Epistemic Infinitism, the Reason-Giving Game, and the Regress Skeptic

ERHAN DEMIRCIOĞLU
Koç University, Istanbul, Turkey

Epistemic infinitism is one of the logically possible responses to the epistemic regress problem, claiming that the justification of a given proposition requires an infinite and non-circular structure of reasons. In this paper, I will examine the dialectic between the epistemic infinitist and the regress skeptic, the sort of skeptic that bases his attack to the possibility of justification on the regress of reasons. I aim to show that what makes epistemic infinitism appear as well-equipped to silence the regress skeptic is the very same thing that renders it susceptible to a powerful skeptical assault by the regress skeptic.

Keywords: Epistemic infinitism, the epistemic regress problem, skepticism, inferential justification, Peter Klein.

> *But who will guard the guardians?*
> *Juvenal*, The Satires 6.029–34

1. *Introduction*

What are the conditions a given set of beliefs must meet in order for those beliefs to have some positive epistemic status such as being justified or reasonable? Epistemological theories that attempt to answer a question of this sort might be plausibly called "normative". Do beliefs of the sort typically held by human beings actually meet the conditions they must meet in order for them to have the desired positive epistemic status? Epistemological theories that attempt to answer a question of this sort might be plausibly called "descriptive". I simply introduce "normative" and "descriptive" as labels, hopefully in a way that reflects a clear sense that might be plausibly attached to them, but without reading too much into them.

The main epistemological theories about the structural conditions a given set of beliefs must meet in order for them to be justified might be conceived either as being merely normative or as being both normative

and descriptive. For instance, foundationalism conceived as a merely normative epistemological theory claims, roughly, that a given set of beliefs must be structured like a pyramid if they are to be justified, at the bottom of which there are justified foundational beliefs and at the upper layers of which there are beliefs that are justified ultimately by their evidential relations to the foundational beliefs. And, foundationalism conceived as both a normative and a descriptive theory claims, roughly, not only that a given set of beliefs must be structured like a pyramid but also that beliefs of the sort typically held by human beings are structured like a pyramid. So, foundationalism qua a normative and descriptive theory in the sense at issue is *eo ipso* anti-skeptical, but foundationalism qua a merely normative theory need not be. A skeptic might approach foundationalism qua a merely normative theory in three broadly different ways. One is to argue that foundationalism cannot be and therefore is not the correct normative theory (for instance, because, the skeptic might say, the notion of justified foundational belief is incoherent)—let us call this "the normative skeptical approach." Another is to argue that whether or not the structural norms prescribed by foundationalism are correct, there is something about those norms that entails that no beliefs can be justified (for instance, the skeptic might argue that justification can only be "internal" and yet that foundational beliefs can only be justified if "external" justification is possible)—let us call this "the skeptical outcome approach." Yet another one is to argue that beliefs of the sort typically held by human beings do not rise to the challenge of satisfying the structural norms prescribed by foundationalism, whether or not those norms are correct—let us call this "the descriptive skeptical approach." Of course, these three skeptical approaches are not mutually exclusive.

Foundationalism is the oldest game in the town of epistemologists. In this paper, I am interested in a relatively novel contender, namely, infinitism qua a merely normative theory, an epistemological theory whose history is characterized either by comforting oblivion or by quick dismissal but that has received considerable and well-deserved attention in recent years mainly due to the pioneering defense of Peter Klein.[1] More specifically, I am interested in whether the regress skeptic can plausibly adopt what I have labelled "the skeptical outcome approach" against the infinitist.[2] As we shall see, there are good reasons, stem-

[1] Here is a representative but incomplete list of Klein's works that defend epistemic infinitism: (1998, 1999, 2000, 2003, 2005a, b, 2007a, b, 2011, 2014). Klein's works have inspired a large and still growing literature on infinitism. Here is again a representative but incomplete sample: Fantl (2003), Cling (2004), Aikin (2005, 2008, 2011), Wright (2013).

