Petitio Principii: A Bad Form of Reasoning

Daniele Sgaravatti
University of L'Aquila
daniele_sgaravatti@yahoo.it

In this paper I develop an account of petitio principii (the fallacy sometimes also called 'vicious circularity', or 'begging the question') which has two crucial features: it employs the notion of doxastic justification, and it takes circularity to be relative to an evidential state. According to my account, an argument will be circular relative to an evidential state if and only if having doxastic justification for the conclusion is necessary, for a subject in that evidential state, to have doxastic justification for the premisses. I compare the account to some existing ones, and claim some advantages. I then rebut an objection which threatens to undermine the importance of one of those advantages. This account seems to shed new light on the old problem of characterizing petitio principii. It avoids the two obvious problems which any account of this phenomenon must face: being too narrow, for example by leaving out all arguments in which the conclusion does not appear among the premisses, and being too wide, making all valid arguments circular.

1. Introduction

Some arguments strike us as having a sort of defect that we call, usually without distinction, being circular, or question-begging, or being a petitio principii. Philosophers in particular often accuse each other of committing this sort of fallacy. However, it proves surprisingly difficult to give an account of what the defect or fallacy consists in. In what follows, I will try to give such an account. My account will be, in short, that the defect consists in the fact that having a justified belief in the conclusion of the argument is, relative to the subject's epistemic state, necessary in order to have a justified belief in the premisses. The key features of this analysis are, first, that it uses the concept of having a justified belief, as opposed to having a justification to believe (the distinction corresponds to the standard one between doxastic and propositional justification); and, second, that it relativizes the circularity to a subject's evidential state.

In section 2, I discuss and criticize some attempts at defining circularity (without any pretension towards being exhaustive). This constitutes the background for presenting my own definition in section 3.

One advantage I claim for my definition is that arguments in which the conclusion is included among the premisses — such as, for example, arguments of the form '*p*, therefore *p*' — are characterized as circular by it. In introducing the matter, it is often assumed that this kind of argument provides a paradigmatic case of circular arguments. However, most authors who have written on this matter recognize that we cannot simply define a circular argument as one in which the conclusion is included in the premisses, for there are circular arguments in which the conclusion is not included among the premisses. The condition is therefore not necessary.

Sorensen (1991) argues for the much more controversial thesis that the condition is not sufficient either. There are, according to Sorensen, arguments in which the conclusion is among the premisses, although they are not circular. In particular, he tries to give examples of arguments of the form '*p*, therefore *p*' which are not circular. In section 4, I will try to show that Sorensen's examples are not convincing, and I will provide some general reasons to deem the kind of argument in question defective. Arguments that include the conclusion among the premisses will turn out to have the special feature of being circular with respect to any epistemic state, and, therefore, to deserve the epithet 'circular' if any argument does.

2. Some previous attempts

I will not try here to survey all the attempts that have been made at giving a definition of circularity. Some background will, however, be useful. We can distinguish two broad (but not unrelated) questions about circularity that are discussed in the literature. The first is whether circularity should be treated as a property of arguments (ordered sets of propositions) in themselves.[1] The second question is about the nature of the defect of circularity: Is it a logical mistake? Or is it a dialectical or pragmatic mistake, having to do with social rules of conversation and debate? Or is it an epistemic mistake, something preventing the acquisition of knowledge?

Here I set out what answers to these questions are entailed by my proposal. However, I will not argue directly for the answers provided. But I hope to show both that the proposal is extensionally correct with respect to our pre-theoretic judgements on which arguments are

---

[1] Views of this kind are defended, for example, in Copi 1961, Hoffman 1971, and, at least sticking to the letter of the text, Pryor 2004.

circular, and that it has some explanatory power with respect to our pre-theoretic sense that there is something wrong with circular arguments. If I am successful, this should provide some indirect support for the starting points I choose.

As to the first question, I will follow what is now the most popular approach,[2] giving a negative answer. In my view, circularity is not a property of arguments *simpliciter*, but rather a property of arguments relative to contexts, where 'context' is here meant mostly as a placeholder for what different theories relativize circularity to (we might also say that it is a property of particular employments of arguments — I will stick to the former usage for it is terminologically simpler). I will, however, make a concession to the opposite view, identifying a way in which some arguments can be circular relative to any context, and thus might count as circular in themselves.

As to the latter question, I will stick to the view, also favoured by most theorists, that, since perfectly valid arguments can beg the question, the mistake involved cannot be of a logical kind.[3] This still leaves a choice between pragmatic and epistemic explanations of the nature of the defect. Here theorists are divided more evenly. Paradigmatic examples of the pragmatic approach are Sorensen (1991) and Walton (1994). Epistemic views are defended, for example, by Sanford (1972), Biro (1977), and Sinnott-Armstrong (1999). There are also approaches that combine the two in various ways.[4] As I have already mentioned, the analysis presented below will be epistemic. I am open to the idea that what I am focusing on is just a species of circularity, and that there might be others having to do specifically with the pragmatic properties of arguments as series of assertions. However, I will try to show that the account proposed can be naturally extended to explain at least one kind of problem related to the use of arguments in a dialectical situation.

Let us now start looking at some previous attempts at defining circularity by considering what I will call the 'traditional' definition, according to which an argument is circular if, and only if, one of the

---

[2] See Sanford 1972 and 1988, Jackson 1984, Sorensen 1991, Walton 1994, Sinnot-Armstrong 1999, and Davies 2009.

[3] Iacona and Marconi (2005) pose a challenge to this orthodoxy. They argue that a petitio involves a logical mistake, at least in the sense that it involves a mistake that can be represented within a standard deductive system in terms of an invalid argument form. As I said, I am not going to discuss this kind of view.

[4] Jackson (1984) distinguishes an epistemic sense of begging the question (which is also dependent on the context) from a pragmatic one.

premises is identical to the conclusion.[5] This definition, despite some initial attractiveness, suffers from serious deficiencies. The main problem is that it seems too narrow. There are intuitively circular arguments that do not satisfy the definition. One interesting way to illustrate this failure is to note that for every argument which is counted as circular by the traditional definition, there is an argument with the same conclusion and a logically equivalent set of premises which is not counted as circular, although it is intuitively circular. Consider the simple case 'p, therefore p'. We could improve on this form of argument, according to the traditional definition, as follows. Pick an arbitrary proposition q, distinct from p, and then argue: 'p or q, p or not-q, therefore p'. Some theorists, such as Iacona and Marconi (2005), count as an additional bad consequence of the traditional view the fact that switching to logically equivalent premises can make a circular argument non-circular. I think there are cases in which we want to allow that to happen, and I will come back to this later.

Although the traditional definition does not seem to capture a necessary condition for an argument to be circular, I think at least it captures a sufficient one. Leaving aside its extensional adequacy, there is another complaint one might have about the traditional definition, which is its lack of explanatory power. If circularity is a bad feature of arguments, we would expect the correct definition to tell us something about why it is bad; but the traditional definition, in itself, is silent on this.

As I have said, it would be impossible to discuss each previous attempt at improving on the traditional definition here, or even each interesting one. I will instead take as my starting point some attempts at capturing a notion of circularity in epistemic terms made in Pryor 2004. Pryor considers five possible understandings of the way the premises could depend on the conclusion to make an argument circular. Although Pryor himself rejects all but the fifth, it will be useful to consider all of them, just as Pryor does, in order to understand what is wrong with some simple-minded but initially attractive thoughts. Moreover, although the reasons Pryor gives against them seem sufficient, there are more radical defects with some of the proposals which it is instructive to highlight, and which, in one case at least, count against the fifth proposal as well, the one Pryor finds satisfactory. This discussion will set the necessary background for appreciating the advantages of the solution I am going to propose.

---

[5] See, for example, Copi 1961, pp. 65–6, and Hoffman 1971.

