Closure on Skepticism

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It is received wisdom that the skeptic has a devastating line of argument in the following. You probably think, he says, that you know that you have hands. But if you knew that you had hands, then you would also know that you were not a brain in a vat, a brain suspended in fluid with electrodes feeding you perfectly coordinated impressions that are generated by a supercomputer, of a world that looks and moves just like this one. You would know you weren't in this state if you knew you had hands, since having hands implies you are no brain in a vat. You obviously don't know you're not a brain in a vat, though—you have no evidence that would distinguish that state from the normal one you think you're in. Therefore, by modus tollens, you don't know you have hands. At least, the skeptic has a devastating argument, it is thought, if we grant him closure of knowledge under known implication, which many of us are inclined to do: roughly, if you know p, and you know that p implies q, then you know q.[i]

To say that this is an intuitively compelling argument is an understatement; the project of finding a reply that isn't table-thumping, or obfuscating, or special-pleading has exercised philosophers for a very long time. The steps of the argument have been scoured in detail to try to find cracks that will yield under pressure. Some of these efforts have been intriguing, and illuminating, and some even appear to provide dialectical victories that shift the burden of proof back to the skeptic. However, as refutations they all come up short. I will argue that we have missed a very simple point: though the skeptical argument above is valid, it has a false premise, namely, the claim that the thing we obviously know *implies* the thing we seem obviously not to know. This premise, I will argue, cannot be repaired, so we have a refutation; if the skeptic wants to convince us to worry about our ordinary knowledge, he will have to come up with a completely different argument.

Closure of knowledge under known implication (hereafter "closure"), is obviously necessary for the skeptical argument presented above. But it is also, obviously, not sufficient. For the closure principle to apply to our case, we would have to know that having hands implies that one is not a brain in a vat. We cannot know that, as epistemologists are aware, because false claims can't be known. The implication doesn't hold because one could be a brain in a vat, so far as that is described above, with hands. The hands would be attached seamlessly to the brain, hence yours in an undeniable sense. These stipulations describe a scenario no less plausible than the original one of a brain in a vat. The scenario ruins the implication the skeptic needs because a handed brain in a vat is a counterexample to the claim that having a hand implies you are not a brain in a vat.

Epistemologists are aware that the implication claim first stated by the skeptic doesn't hold, due to possibilities like the one just described, so the implication claim typically gets propped up in the obvious way, by saying that what one would obviously know if one knew that one has hands is that one is not a *handless* brain in a vat, which does follow from having hands. Sometimes one puts a tone on the emphasized word that conveys the judgment that this detail is tiresome. One then moves along in development of the skeptical line to get to the more interesting issues, confident that the patch has done

no harm to the argument because implication has been achieved. However, the argument was to the effect that there is something we don't know that it is troubling to suppose we don't know. In other words, it must show us that there is something that on the one hand 1) we should know, and on the other hand 2) we don't—standardly, that we are not brains in vats. I will argue that the need for this kind of patch, to insure the kind of implication in question, never goes away. This comes from the fact that 1) can be fulfilled only if we fail to fulfill 2), and vice versa. What we should know, we do (as far as the skeptic gets), and the fact that we don't know the things we don't know should not surprise or trouble us. We can't get to a radical skeptical challenge in this familiar way.

What is wrong with this particular patch? Simply put, weakening the conclusion in this way trivializes it. It is not remotely surprising, or informative, to be told that we are not handless brains in vats if we know that we are not without hands. No appeal to the closure principle is needed to support this conclusion. The claim is independently obvious. If we know that someone has hands then we also know that she is not a handless person with high blood pressure, or a handless victim of child abuse, but would this be enough to assure us that she need not go to a doctor for these conditions? These claims tell us nothing about how far she might or might not be susceptible to heart disease or suicide.[ii] If we do know that she does not have high blood pressure or is not a victim of child abuse, then that is not because of anything we know about her having hands. However, it's not just that nothing about her heart health or mental health went into the premises. It's that nothing came out in the conclusion either. If I know about my hands, then in virtue of that I know I'm not a handless anything. Just as "I'm not a handless victim of child abuse" implies nothing determinate about whether I'm a victim of child abuse, "I am not a handless brain in a vat" implies nothing determinate about whether I'm a brain in a vat. There are no surprises in the fact that I would know I'm not a handless brain in a vat if I knew that I had hands.

