The Sceptic’s Tools: Circularity and Infinite Regress

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Abstract

Important sceptical arguments by Sextus Empiricus, Hume and Boghossian (concerning disputes, induction, and relativism respectively) are based on circularities and infinite regresses. Yet, philosophers’ practice does not keep circularities and infinite regresses clearly apart. In this metaphilosophical paper I show how circularity and infinite regress arguments can be made explicit, and shed light on two powerful tools of the sceptic.

Keywords: scepticism, circularity, infinite regress, schema

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1. Three cases

Consider the following three well-known problems.

Problem of the Criterion. In order to decide a dispute, you need to obtain an agreed-upon criterion by means of which you will decide the dispute. In order to obtain an agreed-upon criterion, you need to decide a dispute about the criterion. Hence, there is a circularity or infinite regress, and it is impossible to decide any dispute. Here is part of Sextus Empiricus’ initial text:

[…] if they wish to decide about the criterion by means of a criterion we force them into infinite regress. Further, since proof requires a criterion that has been proved, while the criterion has need of what has been determined to be a proof, they land in circularity (Outlines, Book 2, §4, 20)

Also compare Chisholm’s formulations from different pages:

[…] And so we are caught in a circle (1973: 62)

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If we continue in this way, of course, we are led to an infinite regress. (ibid: 64)

**Problem of Induction.** In order to justify an inductive inference, you have to rely on the assumption that the future resembles the past. In order to rely on the assumption that the future resembles the past, you have to justify this assumption inductively. Hence, there is a circularity or infinite regress, and it is impossible to justify any inductive inference. Compare part of Hume’s initial words:¹

[…] all our experimental conclusions proceed upon the supposition that the future will be conformable to the past. To endeavour, therefore, the proof of this last supposition by probable arguments, or arguments regarding existence, must be evidently going in a circle, and taking that for granted, which is the very point in question. (*Enquiry*, §4; cf. *Treatise*, Book 1, ch. 3, §6)

**Problem of Relativism.** In order to be entitled to your epistemic system, you have to justify its rules (such as ‘if you believe p and believe q if p, then it is permitted to believe q, but not permitted to believe not-q’). In order to justify epistemic rules, you have to be entitled to an epistemic system. Hence, there is a circularity or infinite regress, and it is impossible to be entitled to an epistemic system. Compare part of Boghossian’s own words:

Suppose that you doubt some claim C and I am trying to persuade you that it’s true. […] Now suppose that the context in question is the special case where C is the proposition that R is truth-preserving and my argument for C is rule-circular in that it employs R in one of its steps. (2001: 11-2; cf. 2006: chs. 5-7)²

In all three cases, the problems have a sceptical conclusion and can take the form of either a circularity or an infinite regress argument. Hence the question is: What is the difference? In the following I first present an informal answer in terms of Sextus Empiricus’ case (§2), and then a more precise and general one (§3). Finally, I argue that this metaphilosophical

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¹ For the regress version of this argument, cf. Popper (1934: 29).
² Rule-circular arguments are distinct from premise-circular ones. Whereas the latter purport to prove a proposition by already assuming its truth, the former purport to prove the validity of a rule by already assuming its validity (cf. Boghossian 2001: 11).
investigation is not only relevant to get clear and valid arguments, but also to obtain general strategies for resisting the sceptic (§4).

2. Informal distinction

Let us consider the Problem of the Criterion as construed by Amico (1993: 35-6). So you have to decide whether a certain proposition \( p \) is true. You can do this critically, i.e. by a proof, or uncritically. If you do it uncritically, then your decision is arbitrary and will be discredited. But if you do it critically and use a criterion \( c_1 \) to decide whether \( p \) is true, you first need to decide whether \( c_1 \) correctly rules what is true and what is not. Again, there are two options: you can do this critically, or not. If the latter, your decision will be discredited. So you do it critically and have two options.