As a first attempt, Pryor considers the idea that arguments in which the premisses could not be true if the conclusion was not true are somehow circular. But, of course, on this approach all valid arguments would be classified as circular, as it seems at least necessary for an argument to be valid that it have precisely that feature. Now, some authors might be prepared to accept this consequence, but I think it is fair to consider it, if not as a *reductio* of an attempted definition, at least as a last resort.[6] We will come back to the epistemic role of valid arguments shortly.

The second sense of circularity considered by Pryor is the following: if the conclusion was not true, I could not be justified in believing the premisses. The objection Pryor himself raises is a problem of over-generation, involving an argument for the conclusion that someone has justification to believe something. Pryor maintains that no argument to that effect could fail to be circular according to the proposed definition. However, I would like to point out a kind of problem that Pryor overlooks: the definition seems to drastically undergenerate. Firstly, arguments of the form 'p, therefore p' do not need to exhibit this kind of circularity, since justification does not entail truth. Secondly, there are other more subtle examples of circularity that do not exhibit it either; consider the following cases of a phenomenon which Wright (2000, 2004) dubs failure of warrant transmission:

Football:
Jones has just kicked the ball between the white posts
Jones has just scored a goal

A game of football is taking place (as opposed to a rehearsal of a movie about football)

Car:
I intend to walk to Lot 15 and drive home
So I will walk to Lot 15 and drive home

My car will still be in Lot 15 when I get there

We can read these as arguments in which the second premiss is an intermediate conclusion. The problem with the arguments, quite obviously, is that (in the natural way of imagining their use) the intermediate conclusion only follows if the final conclusion is

---

[6] This is, of course, a vast topic. For a defence of the assumption of the usefulness of deductive reasoning consonant with the present approach, see Dummett 1973.

somehow assumed; hence the feeling of circularity. I think it would be clearly desirable for our definition to capture these cases as well, thus making failure of warrant transmission a special case of circularity.[7] But the definition under discussion fails to count them as circular. Since the arguments are not deductively valid, it would be possible, in unlucky circumstances, to know (and, *a fortiori*, to have a justified belief) that the premises hold, even if the conclusion is false. In fairness to Pryor, he might be read as considering the stated conditions as sufficient rather than necessary, in which case clearly under-generation would not be a problem; but that does not make it less interesting to explore how the conditions play out as necessary and sufficient.

I will spend more time on a third attempt Pryor considers, so it will be convenient to single it out with a name. Let us call it the Justification Account.

> (JA) An argument is circular if and only if for you to have justification to believe the premises, it is necessary that you have justification to believe the conclusion

Regarding this kind of circularity, Pryor writes:

> Once more, this seems to include some arguments that are perfectly respectable. It includes arguments where the connection between premise and conclusion is so obvious that understanding the premise well enough to be justified in believing it requires you to take any justification for the premise to also justify you in believing the conclusion. (Pryor 2004, p. 359)

Note how Pryor switches from talking about having justification to believe (in the definition), to talking about being justified in believing (in the counterexample). This is a symptom of a problem. The former expression usually denotes propositional justification, while the latter often denotes doxastic justification, in the sense of Firth 1978.[8]

---

[7] I am assuming this is the way Wright always intended the notion, i.e. as providing a sufficient but not necessary condition for circularity. The following reasoning supports this interpretation. Wright (2003) gives the following template for individuating cases of failure of warrant transmission:

> (i) that A entails B; (ii) that my warrant for A consists in my being in a state which is subjectively indistinguishable from a state in which the relevant C would be true; (iii) that C is incompatible with the reliable operation of the cognitive capacities involved in generating the warrant for A; and (iv) that C would be true if B were false. (Wright 2003, p. 63)

Now, consider a single-premiss argument in which the conclusion is identical to the premiss; A = B, so (i) is satisfied. Take not-A for C, and (iv) is also clearly satisfied. However, (ii) and (iii) are not necessarily satisfied, so an argument of that form can fail to realize the template.

[8] See also the insightful discussion in Harman 1973, pp. 24–33.

Roughly, doxastic justification is a property of beliefs, the property of being formed in an epistemically appropriate way. Propositional justification is a property of propositions relative to an evidential state, that of being supported by it. The two properties are usually thought to be intertwined, in that a belief is justified if it is based on evidence that makes its content propositionally justified, and a proposition is justified relative to an evidential state if the evidential state is such that if a subject were to form on its basis a belief in the proposition, the belief would be doxastically justified. There are several issues surrounding the distinction which we do not need to consider here. No particular relation between doxastic and propositional justification is presupposed. All that is needed for our present purposes is that the distinction can be drawn, and I think this should be uncontroversial. It is one thing to have evidence for a certain proposition, and quite another to have a belief which is based on evidence in such a way as to be justified. I think the latter is the notion which should be central in our understanding of circularity. The only way one could reject the notion of doxastic justification is not by rejecting the distinction, but by rejecting the notion of justification itself, a move I am not going to consider here.[9]

However, Pryor's considerations are explicitly focused on propositional justification (see Pryor 2004, p. 352). Now, if the definition makes use of the latter notion, there will be an overgeneration problem much more radical than the one noted; again, every valid argument, assuming propositional justification is closed under entailment, will turn out to be circular. For it will not be possible to have propositional justification for a set of premises entailing a conclusion without thereby having propositional justification for a conclusion. One might worry that the closure principle used here is too strong even for propositional justification. Here is a formulation of the principle (I am following Pryor in taking 'S has justification to believe p' to mean that p is propositionally justified for S):

(CJ) For all subjects S and propositions $p_1, \ldots, p_n$ and q, if S has justification to believe each of $p_1, \ldots, p_n$, and $p_1, \ldots, p_n$ entail q, then S has justification to believe q

Suppose I have a justification to believe the Peano axioms; by (CJ), that means I have justification to believe Fermat's Last Theorem, even

---

[9] Sutton (2007) explores an epistemology 'without justification'.

if my mathematical skills are very poor. Is this a fatal objection? One could think that the objection misses the point of talking of 'propositional justification', which is supposed to be that your evidence supports a certain conclusion, even if you may be incapable of seeing the connection. However, it might be replied that this notion is not the one we are interested in; idealizing away too much from the subject's capacities makes it useless. This is not something I aim to adjudicate here. One might try to make closure principles more realistic by adding the requirement of a justification to believe that the entailment holds:

> (CJJ) For all subjects S and propositions $p_1, \ldots, p_n$ and q, if (i) S has justification to believe each of $p_1, \ldots, p_n$, (ii) $p_1, \ldots, p_n$ entail q, and (iii) S has justification to believe that $p_1, \ldots, p_n$ entail q, then S has justification to believe q

However, when combined with (JA), this principle will also make many legitimate employments of valid arguments circular, for most often one uses a valid argument when one knows that the argument is valid, or at least has justification to believe it is valid. For example, supposing I have justification to believe all instances of modus tollens to be valid, the argument expressed by 'if Jane left early, the keys are under the mat, but the keys are not under the mat: therefore Jane did not leave early', would be always circular for me.

A different kind of worry with the closure principles derives from probabilistic reasoning. Suppose I am justified in believing that my ticket in a very large fair lottery will not win. I would then have the same (probabilistic) justification to believe the same for every ticket. But then, by closure, I would have a justification to believe that all the tickets will lose, when we can suppose, in fact, I know that this is not going to be the case. Even if one rejects unrestricted closure for propositional justification for this kind of reason, one is likely to maintain at least single-premiss closure:

> (SCJJ) For all subjects S and propositions p and q, if (i) S has justification to believe p, (ii) p entails q, and (iii) S has justification to believe that p entails q, then S has justification to believe q

One might think that (SCJJ) is still inadequate because it does not require an appropriate connection between the fact that the entailment holds and the justification. For example, the subject might have been told that the entailment holds by a reputable logician

who was trying to deceive the subject, but was making a mistake in this case. But this is not a counterexample to (SCJJ), since the subject would still have justification, although this justification might not be of the right kind to sustain knowledge; if a true belief were formed on this basis, it might constitute a Gettier case. Assuming (JA), (SCJJ) would make all valid single-premiss arguments circular, which still seems an undesirable result. Of course, I have not given conclusive reasons for any of the closure principles for propositional justification. But I am assuming that they have some plausibility (and some popularity); I take it that it is a defect of an account of circularity that it produces absurd conclusions, unless one radically rejects all such principles. I will argue in section 3 that switching to doxastic justification (in a similar definition of circularity) avoids the problem.

