed in section II.E.) But an alleged entailment threatens to undermine the epistemic nature of epistemic possibilities. In "Possibility," Hacking writes that

(1) It is possible that I shall go

entails

(2) It is possible for me to go,

but not vice versa (p. 150). Alan White has since agreed, writing that

If it is possible that X V's, then it follows that it is possible for X to V; but it can be possible for X to V without its being possible that X V's.

34Modal Thinking, p. 10.
where X is a subject and V is a verb. I assume that Hacking would endorse the general principle that White proposes, since that seems to be the relevant principle behind the specific case Hacking considers.

Hacking claims that the fact that the one entailment holds while the other doesn't is “a fact to be explained by any theory on the meaning of 'possible'” (p. 150). But the "fact" that It is possible that X V's entails It is possible for X to V seems to be a "fact" that Hacking's own theory cannot handle, nor can mine. This alleged entailment seems to threaten almost any epistemic treatment of epistemic possibility. It is no wonder, then, that White, who writes in one place, "The philosophically popular name of 'epistemic possibility' is a misnomer and the ideas based on it are mistaken," is friendly to this alleged entailment.

To see the alleged entailment's unfriendliness to epistemic treatments of "It is possible that P," one only has to consider cases in which it is not possible for X to V but in which Hacking's or my proposed truth conditions for "It is possible that X V's" are fulfilled. Consider a case in which it is impossible for Frank to run 4-minute miles. Consider two new friends of Frank who are beginning to suspect that Frank is a track star, but who do not know that, while he is a track and field star, his only event is throwing the javelin and he could never, no matter how hard he might train, run a 4-minute mile. It seems quite consistent with Frank's inability to run 4-minute miles to suppose that no member of the relevant community knows either that Frank doesn't run 4-minute miles or that it's impossible for him to run 4-minute miles. It also seems quite consistent to suppose that there is no relevant way by means of which they could come to know that Frank doesn't run 4-minute miles. (Perhaps Frank is being very secretive about exactly what his athletic abilities are.) In such a clearly consistent case, Hacking's and my truth conditions for "It is possible that Frank runs 4-minute miles" will be fulfilled when Frank's friends say this sentence, while they would be saying something false were they to say that it is possible for Frank to run 4-minute miles. Thus, if Hacking's or my truth conditions are correct, then the entailment doesn't hold. Thus, if the entailment does hold, then both Hacking's and my proposed truth conditions are wrong.

But if the alleged entailment holds, this does not only cause problems for Hacking and me, but for almost

35 Modal Thinking, p. 86.
any epistemic analysis of "It is possible that P." For if It is possible that X V's did entail It is possible for X to V, then It is not possible for X to V would entail It is not possible that X V's. But that it is not possible for X to V does not seem to entail anything about anyone's (including X's) epistemic position with respect to X's V-ing that could form the basis of an epistemic analysis of "It is possible that P." The only epistemic consequence of It is not possible for X to V seems to be that nobody can know that it is possible for X to V, since one cannot know what is false.

B. The Failure of the Entailment. Fortunately, the entailment doesn't hold. The case we are imagining is not only a case in which Hacking's and my truth conditions for "It is possible that Frank runs 4-minute miles" are fulfilled, but also a case in which it seems intuitively correct for Frank's friends to say "It is possible that Frank runs 4-minute miles." It seems that they are saying something true. To give their statement more of a context, consider one of them saying the following, as they consider the issue of whether or not Frank runs 4-minute miles:

We have uncovered very good evidence that Frank is on the track team. And he does have the build of a miler. And, come to think of it, he has expressed a good deal of knowledge about who has held the world record in the mile at various points of time — more knowledge than he has expressed about any other event. This suggests that he might be a miler. And I've heard that all of the milers on our track team do run 4-minute miles. So, while we can't be certain that Frank runs 4-minute miles, it certainly is possible that he does.

I conclude that one can truly say "It is possible that X V's" in a case in which it would be false for one to say, "It is possible for X to V." Thus, the alleged entailment does not hold.

C. An Explanation for the Clash. Why does it seem as if It is possible that X V's entails It is possible for X to V? Because, I think, statements of the form "It is possible that X V's, but it is not Possible for X to V" seem inconsistent. Now, I think that the counter example to the entailment given above shows that this is only an apparent, and not a genuine, inconsistency. But others will be hesitant to conclude that the inconsistency is only apparent unless they are provided with an explanation for the seeming inconsistency, an explanation which is both plausible and according to which the inconsistency is only apparent.

