

## **A Neglected Way of Begging the Question**

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### **1.**

Some arguments beg the question. Question begging arguments are bad arguments and cannot increase the level of justification one has for the conclusion. Question begging arguments, unlike some other bad arguments, need not suffer the problem of having unjustified premises. Even if the premises are justified and even if the premises entail the conclusion, a question begging argument fails to have any force when it comes to increasing one's justification for the conclusion. For example, many regard Moore's famous response to skepticism as a question begging argument:

1. I have hands ... via perception
2. If I have hands, then I am not a handless brain in a vat
3. I am not a handless brain in a vat ... from 1 and 2, modus ponens

What about this piece of reasoning makes many feel uneasy? Non-skeptics will agree that Moore is justified in believing (1). They will also agree that he is justified in believing (2). In fact, under normal circumstances there will be no dispute that Moore knows the premises. The premises entail the conclusion and Moore knows this, too. In other words, the argument is sound, and is known to be sound. Yet, many feel the argument begs the question. Why?

The intuitive reaction to an argument like Moore's is that it 'presupposes' the conclusion. After all, someone who is in doubt about (3), the conclusion, cannot take the argument seriously. This gives us a good intuitive gloss on what it is for an argument to beg the question: it presupposes the conclusion in a way that renders the argument fallacious. The argument isn't able to remove any doubts about the conclusion; it is usually unpersuasive and dialectically ineffective as well. Though this is an intuitive way to understand begging the question, in epistemology we need a more precise understanding. What does it mean to say that an argument 'presupposes' the conclusion?

A common diagnosis of Moore's argument is that the justification for the first premise depends on justification for the conclusion; one's justification for the conclusion is among the things that makes one have justification for the first premise. It is very plausible that if an argument displays this kind of circular dependence of justification for the premises on justification for the conclusion, it begs the question (Wright 2002; Davies 2004; Pryor 2004).<sup>1</sup> So perhaps an argument presupposes the conclusion just in case it displays circularity. And Moore's argument begs the question because it is circular in this way.

Accepting the link between begging the question and circularity, some defend the Moorean move by holding that it is not circular because justification for the first premise does not depend on justification for the conclusion (e.g Pryor 2004). Many theories of justification in fact are structured so that one can have justification for the first premise without depending on justification for the conclusion (e.g. various externalist views about justification such as reliabilism about perception). One might then feel free to argue that there is nothing wrong with Moore's argument.

It is sound, the premises are justified, and it is not circular: there is no problem of dependence on justification for the conclusion. The appearance of question begging is an illusion.

But this defense presumes that dependence on justification for the conclusion — i.e., circularity — is the only way in which an argument can display the feature we intuitively characterize as presupposing the conclusion, and hence begging the question. And if this presumption is correct, what would be wrong with bootstrapping of the following kind? Kofi wonders whether his color perception is reliable; he proceeds by checking the colors of various objects and comparing them to the verdicts delivered by his color perception; he checks the colors of objects by looking at them, and he checks the verdicts of his perceptual faculties by introspection while he is looking at the object; unsurprisingly, he concludes that he gets it right every time. He goes on to conclude that his color perception is reliable. This looks like a clear instance of question begging: it presupposes the conclusion. If dependence on justification for the conclusion is necessary for question begging, then a Moorean cannot

say that Kofi's reasoning is question begging because such a view, by definition, holds that justification of Kofi's perceptual beliefs does *not* depend on the justification for believing in the reliability of his color vision (Cohen 2002; Vogel 2000).

Now, suppose it is possible to presuppose the conclusion without circularity. *If* that is possible, then it is possible to beg the question without circularity, without depending on the justification for the conclusion. And if so, the objection to the Moorean position just presented is too quick; the bootstrapping procedure might beg the question in some way other than dependence on the conclusion. But it would be equally too quick to hold that there is nothing wrong with Moore's argument on the grounds that it is not circular, that the justification for the premise does not depend on the justification for its conclusion. The argument might presuppose the conclusion, and hence beg the question, in some other way.

The case discussed in the following section shows that some arguments presuppose the conclusion in the intuitive sense, and hence

beg the question, yet are not circular. The conclusion is not one of the premises, nor does the justification for the premises rest on justification for the conclusion. The case is structurally very similar to Kofi's: since Kofi's procedure so clearly begs the question, so does the case discussed in what follows. But, crucially, the case will not display dependence of the premises on the conclusion. Thus, Mooreans and their opponents are barking up the wrong tree. The dispute between the Mooreans and their opponents requires closer scrutiny.