The fourth attempt Pryor makes at a definition of circularity is the following:

> Another type of dependence between premise and conclusion is that the conclusion be such that evidence against it would (to at least some degree) undermine the kind of justification you purport to have for the premises. (Pryor 2004, p. 359)

To understand this proposal it is crucial to see that 'undermine' is here used in the sense in which it is opposed to evidence overriding, or merely opposing, the justification for a belief. Evidence opposes the justification for a belief whenever it counts in favour of the negation of the belief. Evidence undermines the justification for a belief when it gives a reason to think the evidence (or alleged evidence) we had for the belief is misleading (or it is no evidence at all). Suppose I see someone in the distance, and I think it is Paul. If I am now told by a reliable informant that Paul is not in town, this evidence opposes, and maybe overrides, my initial evidence, but it does not undermine it. If, instead, I realize that, though I thought I had my glasses on, I did not, this new piece of information, although it says nothing as to Paul's location, might undermine my justification. If we keep this distinction in mind, we see that the fourth proposal does not condemn all valid arguments to circularity. Although in all valid arguments any evidence that opposes the evidence for the conclusion also opposes the evidence for the premises, it is not typically the case that evidence against the conclusion undermines the justification for the premises. While the definition does not overgenerate in this simple way, Pryor thinks it overgenerates in some cases; Moore's proof is one

such case (if you share Pryor's view that it is not circular, of course). Another case Pryor proposes is the following:

(1) The cat sees the mouse

(2) If the cat sees the mouse, then there are some cases of seeing

(3) So there are some cases of seeing

The argument is supposed to be proposed in a situation in which our evidence for (1) is derived by visual perception. I tend to disagree with Pryor about this case; I think that in such a situation, if we really suspended the belief we all have in (3), (1)–(3) would be a circular argument, so I do not think it constitutes a genuine counterexample to the sufficiency of the proposed definition. In any case, the proposal again has a more radical problem of undergeneration, if it is understood as a definition of circularity. The definition does not classify as circular those arguments which are merely such that one of the premisses is identical to the conclusion. Evidence that the conclusion is false could oppose, but not undermine, the justification we have for it, and thus for the premisses.

Finally, let us consider the definition Pryor favours:

> having justification to believe the conclusion *is among the conditions that make you* have the justification you purport to have for the premise. That is, whenever you need *antecedent* justification to believe the conclusion, as condition for having that justification for the premise. (Pryor 2004, p. 359; italics in original)

A problem with this attempt is that some key notions are left quite unexplained; in particular, it does not seem clear that the two formulations are equivalent. But I will not insist on that. The main problem with the proposal is that, once again, it does not capture arguments in which the conclusion is included among the premisses. Consider again the simplest case, that of arguments of the form '*p*, therefore *p*'. In fact, this kind of argument is *guaranteed* not to meet the condition because if the conclusion is identical to one of the premisses, it is presumably impossible for its justification to be antecedent, in a logical or chronological sense, to the justification of that premiss. Nor does it seem that, in any useful sense of 'make', having justification for a proposition is among the conditions that make you have justification for that very proposition.

Let us assume for the moment that, as we would usually think, this is a serious shortcoming. There is another prominent epistemic

account of circularity that shares this shortcoming, which is the one to be found in Jackson 1984:

> it may be that a given argument to a given conclusion is such that anyone — or anyone sane — who doubted the conclusion would have background beliefs relative to which the evidence for the premises would be no evidence. …
>
> Such an argument could be of no use in convincing doubters, and is most properly said to beg the question. (Jackson 1984, pp. 111–12)

The reason Jackson's definition does not capture arguments in which the conclusion is among the premises is that it is not the case that if your background beliefs are such that you doubt *p*, any evidence offered for *p* is no evidence; otherwise rational belief change would be impossible. Jackson acknowledges this feature of his account, as he writes:

> The argument 'P, therefore P' merely marks time — (call it a species of begging the question if you like, but why not call it as it is, a waste of breath). (Jackson 1984, pp. 109–10)

I agree that the argument is a waste of breath, but it seems clear that the reason it is a waste of breath is precisely that it is patently circular (as I said, I will consider later a line of objection to this claim), so Jackson is not really addressing the worry. Also, the suggestion that it is a waste of *breath* could be taken to indicate that the problem with this kind of argument is of a pragmatic kind, having to do with the use of the argument in a dialectical situation. I think there is clearly a problem with arguments of this kind even if they are not uttered, but only used in reflection.[10]

3. A new account of circularity

3.1 The account explained
In the light of the foregoing, let us look at my proposal, which I will call the Justified Belief Account:

> (JBA) An argument *A* is circular relative to an evidential state E iff in order for a subject S in E to have a justified belief in each one of *A*'s premises, it is necessary that S has a justified belief in *A*'s conclusion

---

[10] Davies (2009) develops Jackson's account in an interesting way, and puts it in relation to the traditional definition. Still, Davies's development does not seem to deal successfully with the problem I indicated.

A few clarifications are in order. An evidential state is the totality of the evidence possessed by a subject at a certain time. In general, we can think of the evidence possessed by a subject as a subset (possibly not proper) of the subject's mental states, those relevant from the epistemic point of view. (JBA), as far as I can see, is compatible with any account of what it takes for something to be part of the evidence possessed by a subject. For example, it is compatible with Williamson's (2000) claim that the evidence possessed by a subject is the totality of the propositions known by the subject, or with a much more internalist understanding of evidence on which evidence consists in the totality of the subject's current mental states and dispositions (e.g. of the kind advocated in Conee and Feldman 2004).[11] Note also that (JBA) talks about believing each one of the premises, but this is not the same as believing the conjunction of the premises. Therefore, the use of conjunction introduction is not automatically counted as circular (I will come back to this in Sect. 3.2). I can certainly rationally believe each of a set of premises without in fact believing their conjunction (whether or not I am rationally required to believe the conjunction is a different, and controversial,[12] matter).

A last clarification is needed on what is meant in (JBA) by one thing being 'necessary' for the other. Of course, it is completely standard to talk of necessary and sufficient conditions and (JBA) in no way represents a particularly problematic case; but what is meant by that is not obvious, and a few words here might be useful. The material conditional having some condition B as an antecedent and some condition A as a consequent is entailed by, but not equivalent to, A's being necessary for B. For otherwise, any satisfied condition would be necessary for everything else, and everything would be necessary for any condition which is not satisfied. The necessitation of the material conditional, on the other hand, seems both too weak, since any

---

[11] Moreover, nothing in the basic idea of (JBA) is incompatible with the rejection of any notion of evidence. If one just does not think that there is a useful epistemological role for that notion, one just has to consider this modified version, which I will call the Justified Subject Account:

> (JSA) An argument *A* is circular relative to a subject S at time *t* iff in order for S to have a justified belief at *t* in each one of *A*'s premises it is necessary that S has a justified belief at *t* in *A*'s conclusion

I will stick to (JBA) because it seems to provide a more useful characterization of the way circularity is relative. If two subjects have the same evidential state, by (JBA) an argument cannot be circular for one of them but not for the other, which seems the right result; (JSA) is silent about that. Still, nothing in what follows essentially hangs on this choice.