[2] A formidable and familiar skeptical challenge against infinitism is descriptive, taking its cue either from the finiteness of the human mind or the finiteness of the amount of time available to human beings. In this paper, I leave the descriptive skeptical approach aside, which is not to say that the apparent contrast between what infinitism demands and what human beings can in principle offer is of no

ming from the norms governing what one might call "the reason-giving game," for thinking that infinitism is tailor-made for defusing the skeptical outcome approach and it turns out that it is unclear whether the regress skeptic is in a position to adopt that approach.

This paper is hereafter divided into seven sections. In section 2, I attempt to show how infinitism is naturally suggested as the correct normative account of epistemic justification by the reason-giving game. In section 3, the move from the reason-giving game to infinitism is clarified by making some of its central assumptions explicit and is defended against some main objections. In section 4, I raise the question of whether the skeptic is in a position to adopt the skeptical outcome approach against infinitism, given that the reason-giving game between the skeptic and a given subject meeting the norms of infinitism ought rationally to result in a tie. A proper answer to this question, I maintain, requires taking a closer look at the question of why exactly infinitism is suggested by the reason-giving game, and I argue in section 5 that the answer to the latter question lies in a particular feature of inferential justification. In section 6, I claim that the very feature of inferential justification I specify that is responsible for why infinitism is suggested by the reason-giving game can be deployed by the regress skeptic in an argument against infinitism: an ultimate tragedy of infinitism is that what makes it appear as well-equipped to silence the skeptical outcome approach is the very same thing that renders it susceptible to a powerful assault by that approach. Section 7 discusses some infinitist responses to the skeptical assault and finds them inconclusive. Section 8 sums up the lesson.

2. *The reason-giving game and epistemic infinitism*

Michael and Susan are two intellectually sophisticated subjects and they decide to play a game, one quite familiar to epistemologists, which they call "the reason-giving game." They pick a proposition, P, and they both assume that Michael believes that P. Now, Susan is the "detective", and adopts the role of an inquisitive and "maximally persistent"[3] inquirer whose aim is to discover whether Michael's belief that P is epistemically justified. And, Michael is the "defender", as persistent as the detective, whose aim is to persuade Susan that his belief that P is epistemically justified by defending it. The game comes in "steps",

epistemological significance. The normative skeptical approach against infinitism is less popular but formidable all the same. The skeptic might argue, for instance, that infinitism requires the existence of an actual infinity and also argue, along with Aristotle, that the notion of actual infinity is incoherent—hence that infinitism cannot be the correct account of norms governing justification. In this paper, I also leave the normative skeptical approach aside.

[3] Compare Leite (2005): "Imagine that someone invites you to defend a belief. You offer what you take to be a good reason for believing as you do, but your interlocutor asks you to support this reason and continues in like fashion in each step…I call this character 'the persistent interlocutor'" (p. 397).

composed of a "what reason?" question and a "my reason" answer. The first step starts with a question that Susan raises, "What reason do you have for believing that P?", and ends with Michael's citing reasons that support P, reasons which they both assume Michael believes and thus sincerely offers. They both agree that a reason cited in support of P does not render Michael's belief that P justified if that reason itself needs to be supported but is not supported by further reasons. So, the game does not end at the first step if the reason Michael cites in support of P needs to be supported in order for it to justify his belief that P. Susan's job is to reiterate the question at each step in a suitable form, and Michael's job is to answer it by citing new reasons. They both agree that Michael loses the game if all he can do at a particular step is to cite a reason which he has cited at a previous step or if there is a step at which he cannot cite any new reasons. They also agree that Michael wins the game if, and only if, there comes a step where Susan ought to be persuaded that Michael's belief that P is epistemically justified. And, by this, they mean that Michael wins the game if, and only if, there comes a step at which the "what reason?" question cannot be legitimately iterated, i.e., cannot be iterated without its losing the rationale it serves at the very first and previous steps, the rationale in virtue of which the game has kept going until that step.