Fortunately, we have the resources for such an explanation already in place. In Part III, I proposed
an explanation for the "clashes" of three forms of statements. This explanation, recall, made use of two principles:

a) In flat-out asserting that P, one represents it as being the case that one knows that P

and

b) "It is possible that not-P" is inconsistent with "I know that P."

These principles, together with the added principle that if one doesn't know that X doesn't V, then one can't know that it is not possible for X to V,\(^{36}\) will also explain the clash of

"It is possible that X V's, but it is not possible for X to V."

When one asserts that it is possible that X V's (when one asserts the first half of the indented sentence), one asserts something which, according to principle (b), entails that one doesn't know that X doesn't V. But this, according to our added principle, entails that one doesn't know that it is not possible for X to V. But according to principle (a), when one asserts that it is not possible for X to V (when one asserts the second half of the sentence) one represents it as being the case that one does know that it is not possible for X to V. Thus, the inconsistency. I take it that this explanation is plausible because it is based on principles that have been independently motivated -- motivated by their ability to explain the three other clashes. And according to this explanation, there is no genuine inconsistency behind the clash of "It is Possible that X V's, but it is not Possible for X to V"; the inconsistency is between something one asserts to be the case and something one represents as being the case. And, again, the importance of this difference can be shown by the fact that, since the inconsistency is not genuine, it is not valid to infer It is possible for X to V from It is possible that X V's, as it would be if the inconsistency were genuine. More to the point, the existence of this kind of inconsistency (what I'm calling a "merely apparent" inconsistency, an inconsistency that involves something that one merely represents as being the case) in "It is possible that X V's, but it is not possible for X to V" does nothing to jeopardize the epistemic nature of 'epistemic' possibility.

This much is true: If we can (properly, truly) say that it is possible that Frank runs 4-minute miles, then

\(^{36}\)Another way of putting this principle is this: If, for all one knows, X actually does V, then one can't know that it's impossible for X to V.
we are not in a position to deny that it is possible for Frank to run 4-minute miles. But neither are we in a position, in the case I have constructed, to assert that it is possible for Frank to run 4-minute miles, as we would be if It is possible that X V's entails It is possible for X to V.

So, given the intuitive counter-example to the alleged entailment, and also given the plausible deflationary explanation of the clash, it is safe to conclude that the alleged entailment does not obtain. It is possible that X V's, at best, entails It is possible that it is possible for X to V, but does not entail It is possible for X to V. So the threat from the alleged entailment is removed, and the epistemic nature of epistemic possibility is confirmed.

V. Contextualism and Epistemic Modal Statements

A. Varying Standards for Knowledge and Epistemic Modal Statements. I have tried to connect the notion of epistemic possibility to that of knowledge. In part II, I arrived at the following biconditional analysis of epistemic modal statements in which what the members of the relevant community know plays an prominent role:

"It is possible that P" is true if and only if (1) no member of the relevant community knows that not-P and (2) there is no relevant way by which members of the relevant community can come to know that not-P.

This analysis was reached as the best explanation for how epistemic modal statements are used in a variety of cases. In part III, epistemic possibilities were tied to knowledge by means of independent data; we started not with what would be typically or appropriately said in describing various cases, but with the seeming clash involved in saying a sentence like, "I know that it's raining, but it's possible that it isn't." I did not run through a range of cases to show that whenever the first conjunct of such a sentence could be truly asserted then the second could not; rather we worked directly from the seeming inconsistency of the two conjuncts.

If I have been correct, the truth conditions for assertions of epistemic possibility depend entirely upon what is known or could be known in certain ways by the speaker and, quite often, by other members of the relevant community. Now, as I have pointed out, there is a good deal of flexibility as to who the relevant community is and what counts as a relevant way of coming
to know. These matters, I suppose, are determined by aspects of the context in which the assertion is made. Thus, I have already endorsed what could be called a contextualist theory of epistemic modal statements. But if, as I argued in Chapter 1, the standards for the truth of knowledge attributions vary with context, then, since epistemic modal statements are analyzed partly in terms of what is known, this contextually-determined variation should be found in epistemic modal statements as well. The truth conditions for an assertion of epistemic possibility should not only depend upon who is a member of the relevant community, but also upon how strong a position such a member must be in with respect to the proposition not-P to count as knowing that not-P. Henceforth, when I write of "contextualism" with respect to epistemic modal statements, I shall mean the view that the truth conditions for such statements depend upon the standards for knowing that are in place. Is it plausible to suppose that there is this kind of contextually-determined variation in the truth conditions of epistemic modal statements?