[12] See Kyburg 1997 and Evnine 1999 for a negative and positive answer respectively.

necessary truth would turn out to be necessary for any other condition, and too strong, since we might sometimes wish to talk of something being necessary for something else even though the two conditions are not metaphysically linked. I do not have a theory to offer. For my present purposes it will suffice to say that a good test of A's being necessary for B (and thus of B's being sufficient for A) is the satisfaction of two subjunctive conditionals. First, if A did not hold, B would not hold; secondly, if B were to hold, A would hold. Hence, a good indicator of the fact that, for a certain argument, having a justified belief in the conclusion is necessary for me in order to have a justified belief in the premises is that, firstly, if I did not have a justified belief in the conclusion, I would not have a justified belief in the premises, and, secondly, if I had a justified belief in the premises, I would also have a justified belief in the conclusion.[13] This, however, invites a further question. In evaluating whether the necessity condition is satisfied in a situation in which we add or subtract justified beliefs, we might doubt that the evidential state can actually be kept fixed. This will depend on views about the nature of evidence on which I wish to remain neutral here. For present purposes, the natural way of judging counterfactuals will suffice; suppose I wish to know whether, for a subject in evidential state E_1, who does not have a justified belief that p, it is the case that if the subject had a justified belief that p, she would also have a justified belief that q. To answer this question I need to consider a situation that is as similar as possible to the actual one, compatibly with the fact that the subject has a justified belief that p. If a change in the evidential state E_1 is forced by the latter fact, then we need to pick a situation in which the subject

---

[13] This is only a test, and not a definition of a condition being necessary for something else. As both Brian Weatherson and a referee for *Mind* pointed out to me, if it were a definition then it would inherit one of the problems of the definition in terms of a necessary material conditional; any necessary truth would turn out to be necessary for everything else, and any impossibility sufficient for anything else, assuming that a counterfactual with an impossible antecedent and one with a necessary consequent are always true.

In our case, the worry arises for arguments which have premises that are metaphysically impossible to believe with justification (relative to the evidential state — but that is not crucial, since, as I explain below, the evaluation of the counterfactual will bring us to a world, if there is one, in which the evidential state changes in such a way as to allow justified belief) which would then turn out to be automatically circular. I am not sure how worrying this is. Assuming there really are propositions which are impossible to believe with justification, my judgement on arguments which include them is unclear. Consider the argument: '$2+2=5$, therefore Paris is the capital of Russia'. The argument is valid, although unsound. Perhaps we could count it as showing a peculiar form of circularity. But I do not need (or wish) to commit to such a view, for clearly this is just an instance of the general problem arising from necessary truths and falsehoods when we try to be precise about what a necessary condition is.

is in an evidential state E_2 as similar as possible to E_1, compatibly with the subject having a justified belief that p. Then of course it has to be judged whether the subject believes q in that situation.

We are now in a position to adjudicate (JBA) on the basis of how well it fares in capturing particular examples. Arguments in which the conclusion is among the premisses are clearly circular according to (JBA), since it is necessary to have justified belief in the conclusion in order to have justified belief in the premiss which is identical to it. This is an advantage, as we saw, that the definition has with respect to some contenders. Moreover, arguments in which the conclusion is among the premisses turn out to have the special feature of being circular relative to any evidential state. I think this is an additional advantage, both because it seems to be the right result and because it explains why arguments of this form have been traditionally taken to be paradigmatic examples of circularity.

Other typical examples of circular arguments are also captured by the definition. Consider, for example, the following:

The Bible says that God exists
Everything the Bible says is true

God exists

This argument looks circular because we imagine a situation in which there is no evidence for the second premiss unless one has reason to believe the conclusion. Here, though, it becomes crucial that circularity is relative to an evidential state. If I had good evidence for the second premiss which is independent of the conclusion, the argument would lose its circularity, relative to my evidential state.

To further illustrate the role of the evidential state, let us consider the more subtle cases provided by examples of failure of warrant transmission. Consider again Football and Car. Typically, a situation in which you either do not believe the conclusion of these arguments, or your belief in the conclusion is unjustified, is a situation in which the first premiss does not provide you with good grounds for the second. Hence, you cannot in that situation have a justified belief in that premiss unless you already have a justified belief in the conclusion. Therefore, again, (JBA) rightly classifies the argument as circular. Note that there are conceivable epistemic states for which the argument will not be circular. For Football, think of a situation in which I have independent knowledge that either a football game is taking place, or they are shooting a movie called 'The greatest 0–0 ever'.

For Car, think of a situation in which I have independent knowledge (perhaps by having being told by God) that today I will succeed in doing everything I intend to do.

A worry about (JBA) delivering the correct result in cases like Football and Car could arise from the notion of belief involved. Clearly, no occurrent belief in the conclusion is necessary at any point in the argument before the conclusion itself. Therefore, (JBA) has to be interpreted as referring to dispositional beliefs[14] as well. This seems to deliver the right result for the cases we considered. Let us look again at the examples of Car and Football. Suppose at the point at which I have accepted the first premiss I have no disposition at all to accept the conclusion. Then my belief in the second premiss will not be justified, and it will, therefore, make no contribution to my justification for the conclusion.

However, the notion of dispositional belief is not itself entirely unproblematic. Audi (1994), for example, argues that we should distinguish between dispositional beliefs and dispositions to believe. If that distinction makes sense, there might be a worry that in some cases of intuitively circular arguments, having a disposition to believe the conclusion, falling short of dispositional belief, is sufficient to allow justified belief in the premisses. If that is so, (JBA) will have to be turned into a Justified Disposition Account:

> (JDA) An argument *A* is circular relative to an evidential state E iff in order for a subject S in E to have justified belief in each one of *A*'s premisses, it is necessary that either S has a justified belief in *A*'s conclusion or S has a justified disposition to believe *A*'s conclusion

The notion of a justified disposition to believe has not, as far as I know, ever been used. But it does not seem problematic to understand it in terms of justified belief. A disposition to believe will count as justified if it would result in a justified belief in case its typical manifestation conditions obtain. I think it is preferable, for independent reasons which I cannot go into here, to be liberal with the notion of dispositional belief, and count as such, roughly, all cases in which simply being presented with the question whether the content of the (supposed) belief is true prompts an occurrent belief. I think this rough understanding is sufficient to show that (JBA) provides the correct predictions. However, switching to (JDA) would not affect the spirit of the definition; what is crucial about the notion of doxastic

---

[14] Sometimes also called 'tacit' beliefs. See, for example, Lycan 1986.

justification is that it attaches to a psychological state; and a disposition to believe is still a psychological state.

Are there cases in which an argument is intuitively circular, but not even a disposition to believe the conclusion is required in order for belief in the premises to be justified? One tempting thought is to think of situations in which a subject lacks the conceptual resources needed to grasp the conclusion. Consider the following argument:[15]

Zebra:
(Z1) The animal in the pen looks like a zebra
(Z2) The animal in the pen is a zebra

(Z3) The animal in the pen is not a cleverly disguised painted mule

Suppose we want to evaluate whether Zebra is circular relative to the evidential state of a subject who does not have the concept MULE. It seems such a subject could be justified in inferring (Z2) from (Z1), even though she has, arguably, no disposition to believe (Z3). By my definition, the argument is not circular relative to her evidential state. Is this a problem? The situation is puzzling because the subject is not in a position to entertain the argument. This suggests a first reply: we could say that the question whether an argument is circular for a subject only makes sense when the subject is in a position to consider the argument; when this is not the case, it is neither the case that the argument is circular for her, nor the case that the argument is not circular for her.[16] This reply seems correct. It has a consequence which must, however, be noted, and which also seems correct to me, but some people might find counterintuitive. If a subject acquires a new concept, this can make it harder for the subject to come to know some things.[17] In the example, if the subject acquires the concept MULE, then she must now be in a position to rule out the painted mule hypothesis if she is to continue to believe (Z2) with justification. Presumably, however, if the subject was in a position to infer (Z2) from (Z1), she had some general reason to

---

[15] The case of course is taken from the classic Dretske 1970.