A natural and tempting line of thought delivers the result that Michael cannot win the reason-giving game conceived in the way above.[4] The rationale of raising the "what reason?" question at the first step is that Michael's persuading Susan that his belief that P is justified requires an answer to that question. For all Susan knows at the outset, Michael's belief that P might be based on a sheer guess, a hunch, or might simply have come "out of the blue", in which case she ought not to be persuaded that it is a justified belief. As the first step ends with Michael's citing a reason, R_1, for P, the rationale of raising the "what reason?" reason remains intact at the second step: for all Susan knows at the second step, Michael's belief that R_1 might be based on a sheer guess, a hunch, or might simply have come "out of the blue", in which case she ought not to be persuaded that his belief that R_1 or his belief that P is justified. And, obviously, after the second step ends with Michael's citing a reason, R_2, for R_1, the rationale of raising the "what reason?" question is kept at the third step, and the same goes for all the subsequent steps. This means that, whatever n is, the reason R_n Michael cites at the nth step needs to be supported in order for him to persuade Susan that his belief that R_n and his belief that P is justified. So, there is no step at which the "what reason?" question can possibly lose the rationale it has at the previous steps, which entails that Michael cannot win the reason-giving game.

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[4] That Michael cannot win the reason-giving game above does not follow from the way the game is defined above. (Thanks to a reviewer for pressing on this point.) An argument that Michael cannot win the reason-giving game is offered in what follows.

It is thus plausible to say that Michael cannot win the reason-giving game and that the best he can do is *not* to lose it. In order for him not to lose the game, Michael must be in a position to cite a reason at each step, one that he has not cited at one of the previous steps; and, since the "what reason?" question can (in principle) be legitimately iterated by the maximally persistent inquirer Susan indefinitely, the following must be true of Michael if he is not to lose the game: there must be an infinite set of reasons available to Michael arranged in a non-repeating series such that the first member, R_1 is a reason for P, and the second member, R_2 is a reason for R_1, and the third member, R_3 is a reason for R_2, and so on. So, in order for Michael not to lose the game, the structure of his reasons must be infinite and non-repeating. That is to say, his reasons must be structured in the way epistemic infinitism says they must. Epistemic infinitism is a normative epistemological thesis about how our beliefs must be organized in order for them to be justified, and it claims that a necessary condition for a series of reasons to lend justification to a proposition is that it must have no repeating members and has no last member. A general moral that can be plausibly drawn from the reason-giving game is that the best we can do in the way of having justified beliefs is by having at our disposal an infinite chain of reasons structured in the way the epistemic infinitist says it must.[5]

An important distinction any account of epistemic justification including epistemic infinitism must respect is between propositional and doxastic justification.[6] Propositional justification is a property of a proposition that it has relative to a given subject, irrespective of whether the subject believes the proposition. We can say that a *proposition*, P, is propositionally justified for a subject, S, only if there is a (good) reason for P that is available to S (irrespective of whether S believes that P). Doxastic justification, on the other hand, is a property of a subject's already formed believing attitude towards a certain proposition. We can say that S's (actual) *believing* that P is doxastically justified just in case P is propositionally justified for S and S bases his believing attitude on the reason (or the chain of reasons) by which P is propositionally justified for S. Doxastic justification is thus propositional justification plus the basing relation.[7] This is a tidy picture, and here is a little complication: suppose S believes that P, and P is justified for S, but S's believing that P is not justified (because the basing requirement is not satisfied). What can we say about the justificatory status of S's *belief* that P—is it justified or not? Suppose one simply insists for a "yes-or-no" answer (and does not accept a "yes-and-no" answer). Clearly, such an answer to this question must be stipulative in nature. I hereby make the stipula-

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[5] Compare Aikin: "In essence, the thought behind the (infinitist) view is that if you know, you can answer questions about what you know until there just aren't any more questions. But, as it turns out, there are in principle no final questions. So, knowers need to be able to keep coming with answers" (2009: 57).

[6] The distinction is first introduced by Firth (1978).