The problem with my claim, one might think, is that it assumes that whether or not one has a hand is independent of whether or not one is a brain in a vat. The blood pressure example would look very different if not having a hand was correlated with having high blood pressure. Then, indeed, finding you have a hand would give you a reason not to worry about your blood pressure. In our case, one might say, not having a hand is part of what we *meant* by being a brain in a vat. It's not an extra piece of news. The word "handless" gets added to the conclusion of the skeptic's argument only in order to make this explicit, so that one can see how clear the implication is. This is also likely the explanation, one might add, of our tone of tiresomeness—it should be obvious that a brain in a vat has no hands. The implication holds, and the conclusion is not trivial.

If this is what we meant, then, I submit, it is not what we wanted to mean, or should have meant, given our collective state of puzzlement and distress over this skeptical argument, for the conclusion imagined is still trivial. Having a hand does make you distinct from the brain in a vat of imagination that has no limbs, but it does so in only one respect. It tells us nothing about whether you resemble it or not in any other respect. Let a brain in a vat be a thing that by definition has no hands. To put my point neutrally, having a hand still allows you to be a thing that is like a brain in a vat in every respect except that it has a hand seamlessly attached to it. The question now is how significant it is to find out that you are not a brain in a vat, when you still could be the same thing but for a hand attached.

This pattern continues. If you shake your foot and say that a brain in a vat has no feet, we can grant your point and point out that you still could be a thing that is like a brain in a vat in every respect except that it has a foot. This doesn't tell us what we wanted to know if we wanted to be reassured that we're not systematically deceived, which is typically taken to be what we need. Why else be distressed? The conclusion described is trivial, and it is entirely unsurprising that you know that you are not a handless or footless brain in a vat if you know that you have a hand, or a foot.

If I am right, then why have we been under the impression all this time that the adjusted conclusion "I am not a handless brain in a vat" is non-trivial? One reason is that philosophers are like all human beings in being susceptible to associational "thinking," that is, in drawing conclusions that haven't been stated, purely on the basis of the proximity of words to one another. All people are sometimes victims, for example, of the devices of highly trained advertising agencies that do psychological research on the areas of our strong associations. There was an ad recently that said, above a vivid picture of a train, "Legally, we can't say you can throw it under a train," of the TOUGHBOOK laptop computer. The ad did not assert that you can throw it under a train (and have it survive), but because precisely that clause was inscribed—see the original sentence—an exaggerated impression was created, in just about everyone I would venture, of just how tough the TOUGHBOOK is. Similarly, the words of our adjusted conclusion are "I am not a … brain in a vat," and this created a strong impression that this sentence without the ellipses had been asserted. Philosophers are not immune to such unconscious mistakes; we are all apt to make them when our conscious attention is directed elsewhere.

The other reason that the sentence "I am not a handless brain in a vat" seemed to carry the content that I am not a brain in a vat is conversational implicature. Suppose a man says that he enjoys talking to me. I ask him whether he has a wife and he replies "I don't have a wife I can *talk* to," where the word "talk" is not only emphasized but raised in pitch. The content of his reply contains no information about whether he has a wife. However, the emphasis conveys very clearly that he does. What is relevant about this case is that the content of the sentence is perfectly consistent with the message that he does have a wife, despite the fact that the sentence contains the phrase "I don't have a wife." Similarly, the content of the sentence "I am not a handless brain in a vat" is perfectly consistent with my being a brain in a vat. This is why it is even possible to make a strong suggestion that I am a brain in a vat, by saying "I'm not a *handless* brain in a vat," if the word "handless" is emphasized and higher in pitch. We never do say the sentence "I'm not a handless brain in a vat" with a high-pitched emphasis on "handless." We do sometimes introduce it with an emphasis on "handless" that doesn't raise the pitch (see above under "tone of tiresomeness"), but that hides the fact that no information has been conveyed that I am not a brain in a vat, just as "I don't have a wife I can *talk* to," may well fail to set off the wife alarm if the word "talk" is not raised in pitch. But once the anti-skeptical conclusion is adjusted to include handlessness, we mostly say "I'm *not* a handless-brain-in-a-vat." This hides the fact that no information is being given that determines whether I'm a brain in a vat, just as "I *don't* have a wife-I-can-talk-to" hides the fact that nothing in the content of the sentence is inconsistent with having a wife. In such a case an infatuated person would judge herself as within the range of plausibility in

concluding that the man isn't married. Are philosophers infatuated with the radical skeptical argument, the argument from which we can never get satisfaction? Maybe we are.[iii]