[16] No failure of bivalence is, however, needed here; we can reformulate the point by distinguishing an argument failing to be circular from the argument being *un*circular (and hence in good standing from that point of view). For someone who lacks the concepts involved, the argument will then not be circular, but it will not be uncircular either.

[17] Elgin (1988) argues that this is in fact a consequence of most accounts of knowledge which were popular at the time she was writing; and I see no reason to think the situation has changed much in this respect. However, she thinks this is a bad consequence. The example I am going to consider should put that in doubt.

believe no scam was going on, and so this will not result in a loss of
justification. However, we can imagine a case which is not like that; we
can imagine a subject who has reasons to suspect a fraud, but does not
have the concept of MULE, or HORSE, or of any other animal similar
enough to a zebra to permit a scam compatible with the rest of the
subject's background knowledge. In such a case, I think it is the correct
result that when the subject comes to have this new concept, she loses
her justification for (Z2).

The examples I have considered here are clear cases of failure of
warrant transmission; of course, things are not going to be so simple
in controversial cases, such as Moore's proof of the external world, for
which some theorists deny there is failure of warrant transmission.
This is certainly not a shortcoming of (JBA); an account of a notion
should not necessarily provide a simple recipe to decide all cases. Still,
I think the account does help to focus on the right question in Moore's
cases; that is, whether one needs to already have a justified belief in the
existence of the external world in order to take one's perceptual ex-
perience as evidence of the existence of a hand.

3.2 Deduction and closure

Let us turn now to another important feature of the proposed ac-
count. Valid arguments are not classified automatically as circular,
since the notion involved is doxastic justification. Doxastic justifica-
tion is not closed under entailment since it requires appropriate belief,
and belief is not closed under entailment (nor is appropriateness; you
might believe a logical consequence of a justified belief for the wrong
reasons). And this is exactly why valid arguments can be informative:
we can have a justified belief without believing all its logical conse-
quences; and we can come to have a justified belief in some of these
consequences by inferring them from the first belief.

To be more precise, let us consider the analogues of closure prin-
ciples for propositional justification which created trouble for (JA):[18]

(CDJ) For all subjects S and propositions $p_1, \ldots, p_n$ and q, if S has a
justified belief in each of $p_1, \ldots, p_n$, and $p_1, \ldots, p_n$ entail q,
then S has a justified belief in q

(CDJJ) For all subjects S and propositions $p_1, \ldots, p_n$ and q, if (i) S
has a justified belief in each of $p_1, \ldots, p_n$, (ii) $p_1, \ldots, p_n$ entail

---

[18] Thanks to a referee for *Mind* for urging for a discussion of these principles, in particular
in the light of the notion of dispositional belief employed here.

q, and (iii) S has a justified belief that $p_1, \ldots, p_n$ entail q, then S has a justified belief in q

(SCDJJ)   For all subjects S and propositions p and q, if S has a justified belief in p, p entails q, and S has a justified belief that p entails q, then S has a justified belief in q

(CDJ), to start with, is patently absurd, while we found no conclusive reasons against the parallel principle (CJ) for propositional justification.[19] We do not believe all the logical consequences of our (justified) beliefs, and, when we believe some of their consequences, we do not always believe them for the right reasons. This is already an advantage for (JBA) over (JA). The other two principles are initially less implausible. But, despite all the qualifications they contain, they too fail in a vast number of cases. Let me first illustrate a counterexample to the stronger principle (CDJJ). I might form at one point the belief that all reptiles are carnivorous. Then, quite a long time after that (maybe years later), I form the belief that turtles are reptiles. At yet a third, again fairly distant, point in time I form the belief that turtles are not carnivorous. Since I am (let us suppose) a proficient logician, I also have, in the dispositional sense, the belief that if turtles are reptiles and turtles are not carnivorous, it logically follows that not all reptiles are carnivorous. But I lack the belief that not all reptiles are carnivorous (or so it seems; we will come back to this). If that situation is possible, there is a possible counterexample to (CDJJ) — let 'turtles are reptiles' and 'turtles are not carnivorous' be $p_1, \ldots, p_n$, and 'not all reptiles are carnivorous' be q.

Not only is this kind of situation possible, I am sure it is fairly common (for myself at least). Recall the rough-and-ready test for dispositional belief in a proposition p is just this: if asked whether p, the subject would answer affirmatively (I will consider in a moment an objection to my use of this test). Consider the following questions: 'Are turtles reptiles?', 'Is it the case that turtles are not carnivorous?', 'Are all reptiles carnivorous?', and 'Does it follow from the fact that turtles are reptiles and turtles are not carnivorous that not all reptiles are carnivorous?' It can be the case that at a precise moment in time[20]

---

[19] See, for example, Brueckner 1994 for an endorsement of such a closure principle for propositional justification.

[20] It is crucial for my example that it concerns the situation of a single subject at a single time, although the *description* of the situation requires telling the reader something about the history of the subject, and some possible developments. It is crucial for two reasons at least.

I have, for each of these questions, a (separate) disposition to answer affirmatively. Of course, I do not have a disposition to answer affirmatively *all* these questions one after the other. The following comparison might be useful: right now, since I am moderately hungry, I have a disposition to accept a cheese sandwich, if it were offered to me, and a disposition to accept chocolate cake, if it were offered to me, and similar dispositions for several other kinds of food; but I do not have a disposition to accept all of those offers one after the other, or even a single offer that puts together all those kinds of food. Similarly, I have the disposition to accept the first sentence, and the second, and so on, without having any disposition to accept the conjunction of the four. If I were asked the four questions one after the other, I would, presumably, bring my beliefs into harmony by rejecting the belief that all reptiles are carnivorous, and my reasoning could (although it need not) be represented by a valid, non-question-begging, argument.

Here one might object that I am putting too much weight on the fact that the subject is disposed to assent to a certain sentence, as a criterion of dispositional belief. After all, the objection would go, in the case I described I do have some disposition to believe that not all reptiles are carnivorous, since I am disposed to accept that proposition when it is pointed out that this follows from other things I know. I see two problems with this move. Firstly, it looks ad hoc. Supposing that I already have the belief that not all reptiles are carnivorous serves no explanatory purpose. I am not disposed to use that proposition in practical reasoning, I am not disposed to assent to a sentence expressing it, and in fact I am disposed to assent to its negation. Secondly, the view has some implausible consequences. In the imagined case, I clearly have the belief that all reptiles are carnivorous (if the disposition to assent were not enough to make this clear, we can imagine that I am disposed to use that belief in various practical decisions; if I were asked to procure food for an iguana, say, I would bring some kind of meat, since I know that an iguana is a reptile, and I believe all reptiles to be carnivorous). So the objection would require attributing

---

First, the closure principles are all relativized to a subject and (implicitly, through the use of present tense) to a time. So the counterexample also needs to have this feature. Secondly, it is crucial that I am assuming that for any subject at a single time there is exactly one evidential state the subject is in. If this were not so, or if my example involved different times, given that justification is plausibly relative to evidential states, there could be a suspicion that my (putative) counterexample equivocates between different evidential states. But that assumption seems safe to me, and dropping it would bring very serious complications.

to me, in the scenario, a belief in a proposition and in its negation. But this is implausible, since my cognitive state can be accounted for by the attribution of beliefs that are inconsistent, but less obviously so. We should not attribute to a subject more irrationality than is needed.

If the case described above is a counterexample to (CDJJ), and I believe it clearly is, the same case provides a further counterexample to (SCDJJ). In the situation described, I clearly have a (dispositional) belief in the conjunctive proposition expressed by 'turtles are reptiles and turtles are not carnivorous'. Add the other beliefs we already assumed I have, and we have the counterexample to (SCDJJ). Again, of course I would change my beliefs if all the propositions were brought under my attention at the same time.