Cases similar to those used to motivate a contextualist treatment of knowledge attributions can motivate a contextualist treatment of epistemic modal statements. Consider a pair of cases. In the first case, it's Friday and Todd and his friend Ted are in Los Angeles, trying to decide whether or not to go to a certain party. Todd would be moderately annoyed if he were to run into his ex-wife, Trudy, at the party. Ted, knowing this, asks, "Is it possible that Trudy will be at the party?" Todd might well answer, "No, that's not possible. I saw her on Tuesday and she told me that she would be driving down to San Diego to visit her mother and that she wouldn't be back in town until Saturday."

In the second case, it is much more important to Todd that he not run into Trudy. Todd is an alcoholic, and has solemnly promised Trudy that he won't even go to functions at which alcoholic drinks are served, and the party Todd and Ted are considering is one at which alcoholic beverages will be served. Still, they want very badly to go, and Todd would gladly break his promise if he knew that he wouldn't run into Trudy at the party. But he would be absolutely mortified if he were to run into Trudy at the party. Ted, knowing all this, asks, "Is it possible that Trudy will be there?" Todd might very well say, "Well, she told me that she would be visiting her mother in San Diego, and wouldn't get back into town until Saturday. So she probably
won't be at the party. Still, it's possible that she'll be there. Maybe something came up and she cut her visit with her mother short."

I am assuming that in both of the cases, Todd is in an equally good epistemic position with respect to the proposition that Trudy will not be at the party, having the same evidence for the proposition, etc. But in the one case he says that it's impossible that she'll be at the party, and in the other case he says that it's possible that she'll be there. This is pretty much what we would expect if epistemic modal statements were sensitive to the same shift in standards that affect knowledge attributions. In fact, the cases presented can be converted into precisely the types of cases used to support contextualism with respect to knowledge attributions, simply by changing what Todd says in the first case to "No, I know she won't be there. I saw her on Tuesday and she told me that she would be driving down to San Diego to visit her mother and that she wouldn't be back in town until Saturday," and what he says in the second case to "Well, she told me that she would be visiting her mother in San Diego, and wouldn't get back into town until Saturday. So she probably won't be at the party. Still, we don't know that she

won't be there. Maybe something came up and she cut her visit with her mother short." Note the presence of the three types of attributor factor differences that we have already seen in Chapter 1: In case 2, it is more important to Ted and Todd that they be right than it is in case 1; in case 2 but not in case 1, Todd mentions the possibility that Trudy has cut her visit with her mother short; and in case 2 but not in case 1, Todd is presumably considering the possibility that Trudy has cut her visit short.  

If we did not already have reasons for accepting contextualism with respect to knowledge attributions, we might try to account for Todd's epistemic modal statements in the two cases by means of the Flexibility of the Relevant Community and the Flexibility of the Relevant Epistemic Situation. That is, we might try to say that in the second case, Todd is asserting that it's possible that Trudy will be at the party relative to a smaller relevant community than the community relative to which he asserts that it is not possible that she'll be there in the first case. Perhaps in the first case, Trudy or her mother are being considered members of the

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37As in Chapter 1, I am remaining neutral as to which of these types of attributor factors really do affect the content of the sentences, and to what extent.
relevant community. Alternatively, and a bit more plausibly, we might try to account for Todd’s utterances by saying that in the first case, Todd is saying that it is not possible that Trudy will be there relative to a larger epistemic situation than the situation relative to which he says it is possible that she’ll be there in the second case. Perhaps in the first case, the relevant epistemic situation includes what Ted and Todd might find out by means of the practicable investigation of calling Trudy’s mother’s house. But both of these explanations seem quite strained. When Todd says, in the first case, that it’s impossible that Trudy will be at the party, he doesn’t seem to be saying anything like that Trudy or her mother know that Trudy won’t be at the party. Rather, he seems to be saying something like that he is, or that he and Ted are, in a position to rule it out that Trudy will be at the party. And he doesn’t seem to be saying that they will be in a position to rule it out after a little investigation, but that he now has the means to rule it out without further investigation. In fact, it would be quite strange for him to be asserting that they will be in a position to rule it out after the investigation, because they will only be in that position if the phone call reveals that Trudy is still in San Diego. Thus, he can be confident that they will be in a position to rule it out only to the extent that he is confident that the phone call will reveal that Trudy is in San Diego. And he should already be confident that Trudy will not be at the party at least to the extent that he is confident that the phone call will reveal that Trudy is in San Diego. Thus, Todd can be no more confident that the investigation will reveal that Trudy will not be at the party than he is that she won’t be at the party.