The initial patch I have described is of course not the only recourse the skeptic has. He could find a different way to weaken the conclusion, although, as we have seen, the task would be to avoid making it trivial. I will canvas another way of using this conclusion-weakening strategy below. The other obvious approach is to strengthen the premises. In this strategy we would keep the conclusion the same—I am not a brain in a vat—and add premises to make sure that what we think we obviously know does imply this conclusion it seems we clearly don't know. For example, we could add, in addition to the claim that we have hands, the claim that we have feet, and so on for other parts of our bodies. It is no less plausible that we know these things than that we know that we have hands, in the innocent first step of the skeptic's argument. This is far too modest a beefing up of the premise, though, as indicated above. It is hopeless, since the hands and feet don't rule out that we are brains in vats with hands and feet. We could imagine an entity like a brain in a vat in every respect except that it had hands and feet, etc., attached, and the possibility of systematic deception does not go away.

How many "attachments" can a brain have before it ceases to be a brain in a vat and becomes a person? The number of attachments isn't the issue, of course. Nor is being a person. The poor captured people who are used as batteries by the Matrix of movie fame have kept their bodies and their personhood, but their brains are being fed impressions of a colorful world nothing like the dank storage facility in which their pods are suspended. This scenario would be as disturbing as the image of ourselves as "mere" brains in vats. To answer the question what makes something a brain in a vat in the important sense, we have to hew closely to what is disturbing about not knowing that you are not one of these things, which is closely related to what is disturbing about being one of these things: your evidence about the external world is systematically corrupt—which derives from the fact that you are not related to the real world in the way you appear to yourself to be—and you have no indication of that. You may have hands and feet. Having hands and feet does not rule out the possibility that you are systemically deceived, that is, that the world your hands and feet exist in is nothing like the world of your impressions. I will call this scenario in which you are systematically deceived one where you are a *brain in a vat* to indicate that this feature is essential to the scenario, while failing to have limbs, for example, is not. This claim that it seems independently obvious we don't know needs to follow from things we think we clearly do know; otherwise our knowing the first cannot, even with closure, imply that we know the second, and our not knowing the second will not threaten our claim to knowledge of the first. But having ever so many hands and feet does not rule out the disturbing, and hence essential, feature of the brain-in-a-vat hypothesis.

What *would* rule out the skeptical hypothesis? The *brain in a vat* hypothesis has the special feature that not only is it a claim about how the world is—such as that there is a human brain suspended in a vat, with all those hookups to electrical stimulations—but also implies something about the vat-brain-person's relation to the world, and thereby to her lack of discriminating evidence about her situation vis-à-vis the world. This is the essential part of the hypothesis, so this is what needs to be ruled out. In presenting the skeptic's argument, people have, typically, pretty grossly underestimated what is required to do so. And rule it out the premise must, since the skeptic's claim is one of

implication, which means that the premise, e.g., some version of "I have hands," must rule out all *logically* possible ways for me to be a *brain in a vat.*[iv v] That I have hands is not enough for this. But perhaps the reason it is not enough is that we have considered a premise that asserts nothing more than that there is a hand attached to the brain. It does not say that the hand is connected up to my impressions, and intentions to move, in the normal way that I have when I have evidence and a non-deceptive set of impressions of the world. Maybe this kind of claim—which we can as innocently agree we have knowledge of when the skeptic asks as we agree about the previous claim—will do the trick of implying the claim that I am not a *brain in a vat*.

Call the first type of hand that is unconnected to my impressions a "floppy" hand, and the second a "hooked-up" hand. The poor people in the Matrix have real, physical hands, but in the technical sense just introduced the hands are floppy. However, we can easily imagine them having hooked-up hands, as long as we also enlarge the pod to allow their free movement. (Their movement would require movement of the arms, but they have those too.) The impressions of their hands (and arms), both sensory and motor, would come from the hands (and arms), whereas their impressions of everything else would come from the supercomputer stimulations. The real and the fake would have to be coordinated with each other, the fake impressions responding just as real objects would, to the interventions of the real hands. But there is nothing impossible about this. It would be like a video game: your control of the joystick is real, but what it is controlling is representations of things that are not real, although what it is controlling is a world that the player can increasingly come to inhabit as if it is real and all-surrounding. Suppose such a player becomes fully entranced, without any longer having a sense of the set-up. Then he is systematically deceived. He won't come out of that world by any prompt within the game-world, but only by a screen that pops up saying he's run out of money, or by a bout of thirst, or intervention from a parent. We can imagine a case in which none of those external cues is available. It is clear that having hooked-up hands does not imply that one is not a *brain in a vat* any more than having a collection of floppy hands and feet did.