Option 1: You prove that \( c_1 \) correctly rules what is true and what is not by showing that it gives the right results. In this case, you already know what is true and what is not (and hence whether \( p \) is true or not). But this is impossible because we started from the situation where you still have to decide whether proposition \( p \) is true. This is the circularity.

\[
\text{dispute } p \rightarrow \text{ use } c_1
\]

\[
\text{dispute } c_1 \leftrightarrow \text{ use } p \ (circularity)
\]

\[
\text{use } c_2
\]

\[
\text{dispute } c_2 \leftrightarrow \text{ use } c_1 \ (circularity)
\]

\[
\text{use } c_2
\]

\[
\text{dispute } c_3
\]

\[
\text{use } c_3
\]

\[
\text{...}
\]

\[(\text{regress})\]

Fig. 1: Circularity vs. regress

Option 2: You prove that \( c_1 \) correctly rules what is true and not by appealing to a meta-criterion \( c_2 \) which correctly rules what criteria correctly rule what is true and not. But now you first need to decide whether \( c_2 \) correctly rules what are the correct criteria. Again, there are two options: you can do this critically, or not. If the latter, your decision will be discredited after all. So you do it critically and have two options. Either you prove that \( c_2 \) correctly rules what is true and not by showing that it gives the right results. This, again, is a circularity. Or you prove that \( c_2 \) correctly rules what is true and not by appealing to a yet another meta-criterion \( c_3 \). This is the regress.
As both routes seem to lead to an impossibility, it follows that we cannot decide whether any proposition is true (cf. Amico 1993: 36). The question is: How to make things precise, and generalize this difference for other cases such as Hume’s and Boghossian’s?

3. Formal distinction

Hence the problem is to find something that the three sceptical arguments from §1 have in common. I will be assuming three restrictions on, or desiderata for, my solution:

- What arguments can have in common is an argument schema of which they are instances.
- Circularities and infinite regresses should be kept apart, but still support the same sceptical conclusion.
- The argument schema should be as simple as possible, and the sceptical conclusion should follow by classical rules of inference.

Here is my solution.

_Sceptical Schema (SCEP)_

<table>
<thead>
<tr>
<th></th>
<th>( \forall x, ) you can ( \varphi x ) only if you can ( \psi x ) first.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>( \forall x, ) you can ( \varphi x ) only if (i) you can ( \varphi x ) first, or (ii) ( \exists y, ) you can ( \varphi y ) first.</td>
</tr>
<tr>
<td>2</td>
<td>( \forall x, ) you can ( \varphi x ) only if (i) you can ( \varphi x ) first, or (ii) you can ( \varphi ) an infinity of items first. [from 1, 2]</td>
</tr>
<tr>
<td>3</td>
<td>( \forall x, ) you cannot ( \varphi x ) first, nor ( \varphi ) an infinity of items first.</td>
</tr>
<tr>
<td>4</td>
<td>( \forall x, ) you cannot ( \varphi x ). [from 3, 4]</td>
</tr>
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</table>

There are three premises, viz. lines (1), (2), (4), and two inferred lines, viz. (3) and (5). To get instances of this argument schema, the relevant domain is to be specified, the Greek letters ‘\( \varphi \)’, ‘\( \psi \)’ to be replaced with a predicate which expresses an action involving the items in that domain. For the three cases from §1, the instances of the letters would be the following:

<table>
<thead>
<tr>
<th>domain</th>
<th>( \varphi x )</th>
<th>( \psi x )</th>
</tr>
</thead>
<tbody>
<tr>
<td>disputes</td>
<td>decide ( x )</td>
<td>obtain an agreed-upon criterion by which ( x ) can be decided</td>
</tr>
</tbody>
</table>
inductive inferences | justify x | assume that the future resembles the past such that x can be derived

| epistemic rules | be entitled to x | justify x inferentially |

By these filling instructions, the following sceptical conclusions can be obtained by SCEP:

- You cannot decide any dispute.
- You cannot justify any inductive inference.
- You cannot be entitled to any epistemic rule.