One might still think there is a related worry for (JBA) based on the case Pryor himself thinks problematic for his third proposal, the case of obvious entailments. If the entailment really is so obvious (for the subject) that she cannot have the belief in the premiss without *at the same time* having the belief in the conclusion, then the argument will be classified as circular. My reply is that this is the right verdict about cases of this kind. There is no useful inference going on. Still, it might be objected that there are certain rules of inference, for example, double-negation elimination, conjunction introduction, conjunction elimination, which seem to have a useful role, while the present proposal seems to imply that they always, or almost always, yield circular arguments, since a closure principle restricting the relevant entailment to such trivial rules would hold for doxastic justification as well. A full discussion of this issue goes beyond the scope of the present work, but I believe there is some evidence that for none of these rules is it the case that a restricted closure principle holds. One can certainly believe each of a set of premisses without in fact believing their conjunction; as we noted before, this is the kind of situation involved in the lottery and preface paradoxes. This is not always because one fails to see the entailment. The paradox arises precisely because the subject is typically in a position to recognize the inconsistency in her beliefs, but unable to eliminate it in a rational way.[21]

The cases of double-negation elimination and conjunction elimination are more controversial. Here, I will restrict myself to a brief

---

[21] In addition to the references in n. 12, see Foley 1992. Foley argues that in cases of lottery paradoxes it is rational for the subject to be knowingly inconsistent. All I am claiming is that in some cases (preface-type cases in particular) it is possible for the subject to be knowingly inconsistent without being unjustified in believing the particular claims to which she is unwilling to apply conjunction introduction.

indication of the structure of a counterexample for versions of the less implausible closure principles (CDJJ and SCDJJ) restricted to double-negation elimination.[22] The possible counterexample would involve someone who lacks the belief in some proposition *p*, but believes that it is not the case that not *p*, while at first not recognizing the entailment, either for theoretical reasons, or just because of very limited logical skills. Later on, the subject could acquire a general belief in the validity of double-negation elimination. This would give the subject a dispositional belief that the entailment holds. But the subject might still be not disposed to assent to *p*, because she has not yet applied her newly acquired logical skills to this particular proposition. I predict that anyone who finds my example above about turtles convincing will be able to think of an equally convincing particular example of this structure, and anyone who does not find my example above convincing will not be persuaded by any case I could concoct here. Moving on to conjunction elimination, Williamson (2007) argues that a (normally rational) subject can believe a conjunction without believing both of the conjuncts. Williamson's case, if it works, only provides a counterexample to closure principles that are not restricted to subjects who have justified belief in the entailment (by conjunction elimination). Williamson notes another case that might provide a counterexample even to that restricted closure principle, the phenomenon of the so-called 'conjunction fallacy', the common fallacy of giving a higher probability to a conjunction than to one of its conjuncts.[23] Again, it goes beyond the scope of this work to discuss the issue.[24]

I think it is fair to say that, in most cases at least, even restricting the entailment to simple inference rules we cannot derive uncontroversial closure principles for doxastic justification. However, and crucially, if some such principle holds, then I am prepared to regard all arguments consisting *only* of the application of that inference rule as circular.[25]

---

[22] Of course some theorists believe that double-negation elimination is not a valid inference rule, and they are not always disposed to infer from a double-negation to the simple claim; they constitute a counterexample to a version of (CDJ) restricted to entailments guaranteed by this inference rule. But they are irrelevant for the other principles, assuming that we are normally justified in believing that the entailment holds.

[23] See Williamson 2007, p. 96 and references there. I am assuming that most participants in the studies would not doubt the logical entailment from the conjunction to the conjunct.

[24] See Boghossian 2011 and Williamson 2011 for further discussion.

[25] The use of the rule as a step in a larger argument will cause no problem. A further complication would be caused by arguments in which the last step consists of the application of the incriminated rule. (JBA) would then count the whole argument as circular. I do not take

This seems to be the right conclusion, for example, about arguments that proceed purely by conjunction elimination. At this point, it is up to someone objecting to my proposal to provide a case of an argument which is not circular, but must be counted as such by my proposal because of some closure principle for doxastic justification. But the two claims will be at least in tension. If one thinks that it is impossible, for someone who accepts the relevant entailment, to have justified belief in the premisses of an argument without having justified belief in the conclusion, one should find the use of that argument by such a person always idle, and it will be harder to argue that the argument is not circular for that person.

   Similar considerations also show why two arguments whose premisses are logically equivalent can differ with respect to their circularity (*contra*, as we noted, Iacona and Marconi 2005). Consider, for example, the following two argument forms:[26]

(A) $\dfrac{\neg P \lor \neg Q}{P \supset \neg Q}$

(B) $\dfrac{P \supset \neg Q}{P \supset \neg Q}$

I think our intuitive judgement is that arguments of form (A) can fail to be circular, while arguments of form (B) cannot. More sophisticated examples of equivalence will, of course, make the claim even more plausible. The general point is that there are logical equivalences which are not trivial, so that it is possible to believe one of the equivalent propositions without believing the other. If this is so, the argument from one proposition to the other can be informative, and intuitively non-circular; but the argument from the proposition to itself cannot. This observation naturally leads to a question: How are we individuating premisses? On some accounts of propositions, logically equivalent propositions are just the same proposition. If that were so, we could not of course draw a distinction between (A) and (B). But on that account, all necessary propositions will be the same. Clearly, epistemology and philosophy of mind need a more fine-grained notion of

---

this to be a problem. Assuming the relevant closure principle for doxastic justification, the last step would be anyway redundant.

   [26] I use ' $\supset$ ' to express the material conditional, so that there is no doubt about the logical equivalence of the premisses in A and B.

proposition. Switching from propositions to sentences improves on the preceding suggestion, I think, but there is a risk however of falling into the opposite defect, being too discriminating. Consider the argument 'the cake was eaten by Tom; therefore, Tom ate the cake'. It seems this should be counted as an argument of the form '*p*, therefore *p*'. A correct account of propositional attitudes will need a notion of proposition which discriminates between (some) logically equivalent propositions, but does not discriminate in the other case. I have no specific suggestion to make on what the right notion is, but I do not think the problem is particularly pressing here. Unlike the traditional definition, (JBA) does not make use of the notion of identity between conclusion and premiss.

3.3 Explanatory power and a knowledge account

So far I have argued (JBA) is extensionally correct. My hope, however, is that (JBA) proves not only extensionally correct but also, to some extent at least, illuminating. It contains implicitly an explanation of what is bad about circular arguments: through them you cannot acquire a justified belief in their conclusion, assuming that you cannot acquire a justified belief by inferring from unjustified premisses. In this sense, circular arguments constitute a bad form of reasoning: they do not produce justified beliefs. For all the definition says, a circular argument could still have some use; for example, supposing we already have a justified belief in the conclusion, you might be able to use one such argument to further improve your epistemic position with respect to it. I will be neutral here with respect to the latter issue. It seems, however, that the defect we highlighted is serious enough; whenever the conclusion is actually doubted or is believed without justification, we cannot improve on that situation by making use of the argument.