**2.**

Consider Boutros. Boutros wants to check whether all acids corrode iron. There are two facts he believes about acids and liquids that corrode iron. First, all and only acids turn litmus paper red. Second, if a liquid turns litmus paper red, it corrodes iron. These two facts entail that all acids corrode iron. So Boutros believes that all acids corrode iron. But Boutros wants to double-check. This is what he does: he takes a liquid and exposes a piece of litmus paper to it. If it turns red, he concludes, by appeal to the first fact, that it is an acid. He then concludes, by appeal to the second fact,

that it corrodes iron. He has a confirming instance of an acid that corrodes iron. He repeats this with a large and random collection of liquids and since all liquids that turn out to be acids also corrode iron, Boutros concludes that indeed all acids corrode iron. Surely, this presupposes the conclusion. This cannot be a cogent way for Boutros to buttress his belief that all acids corrode iron. As with Moore's argument above, nobody who is in doubt about whether all acids corrode can take Boutros' argument seriously. It begs the question.

But even though this is an instance of question begging, this need not be an instance of circularity as the following fleshing-out of the case will show. The details concern two aspects of the case: a) how Boutros gains justification for believing the two facts he relies on in his procedure and b) how Boutros's reasoning proceeds.

Suppose Boutros starts out remembering two things from high school chemistry. The first fact Boutros remembers is

**RA (for Red Acid)** if a litmus paper turns red when exposed to a liquid, the liquid is an acid.

The second fact is

**RC (for Red Corrodes)** if a litmus paper turns red when exposed to a liquid, the liquid corrodes iron.

He remembers only these two things about chemistry, and he remembers them because a renowned chemist highlighted them in a lecture he gave in his town commemorating his Nobel Prize in chemistry. Boutros believes RA and RC based on expert testimony and hence he is justified in believing them. Suppose he gets hold of a piece of litmus paper. He throws it into a liquid near him and the paper turns red. He concludes, based on this observation and RA, that the liquid is acid. He is clearly justified in believing this. He also concludes, based on his observation and RC, that the liquid corrodes iron. He is clearly justified in believing this as well. He is therefore justified in believing that the liquid is both an acid and corrosive to iron.

Boutros wonders whether all acids corrode iron. He would like to proceed in a rigorous fashion but he realizes he has a problem. He only has a sufficiency test for acids. For all the scant chemical knowledge he has there could be many acids that do not turn litmus paper red. If there were any such acids, he would not know how to find them, and as far as



he knows they might be acids that fail to corrode iron. Luckily, his neighbor is a chemical engineer. The neighbor tells Boutros that you can test for acidity by throwing some baking soda into the liquid. If it does not generate bubbles, the liquid is not an acid. Boutros is now justified in believing a necessary test for acidity:

**AB (for Acid Bubbles)** a liquid is acid only if bubbles are generated when baking soda is added.

Armed with AB, Boutros formulates his plan. He will proceed in two stages. He will gather a very large sample of liquids from all over the world making sure the liquids display a very wide variety. In the first stage, he will add some baking soda to every liquid and at the same time conduct the litmus test. If it turns out that a liquid in his sample bubbles up if and only if the litmus paper turns red, he will have justification for believing

**RA+** a litmus paper turns red when exposed to a liquid if and only if the liquid is an acid.

If the data do not support RA+, i.e. if there are many liquids that do not turn litmus paper red but nevertheless bubble up when put in contact

with baking soda, then he will abandon his plan. If the data do support RA+, he will proceed to the second stage. In the second stage he will check whether all acids in his collection corrode iron. It certainly looks like a good plan.

Boutros now begins stage one. He conducts the litmus test on every liquid and adds some baking soda to every liquid as well. After going through his collection of liquids, he notes that all the liquids that turn the litmus paper red also generate bubbles when baking soda is added, and no liquids that do not turn the litmus paper red generate bubbles when baking soda is added. He concludes RA+ is true.

Boutros is clearly justified in believing RA+. RA+ and RC are the two facts Boutros believes in the original simplified description of the case. Armed with this justified belief, he proceeds to the second stage to answer whether

**AC (for Acids Corrode)** all acids corrode iron.

This is what he does in order to check whether every acid in his collection corrodes iron. He systematically goes through the liquids. He throws the

litmus paper into a given liquid and observes how it changes. If it turns red, he concludes that it is an acid on the grounds that it is entailed by RA+ together with the fact that the litmus paper turned red. He also concludes that the liquid corrodes iron on the grounds that it is entailed by RC together with the fact that the litmus paper turned red. So he concludes that the liquid is both an acid and corrosive to iron. If the litmus paper does not turn red, he concludes based on RA+ that it is not an acid. After going through his collection of liquids, he has amassed a very large number of cases in which a liquid turned out to be an acid. Let us say the number was 1500. In all these 1500 cases of examined acids, the liquids turned out to corrode iron. There are no cases in which a liquid turned out to be an acid but not corrosive to iron. So he concludes that all acids corrode iron.

Is this a good way of researching whether all acids corrode iron?