[7] For a critical discussion, see Turri (2010).

tion that S's belief that P is justified if and only if S believes that P and P is propositionally justified for S. Given this, the answer I give to the question is yes. In what follows, whenever I talk about the justificatory status of a given *belief* without qualification, I will have in mind solely considerations that pertain to the propositional justification of its content.

Now, the question that arises is this: is Susan the detective attempting to figure out whether (i) Michael's *believing* that P is justified or whether (ii) Michael's *belief* that P is justified? The answer is "both". This is because what Susan is at bottom interested in is whether P is propositionally justified for Michael, and also because both Michael's believing that P and Michael's belief that P requires that P be propositionally justified for Michael. To see why, consider the following. If one opts for (i), then Susan is to be conceived as trying to discover whether Michael's believing that P is doxastically justified. Since doxastic justification requires propositional justification and basing, Susan is then trying to discover whether P is propositionally justified for Michael and Michael bases his believing attitude towards P on the reason by which P is propositionally justified for Michael. Furthermore, since it might be plausibly assumed that a subject bases his believing attitude towards a proposition on a reason if (though not necessarily *only* if) he sincerely cites the reason in support of the proposition, then the basing requirement for doxastic justification is *automatically* satisfied as soon as Michael sincerely cites a reason in response to a "what reason?" question raised by Susan at a particular step. So, if one opts for (i), then one is entitled to say that what Susan is at bottom trying to discover is whether P is propositionally justified for Michael. And, if one opts for (ii), Susan is to be conceived as trying to discover whether P is propositionally justified for Michael and Michael believes that P. Since it is assumed by both of our subjects that Michael believes that P (and the reason he offers in support of P and the reason he offers in support of the reason he has offered for P, and so on), one is entitled to say, if one opts for (ii), that what Susan is at bottom trying to discover is whether P is propositionally justified for Michael. So, irrespective of whether (i) or (ii) is to be adopted, the reason-giving game between Michael and Susan centers on the question of whether P is propositionally justified for Michael. Accordingly, epistemic infinitism that is strongly suggested by the reason-giving game is to be conceived, at least in the first instance, as an account of the condition a subject must meet in order for a proposition to be *propositionally* justified for him. Epistemic infinitism about propositional justification is the claim that the condition a subject must meet in order for a proposition to be justified for him is that there must be infinitely many reasons available to him structured in a non-repeating way.

3. *Caveats*

Various clarifications and qualifications are required in order to fortify the move from what we can plausibly derive from the reason-giving game to epistemic infinitism. First, a main moral of the reason-giving game is that there is no forthcoming step at which the "what reason?" question loses the rationale it has at the previous steps. This is consistent with the fact that at times we seem to be engaging in something relevantly like the reason-giving game and adopting the detective role in ordinary quotidian contexts, there is always an nth step at which we qua ordinary beings with finite amount of time, perseverance, and guided mainly by pragmatic concerns *concede* a reason provided with us at that step (or perhaps resolve the issue with our fists or just leave the scene). The idea, however, is that we are never *rationally* compelled to do so, and as such the moral of the reason-giving game is normative and abstracts away from what we actually do or tend to do in similar circumstances.[8]

Secondly, and relatedly, the rules of the reason-giving game and the rationale behind it appear to *isolate* some of the core features of the *ordinary* conception of how a rational dialectic between two speakers should go, rather than resting on or taking for granted a set of standards that are far removed from the standards governing an ordinary dialogue that we would ordinarily take to be rational. There are surely everyday conversational contexts in which a particular speaker might wish to figure out the reason behind one of the beliefs of the other speaker. "So, you believe that Trump will make America great again, why is that?" A question like this might normally stem from a suspicion about the truth of what is believed or from a desire to see whether the person that has the belief is justified. In any case, we do not feel that the question is always "off the mark", "odd" or "inappropriate" but can easily imagine everyday contexts in which the person that has the belief *ought* to provide an answer if his belief is to count as reasonable or justified. Now, it is true that ordinary conversational contexts are typically characterized by a "common ground," a set of "background assumptions" that are shared by speakers and ultimately serve as dialectical regress-stoppers. Beliefs about basic arithmetic ("2+2=4"), the