One might wonder if the problem is that we have not taken into account enough body parts. Having a greater number of floppy body parts didn't help, but maybe it will if the numerous parts are hooked up. No luck here, though. This will not be a person immune from vast, systematic deception either. We can concoct the scenario just discussed with any number of body parts we like, by imagining the interface between the joystick and the hand growing into an interface between the entire body and a control surface. Now my whole body is doing every motion I think it's doing and I'm feeling whatever is impinging on the surface of my body. However, none of my impressions bears any but a fraudulent relation to the way the world is. The body is pushing and pulling around a real interface, but the interface is pushing around false representations (from my point of view), or objects that do not match my impressions (from an objective point of view). I could be a whole-body-hooked-up *brain in a vat.*

Perhaps, then, it is not about me and my body, and ruling out the *brains in a vat* scenario requires adding to the premises some things that I apparently obviously know about the *world*. Take the table of skeptical lore. Thwarted again, since that premise typically states only that a table exists, and we already know that mere existence allows the possibility of floppiness—where I have no appropriate connection to the table. A floppy table won't help any more than the floppy hand did because a

systematically deceived brain/body could easily just have a table in front of it. What if we suppose that I am hooked up to the worldly object, the table, in some appropriate way, say causally. Suppose also that my visual impressions of the table are perfectly coordinated with my other impressions of the world, whether those are fraudulent or true. But this does no good. I could be resting my arms on a table while I am perfectly engrossed in a video game on the screen in front of me. The table impressions are properly produced, which requires not just that when I have the leaning feeling in my arms it is because my arms are leaning, as we had already with the hooked-up arms, but also that when the arms are truly leaning, and I'm having the impression of their leaning on a table, they are leaning on a real table. Apart from the hooked-up table, though, the entire world I am having impressions of is a fraud. Make the screen bigger and bigger until it surrounds me, hook me up to a feeding tube and catheter, make sure the video game world never ceases to be interesting and has a backup generator, imprison anyone who might care to save me, and I am a *brain in a vat*.

One might think that the problem is that we are only considering hooking me up in the normal way to *one* object. The world has many objects, and if we suppose me hooked up to many, many of them, then we are imagining a scenario in which I surely cannot be deceived about very much in my physical surroundings. Isn't that enough? Given that we are assuming from the previous steps that I'm hooked up to my whole body too, does this scenario not, for all intents and purposes, rule out the possibility that I am a *brain in a vat*? We can look at this approach in two different ways, as either a strengthening of the premises or a weakening of the conclusion. Both aspects will emerge in what follows, but we will see that neither strategy helps the skeptic.

Our strategy now will be to put into the premises enough claims about body parts and objects that the full denial of the *brain in a vat* thesis will be implied. In strengthening the premises in this way we want to include enough hooked-up objects to insure that I am not systematically deceived about the world around me. Throw in the table, the chairs, the kitchen sink, the lamps and couches, the truck I see outside the window, the sunshine, the floor and ceiling, the walls. Are we there yet? Does all of this imply we are not systematically deceived? One problem is that there are a whole lot of things left out of this list. Does the friend you think you just talked to on the phone exist? Is there really a building supporting the room you're sitting in when you're not looking at the building? Why think that closed closet door doesn't open into outer space? Assume that you do know all of those things you list. They don't imply what the skeptic needs. They don't imply the denial of the *brain in a vat* hypothesis (systematic deception) because the list you make will always leave out important aspects of the world no matter how many you've already put in. The things you have listed don't appear to imply anything that it would be surprising to think you know on the assumption that you know *them*. And suppose the skeptic isn't attached to the *brain-in-a-vat* hypothesis but is willing to run the argument with any conclusion we obviously don't know derived from a premise we obviously do.