Moreover, as anticipated at the beginning of section 2, the account can be used to explain some phenomena related to the use of arguments in a dialectical situation. In a dialectical situation, we need to consider at least two different evidential states:[27] the evidential state of the proponent of the argument and the evidential state of the audience (henceforth, for the sake of simplicity, I will talk of 'the proponent' and 'the audience' when referring to their evidential states). We can therefore easily define four possible situations in terms of (JBA). The

---

[27] At this point, it is of course relevant which option one takes with respect to the nature of evidential states. I do not have the space to explore the different consequences of different theories here, so the discussion will still remain schematic, leaving open all the options, including the one of making circularity relative to subjects at a time (as in (JSA); see n. 11).

argument can be circular relative to: (a) the proponent and the audience; (b) neither of the two; (c) the former but not the latter; (d) the latter but not the former. If the proponent and the audience happen to be in the same evidential state, either (a) or (b) must obtain. Even if the evidential states differ, of course the difference might not matter to the circularity of the argument. But the cases in which it does matter create interesting complexities. Consider the (d) case, where the argument is circular relative to the audience but not relative to the proponent. Sometimes defenders of pragmatic or dialectical accounts of question-begging use this sort of situation to argue against epistemic accounts of circularity. For example, Hazlett (2006) writes:

> Consider this story:
> McCoy knows that the defendant is guilty because reliable Stoolie saw the defendant commit the murder, and Stoolie told McCoy about it. But Stoolie isn't going to testify out of fear. So McCoy is forced to argue in court: 'The defendant was at the scene of the crime. For there was only room for one person to hide behind that dumpster. And no one else could have been there, because the defendant was there taking up all the space.'
>
> McCoy is epistemically fine. He believes that the defendant is guilty, and this belief is warranted given his evidence — the known reliability of Stoolie, say, plus Stoolie's telling McCoy that the defendant did it. McCoy's believing that the defendant is guilty is unassailable, from the epistemic point of view — it would be a mistake not to believe, given his evidence. But his argument begs the question. Therefore, begging the question is not an epistemic vice, in the sense that to beg the question is to actually proceed in an epistemically vicious way. (Hazlett 2006, p. 346)

The view defended here has no trouble in accounting for this case. The argument is surely circular with respect to the evidence of the audience (in fact, it seems to me it is circular with respect to any evidence whatsoever, but leave that aside). They cannot accept one of the premisses unless they already accept the conclusion; therefore, it would be a mistake, epistemically, for the audience to be convinced by the argument. They would form an unjustified belief.

Before considering Sorensen's view that arguments of the form '*p*, therefore *p*' need not be circular, I would like to compare the account defended here with a very similar one, which, however, uses the notion of knowledge rather than that of justification. Consider the following Knowledge Account of circularity:

(KA)   An argument *A* is circular relative to an evidential state E iff in order for a subject S in E to know all of *A*'s premisses, it is necessary that S knows *A*'s conclusion

(KA) has many of the good features of (JBA). It does not entail that all valid arguments are circular, because knowledge, like doxastic justification, entails belief, and hence you can know the premises of a valid argument without knowing its conclusion, since you fail to believe it. (KA) classifies as circular all arguments in which the conclusion is among the premises; and I take this to be a satisfactory result. I think (KA) and (JBA) are extensionally equivalent and in some sense they are in the same spirit; most of the arguments I have given so far also support (KA), and in fact I would be satisfied if the reader accepted (KA). But I think (JBA) has more explanatory power. Does (KA) explain what is bad about circular arguments? (KA), by itself, does not explain why you cannot use circular arguments to acquire justified belief in their conclusions, since it does not say that justified belief in the conclusion is necessary for justified belief in the premises. One might think that the situation is symmetric, for (JBA) would not explain by itself why you cannot acquire knowledge of the conclusion through a circular argument. But, crucially, it is doubtful that (KA) can explain that either. (KA) guarantees that, for a circular argument, if you lack knowledge of the conclusion you also lack knowledge of the premises. But this explains why you cannot acquire knowledge of the conclusion by going through the argument only on the assumption that you cannot acquire knowledge by inferring from unknown premisses. However, this assumption is very contentious. Several theorists think that false premises can figure in an inference without preventing it from producing knowledge,[28] and Coffman (2008) presents an example in which it is plausible to think that one gains knowledge by using a 'Gettierized' belief (a justified and true belief falling short of knowledge) as a premiss (see Coffman 2008, p. 191). The assumption I made use of — that it is not possible to acquire justified beliefs by inferring from unjustified ones — is not, I take it, similarly contentious.

4. Sorensen on '*p*, therefore *p*'

As I indicated at the outset, I will now consider the objection that arguments in which the conclusion is included among the premises should not be automatically counted as circular.

---

[28] See, for example, Unger 1968, Hawthorne 2004 (p. 57), Warfield 2005, Klein 2008, and Coffman 2008.

Here are some alleged counterexamples offered by Sorensen (1991):

(C1) Some arguments are written in black ink

———————————————————————

Some arguments are written in black ink

(C2) Some arguments are composed solely of existential generalizations

———————————————————————

Some arguments are composed solely of existential generalizations

(C3) An argument has been propounded by someone at some time

———————————————————————

An argument has been propounded by someone at some time

(C4) There are at least two tokens of an eleven word sentence

———————————————————————

There are at least two tokens of an eleven word sentence

The examples all turn on a special feature of the arguments: being aware of the fact that the argument is proposed constitutes a justification for its conclusion. This observation will prove to be the key as to what goes wrong in Sorensen's argument, but some distinctions are needed to see exactly where the problem lies.

Sorensen claims of each of (C1)–(C4) (and similar examples) that they are not only sound but also rationally persuasive — 'A person who doubts the conclusion comes to know it by considering the argument' (Sorensen 1991, p. 248).[29] Given the specification Sorensen offers of 'rationally persuasive', what he says is correct. However, this sense of 'rationally persuasive', I will argue, is not a relevant one. An argument can be 'rationally persuasive' in that sense and still circular. Here is an alternative understanding of the expression: you are rationally persuaded by an argument if, and only if, accepting the content of the premises provides you with a reason to accept the content of the conclusion. Note how this rules out each of the four examples. While in (C1), (C3), and (C4) the content of the premiss is clearly irrelevant, in (C2) it is not, but what constitutes a reason to accept a conclusion is not accepting the content of the premiss, but rather accepting that a premiss with that content is used to support a conclusion with the same content.

But why, Sorensen could ask, should one use my sense of 'being rationally persuaded by an argument'? He admits that, in the sense in which arguments such as (C1)–(C4) are rationally persuasive, things

———

[29] Sorensen is referring to (C1) in particular, but the claim obviously applies throughout.

which are not arguments at all can be rationally persuasive; for example, material objects, such as the desk in front of me, can be rationally persuasive (I can be persuaded by it that there is a desk in front of me). He distinguishes correspondingly 'ontic' reasons from 'propositional' reasons. Now this move is itself controversial, for some — most prominently Williamson (2000) — have argued that all evidence must be propositional in form. If this were the case, there would be no ontic reasons, and, *a fortiori*, arguments such as (C1)–(C4) would not constitute ontic reasons. If one accepts such a view, the persuasiveness of (C1)–(C4) is naturally accounted for as deriving from some form of implicit reasoning that stems from the belief that one has been presented with the argument; for example, in being presented with (C1), I come to know that (C1) is an argument written in black ink. From this, I derive the conclusion that some arguments are written in black ink. I think this is the right thing to say about the examples, independently of one's view about the nature of evidence, on which I remain neutral.

A further reason not to classify (C1)–(C4) as rationally persuasive arguments is that, as Sorensen notes, arguments which have obviously false, unjustified premisses — the contents of which obviously bear no logical relation to the content of the conclusion — can be persuasive in the same way as (C1)–(C4). Here is an example provided by Sorensen:

The moon is edible

Some arguments are written in black ink

And here is another:

Fried chicken is the best food for a child's health

The proponent of this argument speaks English

Do these examples show that we were wrong in thinking that having true, justified premisses, which support the conclusion either deductively or inductively, were good features of arguments? In particular, were we wrong in thinking that having the premisses support the conclusion is a necessary condition for an argument to be rationally persuasive? Should we accept arguments where not only are these conditions not satisfied, but we know they are not satisfied? To answer all of these questions affirmatively seems absurd. The case of arguments of the form '*p*, therefore *p*' (where *p*, moreover, is a true proposition) disguises these unwelcome consequences of Sorensen's

understanding of rational persuasiveness. But once one has it in mind, that seems a good reason to reject the account, provided we have alternative ways of explaining why being confronted with arguments of this kind can produce knowledge of their conclusion. But of course, we do have a plausible alternative explanation; we gain knowledge in these cases by reasoning *about* the arguments, not through them.