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[8] A reviewer raises the following worry: "If I assert that I ate potatoes for breakfast, and someone says I'm not reasonable in believing unless I can publically defend it, I think they are wrong. And, I think it has nothing to do with how much time I have on my hands." In response, let me first note that I claim above that the fact that there is no forthcoming step in the reason-giving game at which the "what reason?" question loses the rationale it has at the previous steps is consistent with the fact that there is always an nth step at which we actually concede a reason provided with us at that step. I have argued in the previous section for the claim that there is no forthcoming step at which the "what reason?" question loses its initial rationale. So, if the reviewer cannot answer the "what reason?" question raised for the belief that I ate potatoes for breakfast, then s/he would *lose* the reason-giving game as the game is *defined*. What this has to do with *justification* is clarified below.

immediate environment ("Here is a hand"), one's own occurrent mental states ("I feel pain"), "hinge" propositions ("There is an external world") do usually provide the background against which ordinary dialectical exchanges take place. So, there is a sense in which an attempt to question what is ordinarily taken to be a "common ground" between speakers is bound to appear "off the mark" or "odd". However, despite this, it might be plausibly argued that there is again no special difficulty ordinary speakers feel in admitting that there is a clear sense in which just as any other belief, the beliefs belonging to the common ground are not unquestionable but stand in need of the support of reasons, and that the fact that our interlocutors usually let us get away with making such assertions as "I have a hand" is consistent with the fact that we as ordinary speakers can easily imagine conversational contexts in which questioning them is appropriate. Why doesn't the idea that the beliefs ordinarily viewed as belonging to the common ground are not unquestionable strike ordinary speakers as strange, wild, or absurd, as something that they ought to reject given their conception of a rational conversation? It is, it might be argued, because there is a norm ordinary speakers are willing to admit that applies to all beliefs across the board: be ready to provide reasons for any of your beliefs when challenged, if they are to count as reasonable. The reason-giving game takes for granted and is built on a norm along these lines, a norm, one might plausibly argue, that is not "strange" or "wild" but is treated by ordinary speakers as ultimately correct.[9]

Thirdly, and relatedly again, the argument that Michael cannot win the reason-giving game presupposes what one might call the "unrestricted-defense" view, according to which all beliefs asserted in the reason-giving game require defense in the light of requests for reasons—when challenged by the "what reason?" question. On this view, there are no privileged beliefs whose assertions cannot be legitimately disputed by raising the "what reason?" question. The unrestricted-defense view can be contrasted with what one might call the "unrestricted-challenge" view and the "restricted-challenge" view. The unrestricted-challenge view holds that *all* beliefs are "presumptively rational" or are "defeasible presumptions" in that one can only challenge their assertions by providing grounds or reasons for doubting them and not by merely raising the "what reason?" question.[10] The restricted-challenge view holds that only some beliefs are presumptively rational.[11] I will not attempt to adjudicate between these views, but remain content with maintain-

[9] The central aim of this section is to disclose those main assumptions that connect the reason-giving game to epistemic infinitism, while showing that those assumptions are not gratuitous. The argument provided above is not, and is not intended to be, a decisive argument on behalf of the norm in question, but it is, and is intended to be, an argument that shows that the norm is to be taken seriously. Thanks to a reviewer's comment that prompts this note.

[10] See Adler (2002).

[11] See Brandom (1994).

ing that the argument that Michael cannot win the reason-giving game presupposes the unrestricted-defense view.