The list is of course infinite of the things that would need to be part of a set of premises that implies the denial that one is a *brain in a vat* . However, given infinite time one could verify each claim in the list, the way one does with the claim that one has a hand, by directly inspecting each of these things seriatim. The problem is that the knowledge so produced that the closet door doesn't open to outer space expires when I move away to inspect the lamps in the living room. Can't we have that

knowledge in a different way? Not if we are trying to help out the skeptic, whose target is those of our beliefs that we think we most obviously do know. We need to make the premises that go into the skeptical argument claims that it is very, very hard to believe I don't know, the way that it is hard to believe that I don't know I have a hand, since I can wave it in front of myself. A large part of our confidence that we know we have hands is this direct verification. This can't be done with all of the claims we need in the premises, even if we cut the list off to a large finite set, because we can't sufficiently directly verify them all at the same time. To play a role as premises to an argument, the claims have to be asserted, and in this argument apparently known in a special way, all in the same small time interval.

The things that we obviously, simultaneously, know do not appear to be strong enough to imply anything that we obviously don't know, and so, surely not that we are not systematically deceived. But one might think there is an obvious solution to all of this. You can express all of that information, that there is a table, chairs, sunshine, a building supporting me, whatever you see, by simply making a generalization that includes all of those examples without listing them individually. That captures everything we need in one expression, making it possible to verify it all together, and then we are done. What would the generalization look like? In order to capture all the things that I should be properly connected to if I'm going to rule out being systematically deceived, the claim must be something very general, not referring merely to a list, however long, of specific objects. That is, I must say that, modulo local errors—incorrect beliefs where there are nevertheless potential observations I could make to correct them—things are pretty much as they appear to me to be not just at this moment, but also according to the general assumptions that the perceptual process typically has me making, such as that objects don't disappear in virtue of my turning away, etc. Thus, that there is a building holding up my office counts as part of how things appear to me to be in this sense of "appear."

But now we've come full circle. In order to get premises strong enough to imply the conclusion that I am not a *brain in a vat*, we've had to add so much information, and in such a generalized form, that the premise that results is so close to equivalent to the claim that I am not a *brain in a vat*—notion which did not essentially involve brains or vats—that if we know it, then there can be no surprise that we also know we're not *brains in vats*. We've closed the implicational gap, but only by inflating the premises to the point of recognition.

This is a situation that can be looked at in two ways, but neither of them helps the skeptic to his conclusion. We could grant the skeptic the first step of his argument, that, roughly speaking, we know all of these things that are obvious to us, the appearers. But if so, then we don't need to apply closure as a general principle to see that we *also* know we are not *brains in vats*. We can't be systematically deceived if the generalized premise is true—what would there be left for us to be hopelessly deceived about? Alternatively, we might worry that the premises are so strong that maybe we don't know them. But consider, if I don't think I know the generalization that things are roughly as they appear to me to be, then there is no reason I *should* I think I know I'm not a *brain in a vat*. If this is the basis for our admission that we don't know we are not brains in vats, then the skeptic will have in the meantime lost the argument that any of this should trouble us. The skeptic needed the implication from "I have a hand" to "I am not a brain in a vat" in order to convince us that we should know we're not brains in

vats, since we think that if we know anything it's that we have hands. What the arguments here have shown is that although we may not know we're not *brains in vats* –and after all, look at all that would be required to get there—there is also no reason to think we should have.

Whether it was the original skeptic's argument or not, though, it still may seem that we have something to worry about, in that we have exposed that we may not know that we're not *brains in vats*. We do, surely, go around implicitly believing we are not so thoroughly deceived, so if we can't defend that claim there still seems to be a problem. So knowing I have a hand doesn't mean I should know I'm not a *brain in a vat*. Shouldn't I still know, somehow, that I am not systematically deceived? Doesn't not knowing this still somehow interfere with the assumptions of my daily life? Part of the reason for this worry is not yet having fully taken on board the claim of this paper. Lack of knowledge that you are not a *brain in a vat* undermines your claim to knowledge only of those things inconsistent with your being a *brain in a vat*. A given list of beliefs about things around us being thus and so, and even our being rightly hooked up for knowing that they are thus and so, is obviously not inconsistent with being a *brain in a vat*. This may seem like a bad thing—all of the things we are most confident we know will never get us to the reassuring knowledge we are not thoroughly systematically deceived. But it is just as much a good thing: we don't need to know we are not *brains in vats* in order to know those familiar things we think we know. We can take the skeptic's first premise: you know you have hands, and go home with it. We can take our feet home too. Nothing in his subsequent argument touches what we are permitted to think we know of such things.