It seems much more plausible, then, to explain Todd’s claims in the two cases by saying that the standards for knowledge, and therefore, for epistemic impossibility, are higher in second case than they are in the first. In the first case, he is saying, roughly, that he knows, relative to fairly low standards, that Trudy will not be at the party. In the second case, he is saying, roughly, that he does not know, relative to fairly high standards, that Trudy will not be there. This seems to be a very natural explanation for Todd’s two utterances. And since we already have reason to accept contextualism with respect to knowledge attributions and a knowledge-based analysis of epistemic modal statements, we have even more of a basis for accepting this varying-
standards explanation for Todd's utterances.

B. The Final Reformulation and an Objection. I will, then, reformulate my hypothesis as to the truth conditions for epistemic modal statements so as to make explicit the contextual aspects of such statements:

"It is possible that P" is true if and only if, relative to the contextually relevant standards for knowledge, (1) no member of the contextually relevant community knows that not-P and (2) there is no contextually relevant way by which members of the contextually relevant community can come to know that not-P.

I turn now to an objection. There are many occasions on which (a) one can truly say that it is not possible that P (or that it is impossible that P) according to the above hypothesis, but (b) it does not seem that any of us would say that P is impossible. In fact, we can appropriately use sentences of the form "It is not possible than P" or "It is impossible that P" far less frequently than we should expect if the above hypothesis is correct.

I want to admit that sentences of those forms are not typically used on most of the occasions on which, according to my hypothesis, they could be truly asserted. In fact, this explains why, in Part II of this paper, as I was in the process of arriving at the above hypothesis and needed cases to oppose those in which we say that something is possible, I made heavy use of cases in which we claim not to know whether or not something is possible rather than cases in which we say that something is impossible: there just weren't many cases in which it seemed natural or appropriate to say that something is impossible. Most of the time, when the above conditions for "It is possible that P" are not fulfilled, one will not say "It is impossible that P," while there are many such occasions on which one will instead say, "I know that not-P."

But this result, I think, should not be unexpected, given my hypothesis. Let me explain. According to the principle we used in Parts III and IV, in asserting something, one represents oneself as knowing that it is true. Thus, it is usually only appropriate to assert a sentence when one knows (or can reasonably believe oneself to know) that it is true. Thus, if the above hypothesis is true, one will only be able to appropriately assert that it is impossible that P if one knows (or reasonably believes oneself to know) that at

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38 When the conditions are not fulfilled and one is asked whether or not P is possible, one will usually answer, "No." I was, however, looking for cases in which the speaker volunteers that P is impossible.
least one of the two conditions for the truth of "It is possible that P" is not fulfilled. But any time you know that one of the two conditions is not fulfilled, you yourself must know that not-P (and any time you reasonably believe yourself to know that one of the conditions isn't fulfilled, you reasonably believe that you yourself know that not-P), for, since nobody can know what isn't true, if you don't know that not-P, you can't know that someone knows that not-P or that you or someone else can get to know that not-P in a certain way. Thus, any time one is in a position to assert that P is impossible, one is also in a position to claim to know that not-P. And since "I know that not-P" is stronger or more informative than is "It is impossible that P" (according to my hypothesis and the side-constraint that the speaker is always a member of the relevant community, "I know that not-P," in a given speaker's mouth, entails, but is not entailed by, what that speaker would assert in saying "It is impossible that P"), then, since one should, in general, be as informative as possible in conversation, one should say "I know that not-P" rather than "It is impossible that P."

When we do say, "It's impossible that P," then, like Todd's utterance in the first case above, the sentence usually precedes one's citing what one takes to be pretty conclusive evidence that not-P, and one's assertion seems to have the force of, "Look, we can figure it out that not-P in the following way. . ." Of course, when the speaker says that P is impossible, he has already figured out that not-P, so he could also have said, "I know that not-P" before citing his evidence. But by preceding his evidence instead by "It's impossible that not-P," the speaker is able to stress the fact that not-P can be known by the listener in a certain way: by means of the evidence the speaker is about to present.
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