Hardly. In a nutshell, what Boutros does is conclude that a given liquid is acid on the grounds that the litmus paper turned red, and conclude that it corrodes iron on the very same grounds. It is obvious that the procedure

won't allow Boutros to reach any other conclusion than that all acids corrode iron. Certainly no one who doubts the conclusion could rationally proceed like Boutros. Boutros's *procedure* presupposes the conclusion but does this mean that Boutros is depending on an antecedent justification for the conclusion? That is, is Boutros proceeding in a way that requires him to be justified in believing the conclusion antecedently to gaining justification for some or all of his premises? Is this an instance of circularity? The answer is no.

It will be assumed that after stage one gives Boutros justification for RA+, he is already justified in believing his overall conclusion AC, that all acids corrode iron, since Boutros can see that RA+ and RC together entail AC.<sup>2</sup> The problem is that once he has justification for RA+ (and hence AC), his procedure in stage two does nothing to *strengthen* his justification for AC. He never throws a piece of iron into a liquid even once, nor does he do anything that remotely resembles anything we would consider testing whether acids really do corrode iron. How could this be a way of corroborating that acids corrode iron? How could this *improve* his

justification for believing AC? Unlike other things he could do, once he gets to have justification for RC and RA+, the further “research” into the correlation between acidity and corrosiveness does nothing to strengthen Boutros’s justification for AC: it begs the question.

To be clear, there are ways in which Boutros could proceed that would not beg the question. For instance, he could modify the second stage just slightly: whenever a liquid is revealed to be an acid, throw in a piece of iron and see what happens to it. If this modified procedure results in all acids in the collection corroding iron, then this *would* strengthen his justification for AC. He would have corroborated his already justified belief in a non-question begging way. Thus, the question-begging character of Boutros’s actual procedure *cannot* be explained by his having justification for the conclusion AC before commencing the second stage. Though the reasoning begs the question, it is *not* circular.

To see this, take a closer look at Boutros’s reasoning. Put schematically, the two stages proceed as follows.

Recall:

**RA** if a litmus paper turns red when exposed to a liquid, the liquid is an acid

**AB** a liquid is acid only if bubbles are generated when baking soda is added

**RC** if a litmus paper turns red when exposed to a liquid, the liquid corrodes iron

**RA+** a litmus paper turns red when exposed to a liquid if and only if the liquid is an acid

**AC** all acids corrode iron (i.e. for any  $x$ , if  $x$  is an acid,  $x$  corrodes iron)

First stage:

A1. RA ... *premise*

A2. AB ... *premise*

A3. liquid no 1. turns litmus paper red ... *observation*

A4. liquid no 1. bubbles up when baking soda is added ...  
*observation*

A5. liquid no 2. does not affect litmus paper ... *observation*

A6. liquid no 2. does not bubble up when baking soda is added  
... *observation*

...

An. every examined liquid is such that it turned the litmus paper red if and only if it generated bubbles when baking soda was added.

An+1. RA+ ... An, RA, AB, induction

Second stage:

B1. liquid no 1. turns litmus paper red ... *observation*

B2. liquid no 1. is acid ... *RA+, B1*

B3. liquid no 1. corrodes iron ... *RC, B1*

B4. liquid no 2. does not affect litmus paper ... *observation*

B5. liquid no 2. is not acid ... *RA+, B4*

B6. liquid no 3. turns litmus paper red ... *observation*

B7. liquid no 3. is acid ... *RA+, B6*

B8. liquid no 3. corrodes iron ... *RC, B6*

...

Bn. all the liquids that turned out to be acid corrode iron ... *B2,*

*B3, B7, B8...*

$B_{n+1}$ . AC ...  $B_n$ ,  $RA^+$ , induction

As noted, once Boutros has arrived at  $A_{n+1}$  he has justification for AC since  $RA^+$  and RC entail AC, and it is granted that Boutros recognizes this entailment. The trouble is that the second stage does nothing to increase the level of justification Boutros has for AC. The second stage is question begging.

Recall that merely having justification for AC before commencing the second stage cannot be the problem. Might it be that Boutros's procedure does not give him justification for  $B_n$ ? That is unlikely. It is part of the story above that before Boutros even wondered whether AC might be true, he threw a piece of litmus paper into a liquid and came to believe that it is both an acid and corrosive to iron. There is no question that this belief was justified. But what he does in the second stage to come to believe that a given liquid is both an acid and corrosive to iron is exactly the same thing. He merely repeats this many time over with different liquids to get to  $B_n$ . If evidence gathering for purposes of inductive



generalization is at all possible, there better not be anything wrong with pulling the repetitions together to gain justification for a track record belief like Bn.

Now to the main point. The problem in the second stage is *not* circularity, for no premise's justification depends on Boutros having antecedent justification for the conclusion AC. Boutros's premises are all justified and his "track record" belief Bn is also justified. But justification for these beliefs does not *depend* on Boutros possessing antecedent justification for his conclusion. This is easy to see.