A further challenge to my definition that one can derive from Sorensen is the following: Sorensen (1999) argues that there are arguments with no premises. By (JBA), these arguments could not be circular, since nothing is necessary to have justified belief in the premises. Moreover, if, as I claimed, you are rationally persuaded by an argument if, and only if, accepting the content of the premises is for you a reason to accept the content of the conclusion, it seems these arguments could not be rationally persuasive. Yet some of them are rationally persuasive — for example, when they have a logical truth as a conclusion.

We might think it is a terminological matter whether we want to classify alleged arguments with no premises as real arguments. Surely not every assertion is an argument; and yet it is not clear what exactly is needed to make an assertion into an argument with no premises. Nevertheless, I am prepared to accept that there are some cases like that. And I think that what I say about rational persuasiveness applies there as well. We can think of arguments without premises as arguments from the empty set of premises (as Sorensen suggests himself). Then they will be rationally persuasive when you can reason from the empty set to the conclusion — that is, exactly when they are logical truths. (JBA) admittedly will not classify any such argument as circular. But, when the conclusion is a logical truth, that seems to be the right result. When the conclusion is not a logical truth, the argument will be invalid.

5. Conclusion

I have proposed an account of circularity which has two crucial features: it employs the notion of doxastic justification, and it takes circularity to be relative to an evidential state. An argument will be circular relative to an evidential state if and only if having doxastic justification for the conclusion will be necessary, for a subject in that evidential state, to have doxastic justification for the premises.

This account seems to shed new light on the old problem of characterizing circularity, or begging the question. It avoids the two most

conspicuous problems which accounts of this phenomenon must address: being too narrow, thus leaving out cases in which the conclusion does not appear among the premises; and being too wide, thereby making all valid arguments circular.[30]

References

Audi, Robert 1994: 'Dispositional Beliefs and Dispositions to Believe'. *Noûs*, 28, pp. 419–34.

Biro, John 1977: 'Rescuing "Begging the Question"'. *Metaphilosophy*, 8, pp. 257–71.

Bogdan, Radu J. (ed.) 1986: *Belief: Form, Content and Function*. Oxford: Oxford University Press.

Boghossian, Paul 2011: 'Williamson on the *A Priori* and the Analytic'. *Philosophy and Phenomenological Research*, 82, pp. 488–97.

Brueckner, Anthony 1994: 'The Structure of the Sceptical Argument'. *Philosophy and Phenomenological Research*, 54, pp. 827–35.

Copi, Irving M. 1961: *Introduction to Logic*. New York: Macmillan Company.

Coffman, E. J. 2008: 'Warrant without Truth?' *Synthese*, 162, pp. 173–94.

Conee, Earl and Richard Feldman 2004: *Evidentialism*. Oxford: Oxford University Press.

Davies, Martin 2009: 'Two Purposes of Arguing and Two Epistemic Projects'. In Ravenscroft 2009, pp. 337–83.

Dretske, Fred 1970: 'Epistemic Operators'. *Journal of Philosophy*, 67, pp. 1007–23.

Dummett, Michael 1973: *The Justification of Deduction*. London: Oxford University Press.

Elgin, Catherine Z. 1988: 'The Epistemic Efficacy of Stupidity'. *Synthese*, 74, pp. 297–311.

Evnine, Simon 1999: 'Believing Conjunctions'. *Synthese*, 118, pp. 201–27.

Firth, Roderick 1978: 'Are Epistemic Concepts Reducible to Ethical Concepts?' In Goldman and Kim 1978, pp. 215–29.

Foley, Richard 1992: 'Being Knowingly Incoherent'. *Noûs*, 26, pp. 181–203.

Goldman, Alvin I. and Jaegwon Kim (eds) 1978: *Values and Morals*. Dordrecht: Reidel.

Harman, Gilbert 1973: *Thought*. Princeton, NJ: Princeton University Press.

Hawthorne, John 2004: *Knowledge and Lotteries*. Oxford: Oxford University Press.

Hazlett, Allan 2006: 'Epistemic Conceptions of Begging the Question'. *Erkenntnis*, 65, pp. 343–63.

Hoffman, Robert 1971: 'On Begging the Question at Any Time'. *Analysis*, 32, p. 51.

Iacona, Andrea and Diego Marconi 2005: 'Petitio Principii: What's Wrong?' *Facta Philosophica*, 7, pp. 19–34.

Jackson, Frank 1984: 'Petitio and the Purpose of Arguing'. *Pacific Philosophical Quarterly*, 65, pp. 26–36, Reprinted in Jackson 1987, pp. 100–14 (page references in the paper are to this reprint).

——1987: *Conditionals*. Oxford: Basil Blackwell.

Klein, Peter 2008: 'Useful False Beliefs'. In Smith 2008, pp. 25–62.

Kyburg, Henry E. 1997: 'The Rule of Adjunction and Reasonable Inference'. *Journal of Philosophy*, 94, pp. 109–25.

Lycan, William 1986: 'Tacit Belief'. In Bogdan 1986, pp. 61–82.

Nuccetelli, S. (ed.) 2003: *New Essays on Semantic Externalism, Skepticism and Self-Knowledge*. Bradford, MA: MIT Press.

Pryor, Jim 2004: 'What's Wrong with Moore's Argument?' *Philosophical Issues*, 14, pp. 349–78.

Ravenscroft, Ian (ed.) 2009: *Minds, Ethics and Conditionals: Themes from the Philosophy of Frank Jackson*. Oxford: Oxford University Press.

Sanford, David 1972: 'Begging the Question'. *Analysis*, 32, pp. 197–9.

——1988: 'Begging the Question as Involving Actual Belief and Inconceivable Without it'. *Metaphilosophy*, 19, pp. 32–7.

Sinnott-Armstrong, Walter 1999: 'Begging the Question'. *Australasian Journal of Philosophy*, 77, pp. 174–91.

Sorensen, Roy 1991: '"P, therefore, P" without Circularity'. *Journal of Philosophy*, 88, pp. 245–66.

——1999: 'An Empathic Theory of Circularity'. *Australasian Journal of Philosophy*, 77, pp. 498–509.

Smith, Quentin 2008: *Epistemology: New Essays*. Oxford: Oxford University Press.

Sutton, Jonathan 2007: *Without Justification.* Cambridge, MA: MIT Press.

Unger, Peter 1968: 'An Analysis of Factual Knowledge'. *Journal of Philosophy*, 65, pp. 157–70.

Walton, Douglas 1994: 'Begging the Question as a Pragmatic Fallacy'. *Synthese*, 100, pp. 95–131.

Warfield, Ted 2005: 'Knowledge from Falsehood'. *Philosophical Perspectives*, 19, pp. 405–16.

Williamson, Timothy 2000: *Knowledge and its Limits.* Oxford: Oxford University Press.

—— 2007: *The Philosophy of Philosophy.* Oxford: Blackwell Publishing.

—— 2011: 'Reply to Boghossian'. *Philosophy and Phenomenological Research*, 82, pp. 498–506.

Wright, Crispin 2000: 'Cogency and Question-Begging: Some Reflections on McKinsey's Paradox and Putnam's Proof'. *Philosophical Issues*, 10, pp. 140–63.

—— 2003: 'Some Reflections on the Acquisition of Warrant by Inference'. *In Nuccetelli 2003*, pp. 57–77.

—— 2004: 'Warrant For Nothing (And Foundations For Free?)'. *Aristotelian Society Supplementary Volume*, 78, pp. 167–212.