Here is for example the first case in full:

*Problem of the Criterion (SCEP instance)*

(1) You can decide a dispute x only if you can obtain an agreed-upon criterion by which x can be decided first.
(2) You can obtain an agreed-upon criterion y by which a dispute x can be decided only if (i) you can decide x first, or (ii) you can decide a dispute about y first.
(3) Hence: You can decide a dispute x only if (i) you can decide x first, or (ii) you can decide an infinity of disputes first. [from 1, 2]
(4) You cannot (i) decide a dispute x first, nor (ii) decide an infinity of disputes first.
(5) Hence: You cannot decide any dispute. [from 3, 4]

It is worth noting that lines (1) and (2) in this case do not depart too much from Sextus Empiricus’ initial premises:³

In order to decide the dispute that has arisen […], we have need of an agreed-upon criterion by means of which we shall decide it; and in order to have an agreed-upon criterion it is necessary first to have decided the dispute about the criterion. (*Outlines*, Book 2, §4, 20)

The main rationale of SCEP is that two abilities (being able to φ and ψ the members of a certain domain, e.g. being able to decide disputes and obtain

³ Assuming that: ∀x, you can φ x only if you can ψ x first = in order to φ x, you need to ψ x.
agreed-upon criteria to decide them) mutually depend on one another such that they cannot get off the ground.\(^4\)

Let me briefly explain the circularity/infinite regress difference in terms of SCEP. Most importantly, the circularity is captured by the (i)-clauses of lines (2), (3) and (4), whereas the infinite regress is captured by their (ii)-clauses.

In case of the infinite regress, the inference of clause (ii) of line (3) is important. It is to follow from (1) and (2) by Transitivity in combination with Conjunction Introduction in the Implicatum. Another way of putting this clause would be this: ‘\(\exists y, \text{you can } \phi \, y, \text{and } \exists z, \text{you can } \phi \, z, \text{and } \exists v, \text{you can } \phi \, v, \text{etc. first}\)’ (where each item is new and distinct from the others). It may be disputable whether you can reach infinity by Conjunction, but what is important for the argument is that the number of items exceeds your capacity.

In case of the circularity, ‘first’ is indispensable. Without ‘first’ clause (i) of line (3) line would read: ‘you can \(\phi \, x\) only if you can \(\phi \, x\)’, which is trivial. To say that you cannot \(\phi \, x \) first is to say that you cannot already \(\phi \, x\) before \(\phi\)-ing \(x\) (e.g. decide a dispute before deciding that very same dispute). Yet, ‘first’ need not be read temporally. So ‘you can decide a dispute only if you can obtain an agreed-upon criterion first’ does not necessarily mean that the criterion must be there earlier in time. What matters is that your ability to decide a dispute depends upon your ability to obtain an agreed-upon criterion, and not vice versa.\(^5\)

Finally: for sure the Problems of the Criterion, Induction and Relativism do not exhaust philosophy, and many more important and influential cases (such as the Justification Regress, the Cartesian Circle, Carroll’s Tortoise, Wittgenstein’s Paradox, etc.) could be set out as instances of SCEP.

4. Meeting the sceptic

It is often unclear whether, and sometimes even disputed that, a given circularity or infinite regress is bad or vicious. Boghossian (discussing the problem of rule-circularity, as opposed to premise-circularity), for example, asks: “But why should this be considered a problem?” (2001: 10) My general answer here is straightforward:

\(^4\) This notion of circular abilities is to be distinct from other common circularities: circular arguments, definitions and explanations (yet perhaps the latter may be discussed in terms of the former).

\(^5\) However this asymmetric dependence relation is spelled out. For a similar take on ‘first’ see Van Cleve (2003: 50, fn. 12). Also cf. his reconstruction of the Cartesian Circle (1979: 55-6).
Viciousness. Infinite regresses and circularities are bad whenever they establish a sceptical conclusion.