Fourthly, the reason-giving game presupposes that a given subject's belief that P is justified only if the subject has the ability to defend (or is in a position to cite a reason for) the belief. This is questionable. It seems clear that non-linguistic creatures and human infants can have justified beliefs despite the fact that they are not able to cite reasons for their beliefs. Moreover, adult humans may have justified beliefs despite the fact that the original reasons for those beliefs, though compelling, have long since been forgotten. The fact that the subject is *now* at a loss if asked to justify his belief does not show that his belief is thereby unjustified. The main point here is that the state of holding a justified belief is to be distinguished from the activity of justifying a belief or from having the ability to justify it. This is an important point, which must be granted, and it calls for a qualification. The qualification required is this: there is *a sense* of justified belief in which a subject's belief that P is justified only if the subject has the ability to defend (or is in a position to cite a reason for) the belief. This is the sense of justified belief as essentially the product of the reflective activity of examining our beliefs and determining which, if any, are worthy of being kept. And, this is the sense of justified belief that accords well with the notion of a responsible epistemic agent seeking to retain only those beliefs worthy of being retained.[12] In *this* sense of the term, it seems that the distinction between the state of holding a justified belief and the activity of justifying a belief is largely bogus. And in this sense of the term, neither non-linguistic creatures nor human infants can have justified beliefs. And the same goes for adult humans that have forgotten the reasons they once had for their beliefs.

Fifthly, and finally, the move from the fact that the best we can do in the reason-giving game is by having at our disposal an infinite and non-repeating chain of reasons to *epistemic* infinitism is suspicious. Here it must be observed that the reason-giving game involves a discursive practice, a dialectical interaction between two subjects. And, epistemic infinitism is a thesis about how the propositions available to a subject must be structured in order for the subject to be justified in believing those propositions. Now, it is questionable whether the normative rules governing a rational discursive practice have anything essential to do with the epistemological concerns about the structure of justified beliefs. In particular, it might be claimed that while it might be true that in order for Michael to be rational in his attempt to *defend* his belief that P or to *persuade* Susan that his belief that P is justified, he must be in a position to cite new reasons at each step, it does not follow that Michael's belief that P is justified only if the *structure* of his

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[12] Compare also Aikin: "Epistemic infinitism…holds that those who know are those who have been *maximally intellectually responsible*…Who would say that someone knows that p, if asked why he believes it, he shrugged his shoulders and uttered an inarticulate "hmmm… idunno"?" (2009: 57–8, emphasis mine).

reasons must be infinite and non-repeating. So, it might be argued that one can, for instance, consistently defend epistemic foundationalism (the view that the epistemic regress must halt at basic beliefs (i.e. justified beliefs that are not justified in virtue of other beliefs) if one is to have justified beliefs at all) while acknowledging that rational defense or persuasion in the reason-giving game requires having the capacity to cite new reasons at all forthcoming steps: epistemic infinitism does not follow from what one might call dialectical infinitism. This is an important point but there are two things that can be said in response. One is that the reason-giving game does not strictly require two subjects and can be played with only one subject adopting both the roles of a detective and a defender. If the moral of the reason-giving game with two subjects is dialectical infinitism, then the moral of that game with only one subject engaged in a *sotto voce* dialog is also dialectical infinitism. The other is that the distinction between epistemic and dialectical infinitism is again largely bogus if the relevant sense of justified belief is one that conceives justification as an epistemic status that the subject must earn through engaging in an activity of justifying in order for him to have justified beliefs, that is, if having justification rests essentially on an activity of justifying.[13]

With these points in mind, it appears that the move from what must be true of Michael, our hypothetical subject defending his belief that P, in order for him not to lose the reason-giving game to epistemic infinitism is safe. In this connection, it is important to realize that Klein, a prominent epistemic infinitist, actually argues against epistemic foundationalism by an argument that rests on the normative rules governing reason-giving procedures (2004: 14–15). Consider an epistemic foundationalist, Fred, who takes his belief that P to be epistemically basic. Sally, a persistent interlocutor, asks Fred his reason for believing that P. According to Klein, Fred faces a dilemma here. He may either simply say that there is no reason that he can offer for believing that P but still insist that P, or realize that it is in virtue of its having a certain property, F, he takes the belief that P as epistemically basic and say that the belief that P has F and that beliefs with F are likely to be true. If Fred takes the first horn, then his belief that P is dogmatic and he ought rationally to abandon it. And, if he takes the second horn, then the regress continues by the question "What reason do you have for thinking that beliefs that have F are likely to be true?" and *contra* Fred the epistemic foundationalist, his belief that P is not a regress-stopper and is thus not epistemically basic. The lesson Klein derives about *the reason-giving game* Fred and Sally engage in is that the epistemic foundationalist "can't be an epistemically responsible agent and practice what he preaches" (2004: 15). And, this lesson about the reason-giving game is what grounds Klein's claim that *epistemic foundationalism* "advocates accepting an arbitrary reason at the base" (1999: 297).