The premises of the second stage are RA+, RC and the observational B1, B4, etc. Justification for B1, B4, etc. provided by observation does not depend on justification for the conclusion AC. Justification for RC is provided for by the Nobel Laureate's testimony and hence does not depend on justification for AC. What about the justification for RA+? There is no doubt that stage one does justify Boutros in believing RA+. As inspection of the first stage shows, justification for RA+ depends on justification for RA and AB, which are provided by

testimony, and the ability of observation to provide justification respectively. Moreover, RA and AB are consistent with the denial of AC. It is only after going through stage 1 that Boutros gains justification for RA+ and hence for AC. So justification for RA+ does not depend on justification for AC. In short, the justification needed for the second stage depends on justification for RA, RC, AB and the ability of observation to provide justification. None of these depend on the justification for AC. Thus, the second stage is an example of a question begging reasoning without dependence on justification for the conclusion. There is no circularity.

This result fits nicely with the intuitive complaint about Boutros's reasoning. The complaint is not that there is something wrong with the way he gains justification for his premises. Rather, the complaint is that there is something wrong with his *procedure*. His procedure presupposes the AC conclusion: he is not doing anything that intuitively counts as checking whether a given acid corrodes iron. This is not the place to hazard an explication of just what about the procedure generates the problem.<sup>3</sup> The point is simply that not all cases of question begging are

cases of dependence of justification of the premises on justification for the conclusion. Not all question-begging reasoning is circular.

Once the possibility of non-circular question begging is acknowledged, it is not hard to find other cases. Here is one. Dag buys a scale from a reputable company that advertises the particular model as being accurate 90% of time. (Assume that 90% reliability is high enough confer justification when he uses the scale; the number is not important.) Dag uses it for a while and it seems to work fine. One day Dag embarks on an important project where it's vital that he weigh things accurately. He decides to test whether his scale is at least 99% reliable or whether he needs to go out and buy another one. Here's how he proceeds. He takes a random selection of 1,000 items, puts each one on the scale in turn, and notes the scale's readout. He reasons: on trial  $n$ , a) the object weighs  $x$  pounds, and b) the scale's readout says it weighs  $x$  pounds, so my scale got that one right. Dag's justification for believing a) is that he's using a scale that he knows to be at least 90% reliable; his justification for b) is simple observation. After running through all 1,000 objects, can Dag

reason: “Well the scale got the correct reading on 1,000 of 1,000 trials.

Therefore I have increased my justification for believing that the scale is at least 99% reliable”?

The answer is clearly no. Intuitively the scale argument begs the question. Dag relies on the scale's reliability to prove the scale's reliability. What could be more question begging than that? Clearly the scale argument begs the question. But is it also *circular*? A closer look reveals that it is not. Although Dag's procedure depends on his having justification that the scale is reliable — at least 90% reliable — and Dag wouldn't be justified in believing a) and b) without that justification, Dag's procedure does *not* depend on having prior justification to believe the conclusion that the scale is 99% reliable. While he does presuppose as a premise that the scale is 90%, he does not presuppose as a *premise* that the scale is 99% reliable. Dag's *procedure* presupposes the conclusion: using that procedure he can reach no other conclusion. Hence the problem with Dag's scale reasoning is not circularity. This is another case of begging the question without circularity.

3.

If there are question-begging arguments that are not circular, then diagnosing the Moorean response to skepticism is not a straightforward matter of circularity. Mooreans cannot necessarily dodge the charge that they beg the question merely by offering a theory in which there is no dependence of premises on the conclusion. But it would be equally too quick to dismiss the Moorean response on the grounds that it cannot locate the dependence in the kind of bootstrapping described in section 1. In fact, the problem with bootstrapping seems to be very similar to Boutros's — there is intuitively something wrong with Kofi's procedure as well (see Kung & Yamada 2009). In any case, a much better understanding of question begging is needed if we are to make headway on some important epistemological questions.<sup>4</sup>

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<sup>1</sup> Pryor (2004) distinguishes several relations that one might mean by 'dependence.' What is meant by dependence most closely resembles what he means by Type 5 dependence.

<sup>2</sup> The argument is strongest if it is conceded that after stage one Boutros is already justified in believing AC. However the case could be tweaked to reverse this concession. It could be stipulated that Boutros does not recognize the entailment. Or the connection between premises and AC could be made less obvious, to make it more plausible that Boutros fails to recognize the entailment. If there is no justification for AC after stage one, there is no possibility of dependence.

<sup>3</sup> See Kung & Yamada (2008) for discussion.

<sup>4</sup> Thanks to Yuval Avnur and Stew Cohen for very illuminating discussion, and to an anonymous referee for helpful comments.