The kicker, one might think, is in a different set of things we believe, assumptions that perception has us automatically making, such as that objects remain when I'm not looking at them. This generalization is not one I can directly verify in the way discussed above, and this kind of claim is essential to the denial that I'm a brain in a vat. Granting something like this claim for the sake of argument, the question is why this standard of knowledge is being applied when we ask ourselves the plain question whether we know objects are there when we're not looking at them. We think of this standard because the skeptic focused on an example where we fulfill it: the claim that we have hands. That we have it there does not imply it is necessary for knowledge. Even in the skeptic's argument it was used because fulfilling it seems of all things overwhelmingly sufficient. There was no need to suppose it was necessary, nor any argument given for doing so; whether it is necessary is a question about the nature of knowledge. We may know that objects are there when I'm not perceiving them in a different way, or we may not. This issue is part of knowing whether we are systematically deceived, but the skeptic's argument under consideration doesn't touch the question.

The effect of the argument of this paper somewhat resembles the outcome of views of knowledge that deny closure. In both you have a split decision where it is possible for you to know you have hands without knowing you're not a *brain in a vat.* But here the reason is that it is possible to *be* a *brain in a vat* even if you hands. The difference is in whether we deny that knowing p, and knowing that p implies q, implies that you know q (closure), or deny that "I have a hand," and claims relevantly like it, imply "I am not a *brain in a vat.*" There is no need to deny closure in order to defeat the skeptic in the way advocated here. There is no need to deny any general principle about knowledge. We need not attribute to the skeptic a false claim about knowledge, since he has a much more basic false factual

premise about an implication. The contents "I have a hand" and "I am not a *brain in a vat*," simply are not suitable for applying principles that will get him to his goal. Here we got generality over the moves the skeptic might make to repair his situation by explaining the trade-off he will always face in trying to identify, between something we obviously know and something we obviously don't know, both a logical implication and a huge intuitive gap. The closer we get to an implication, the farther we get from a combination of a premise we think we know and a conclusion we think we don't know.

The argument of this paper clearly does not appeal to a denial of closure, but one might think it tends to suggest the opposite, closure, and even, perhaps, to depend on it. This is because it is sufficient for a counterexample to closure if we find a case where we obviously know something, obviously know that it implies something else, and obviously do not know the something else. If I am right that the skeptic can't find the kind of example he needs then it looks like a counterexample to closure can't be found either. The argument I've made says that the closer he gets to known premises, the farther he gets from unknown conclusions, in cases where the implication does truly hold. But all of this is very confusing. The approach to defeating skepticism that denies closure (e.g. Dretske 1970, 1971, 1981; Nozick 1981) assumes the skeptic needs closure in order to make his argument go. The argument here suggests that what the skeptic needs is a *counterexample* to closure. How could both of these be true of his one argument?

They are both true because his argument is a reduction ad absurdum, and the way down is different from the way up. The way down appeals to an implication claim, and two intuitions:

1) I know "I have hands."	Intuition
2) "I have hands" implies "I am not a brain in a vat."	"Logic"
3) A normal person and a brain in a vat have the same evidence	definition, stipulation, or?[vi]
4) But I (obviously) don't know "I am not a brain in a vat."	3) plus (independent) intuition

If all of these statements are true, then this is a counterexample to closure. The skeptic needs it to be compelling to us that this is true, and thus compelling to us that there is a counterexample to closure, however uncomfortable he also wants us to be in admitting it. It is on the way back up that he then appeals to closure: If you knew you had hands then you *would* know that you are not a brain in a vat. Hence, since you admit you don't know the latter, you must admit you don't know the former. The discomfort we have with the apparent counterexample to closure is relieved by implicitly denying that there could be any such counterexamples. But what we had failed to ask was whether it was compelling in the first place that there was a counterexample here. And my answer has been that it was not shown, with suggestions for why it cannot be, at least in the way that the skeptic needs. My argument does not assume closure, but does in a limited sense defend it using independent intuitive judgments. However, it does so by focusing on an aspect of the premises needed for closure that has been ignored: the implication claim of the sort we have in 2). The suggestion that follows, and would be interesting to test more generally, is that when we think we have found apparent counterexamples to closure, it is because we are not paying close enough attention to how much it would take to defend the implication claim.