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[13] For further discussion, see Rescorla (2009).

4. Two virtues? Or just one?

If our beliefs are structured in the way epistemic infinitism says they must in order to be justified, then it seems that we are in a position to alleviate a major skeptical worry that might arise about the justificatory status of our beliefs. This is clearly so, given that one of the favorite tools the skeptic uses to question the justificatory status of our beliefs is the very same question the detective raises in the reason-giving game, viz. the "what reason?" question. Let us call the philosopher that bases her skeptical attack to the possibility of justification on the regress of reasons *the regress skeptic*. Now, suppose that the reasons available to me for believing in a particular proposition are infinitely many and non-repeating, which means that I am in a position to cite a reason for each reason that I offer and might be challenged by the regress skeptic. If this is so, then I cannot lose, and the regress skeptic cannot win, the reason-giving game. It is also true that I cannot win, and the regress skeptic cannot lose, it. However, it might be argued that not losing the reason-giving game against the regress skeptic, our notoriously powerful opponent, is perhaps victory *enough*.

The "what reason?" question raised for a particular belief starts a regress of reasons. And, if we maintain that there is no forthcoming step at which the "what question?" loses the rationale it has at the previous steps, then the only way for us not to lose the reason-giving game is by having at our disposal an infinite (and non-repeating) chain of reasons. Epistemic infinitism is simply the view that fully endorses the regress of reasons strongly suggested by the reason-giving game: it appears to be a direct outcome of an appreciation of a natural (if not uncontroversial) conception of the rules governing the reason-giving game. Furthermore, it seems that it enables a sort of response to the regress skeptic that does not look desperate: if the reasons available to me for a belief is structured in the way epistemic infinitism says it must in order for me to have a justified belief, then I am immune to skeptical challenges to the grounds of that belief in the form of "what reason?" questions.

It thus appears that there are two virtues of epistemic infinitism:

> (RR) Epistemic infinitism takes at face value what is suggested by the reason-giving game: in order for a subject to be justified in believing a proposition, there must be an infinite set of reasons available to the subject arranged in a non-repeating series such that the first member, R_1 is a reason for P, and the second member, R_2 is a reason for R_1, and the third member, R_3 is a reason for R_2, and so on. (RR = Regress is Real)

> (RS) If a subject's reasons for a particular belief are infinite in number and structured in the way the epistemic infinitist says they must in order for that belief to be justified, then the reason-giving game concerning that belief with the regress skeptic ought

rationally to result in a tie and therefore skeptical attacks from the regress of justification are circumvented. (RS = Response to the regress Skeptic)

(RR) and (RS) provide strong support for epistemic infinitism. As for (RR), we can say this: it is in general a merit of a theory that it does not yield a gap, or reduces the already-existing gap, between how things "appear" to us (not necessarily in the visual or perceptual sense) and how things really "are". Any theory that yields such an appearance-reality gap faces the often-not-lifted burden of explaining why things "appear" to us differently from how things really "are". It is therefore a virtue of epistemic infinitism that it endorses what "appears" to be a moral of the reason-giving game as a condition for propositional justification. As for (RS), a general point is that any normative epistemological theory that provides an adequate response to the skeptic is preferable to those that do not. This is again because it "appears" to us that we have justified beliefs and we want to resist the skeptical thesis that we have none.