Three clarifications. First, sceptical conclusions are to be conclusions of the form ‘∀x, you cannot φ x’. Second, how infinite regresses and circularities can establish such a conclusion I discussed in the previous section (or at least, I presented one option). Last, to my knowledge this take on viciousness has not been defended or even considered in the literature so far (for the discussion on regress arguments, see Wieland 2012).

No matter which particular debate, if one regards the sceptical conclusion as absurd, or at least unacceptable if alternatives are available, then a natural way to resist it would be to deny one of relevant premises. On the basis of SCEP the options are easily available. Specifically, the idea is to add the anti-sceptical claim of the form ‘you can φ at least one item of the domain’ as a premise to the argument (PREM), regard the others as hypotheses for reductio from now on (HYP), and then conclude, by Reductio Ad Absurdum (RAA), that one of the hypotheses has to go as they are jointly incompatible.

Anti-Sceptical Schema (ANTI-SCEP)

(1) ∀x, you can φ x only if you can ψ x first. [HYP]
(2) ∀x, you can ψ x only if (i) you can φ x first, or (ii) ∃y, you can φ y first. [HYP]
(3) ∀x, you cannot (i) φ x first, nor (ii) φ an infinity of items first. [HYP]
(4) ∃x, you can φ x. [PREM]
(5) ~(1), ~(2) or ~(3). [from 1-4; RAA]

So, there are three main options, viz. you may reject (1), (2) or (3) of ANTI-SCEP (and all other options are to be combinations of these). I shall not go through the options in terms of all three debates mentioned in this paper, but limit myself to Chisholm’s anti-sceptical position. Chisholm famously distinguished two views: particularism and methodism (1973: 66). Basically, particularism is the view which takes particular instances of knowledge as primitive and criteria for knowledge as derivative. Methodism has it the other

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6 Cling (1994) makes a similar point for the Problem of the Criterion. Still, his reconstruction of the problem is substantially different from an instance of SCEP. The main difference is that line (4) of SCEP has no parallel in Cling’s case.
way around: criteria for knowledge are primitive and particular instances derivative.

In terms of the options just listed, particularism is an example of the first strategy (viz. \( \sim(1) \)) and resists the sceptical conclusion by rejecting ‘you can decide which are instances of knowledge only if you can have criteria for knowledge’. This was Chisholm’s own choice. By contrast, methodism is an example of the second strategy (viz. \( \sim(2) \)). Specifically, it resists the sceptical conclusion ‘you cannot decide which are instances of knowledge’ by rejecting ‘you can have a criterion to decide whether proposition \( x \) is a piece of knowledge only if either (i) you can decide whether \( x \) is a piece of knowledge first, or (ii) there is another criterion \( y \) and you can decide whether \( y \) is a piece of knowledge first’. Chisholm did not discuss the third strategy. Still, that position could be called circularism or infinitism (depending on what part of (3) is rejected).

All in all, all anti-sceptical responses to a circularity or infinite regress argument can nicely be framed in terms of ANTI-SCEP. Hence, the argument schema presented in this paper is not only useful to get clear and valid arguments, but also to map the logical space for meeting the sceptic.

5. Global scepticism

I would like to conclude with a note on global scepticism. Usually the global/local distinction is taken along the following lines. Local scepticism denies that knowledge regarding a specific subject matter is possible. For example, one could be a local sceptic about religious matters and deny that knowledge about such matters is possible. Whereas there can be many different local sceptics, it is furthermore thought, there can be only one form of global scepticism. Namely, global scepticism would be the view that knowledge regarding each and every subject matter is impossible.

Yet, given what I have said in the foregoing, such a form of global scepticism is not even global enough. To say that knowledge in general is impossible is merely to say that one instance of SCEP is sound and has a true conclusion (i.e. ‘you cannot know any proposition’). Fully global scepticism, by contrast, would be the position that all instances of SCEP are sound. Hence, it accepts that it is impossible to decide disputes, to justify inductive inferences, to be entitled to epistemic rules, and so on for all filling instructions of SCEP. Indeed: a view that I will defend at another occasion.
References