We can defeat the skeptic without denying closure because in his initial foray he needs to be convincing us of an apparent violation of it, but can only come up with a case where the principle simply doesn't apply. Anything you know as well as that you have a hand is not going to imply that you're not systematically deceived about most of the world. But this does not mean we are knowledge-poor. It means that the skeptic's argument hasn't shown anything about our knowledge. Rather, he has engaged, with our assistance, in an iterated shell game. (Ten dollars if you can tell me where the knowledge went!) Most people think, *contra* G.E. Moore, that you can't get out of radical skepticism by waving your hands. What we have seen here is that you can't get *to* a radically skeptical challenge by hand-waving either, and for the same reason: knowledge that you have a hand can't give you knowledge of a world. Even the Romantics, who told us that we can see the world in a drop of water, didn't think that getting from the one to the other was a matter of logical implication.

References

Dretske, Fred (1970), "Epistemic Operators," *Journal of Philosophy* **67**: 1007-23.
---------- (1971), "Conclusive Reasons," *Australasian Journal of Philosophy* **49**: 1-22.
---------- (1981). *Knowledge and the Flow of Information*. Cambridge, MA: MIT Press.
Greco, John (2007), "External World Skepticism," *Philosophy Compass* **2**: 625-649.
Nozick, Robert (1981). *Philosophical Explanations*. Cambridge, MA: Harvard University Press.
Williamson, Timothy (2000). *Knowledge and Its Limits*. Oxford: Oxford University Press.

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[i] For an up-to-date discussion of this argument, see Greco 2007.

[ii] To insure this conclusion, I assume that having hands is probabilistically independent of having high blood pressure, or being a victim of child abuse. (Otherwise information that one has hands would give information about whether or not you had the other properties.)

[iii] One might think that the mistaken idea that "I have a hand" implies "I am not a brain in a vat" is that we are making a level confusion by smuggling an "I know" into our thoughts of the first. Knowing that you have a (normal) hand gives more of the kind of information we need because it implies not being systematically deceived about the hand. I do not think philosophers are making this mistake, because a scan of the literature shows the proofs are written very carefully to include "know" in the premise only if it is also included in the conclusion. Of course, this wouldn't get the job done anyway, since it doesn't imply that I am not systematically deceived about everything other than the hand.

[iv] It does seem possible to re-run the skeptic's argument using an inductive inference, though I am not aware that this has been done, apparently because knowing that one is probably not a brain in a vat is not deemed sufficiently reassuring. In this version, we would say that "I have hands" makes it probable that I am not a brain in a vat, and improbable that I am. However, we can look at this in terms of the same dilemma I am developing above. It does not seem that the mere fact that I have hands makes it improbable that I am a *brain in a vat*. It's not just that it is logically possible for me to be a brain in a vat with hands. It is that this seems only marginally less probable than that I am a brain in a vat in the first place. If I didn't know I was not a brain in a vat before, adding the hand does very little to change the probability. The skeptic is stymied on this side because whatever probability my having a hand confers on the claim that I'm not a *brain in a vat* that does not give me any more knowledge than it is plausible to think I have. So, this does not come back to undermine my claim to know I have hands. On the other hand, suppose there is some sense in which the having of hands makes it truly improbable that I am a *brain in a vat*. It does not seem, and has not seemed to the tradition of thinkers worried about this problem, that that sense can be to the point, which is that whatever evidence I have would, it is assumed, be the same if I were a *brain in a vat*.

[v] As will be plain in what follows, I won't be exploiting the fact that systematic deception can be realized in a number of different material ways. The focus is on the problem of confirming that what appears to you is the same as what is in the world, not on the infinite number of different kinds of world in which it could fail to be.

[vi] Williamson (2000) points out, convincingly, that the skeptic's argument is not serious if he plans simply to stipulate that the brain in vat and I could have the same evidence. "Same evidence" must be defined, and the claim that it is possible defended, which Williamson argues can't be done. I'm inclined to think this challenge can be met, so it is not otiose to present the skeptic with another problem. And, in any case, it is always possible for the skeptic to have more than one unmet challenge.