(RR) and (RS) deserve a critical examination. One question that we might ask about (RR) is this: why exactly is epistemic infinitism suggested by the reason-giving game? And, one question that we might ask about (RS) is this: is it true that skeptical attacks from the regress of justification are circumvented, given that the reason-giving game for that belief ought rationally to result in a tie? I will argue that an adequate answer to the question about (RR) paves the way for a "no" answer to the question about (RS). The reason why epistemic infinitism is suggested by the reason-giving game is the reason why the regress skeptic can plausibly argue that the subject is not justified in having a particular belief while appreciating that the reason-giving game for that belief ought rationally to result in a tie.

5. *RR and inferential justification*

Reflecting on (RR), let us start with observing that the reason-giving game presupposes an *argumentative* model of dialectical interaction between the detective and the defender. According to this model, a proper answer by the defender to the "what reason?" question raised by the detective with respect to one of the defender's beliefs requires citing a reason (a proposition the defender believes) that effectively serves as a premise that purportedly supports the belief. Now, assuming that there is a sense of justification (or justified belief) on which an argumentative model of dialectical interaction is also a model of epistemic justification (see section 3), the reason-giving game presupposes an argumentative model of *epistemic justification* (in that sense). Furthermore, since a belief's being inferentially justified is a matter of its owing its justification to the support of other beliefs, an argumentative model of epistemic justification presupposes that only those beliefs

that are inferentially justified are justified. So, given that the reason-giving game presupposes an argumentative model of epistemic justification, epistemic infinitism suggested by that game presupposes that only those beliefs that are inferentially justified are justified.

A crucial point here is that the infinite regress of reasons suggested by the reason-giving game and endorsed by epistemic infinitism has to do with the nature of inferential justification. There are two individually necessary and jointly sufficient conditions for the inferential justification of a belief, captured by the following thesis:

> (IJC) A belief held by a subject is (prima facie) inferentially justified if, and only if, (i) that belief is (adequately) supported by some of the other beliefs of the subject and (ii) those other beliefs of the subject are themselves justified.

Let us call the condition captured by (i) *the support condition*, viz. that in order for a belief to be inferentially justified, there must be another belief that (adequately) supports it (or there must be a suitable 'evidential' relation between the two beliefs). It is notoriously difficult to give an adequate account of the notion of evidential support; but fortunately, I can leave it unanalyzed in this paper. Intuitively, my belief that my wife is back home from the gym is supported by my belief that her car is parked outside but not supported by my belief that Paris is the capital of France. What needs to be observed for the purposes of this paper is that the support thesis is unquestionably true simply because it specifies in part what it means to be inferentially justified. Let us call the condition captured by (ii) *the other-belief-justification condition* (or simply *the justification condition*), viz. that in order for a belief to be inferentially justified by another belief, the latter belief itself must be justified. There is good reason to think that the justification condition is required for inferential justification. Suppose that John believes that his boss is going to fire him and this belief is (adequately) supported solely by one of his other beliefs, viz. that his boss distrusts him. But suppose that the belief that his boss distrusts John is in turn entirely unsupported—John has no reason at all to believe this, and his 'paranoid' tendencies are active in the formation of this belief. In this case, is the belief that John's boss is going to fire him inferentially *justified* by the belief that John's boss distrusts him, given that the former is *supported* by the latter? The answer appears to be a clear "no": the belief that John's boss is going to fire him is not justified and therefore not inferentially justified, and the reason why this is so is evidently that the supporting belief that John's boss distrusts him is not justified. And, this is just to say that the justification condition is not met by John's belief that his boss is going to fire him.

The justification condition for inferential justification generates the regress of reasons in the reason-giving game. Citing a reason, R_1 in support of the target belief that P is not sufficient for the justification of the belief that P: R_1 must also be justified. Without R_1 being justified,

the belief that P is not justified in virtue of its being supported by R_1. So, the initial question of whether the belief that P is justified has not yet been answered by citing R_1. In order to answer that question, we need to know whether R_1 is justified. And, citing R_2 in support of R_1 is not sufficient for the justification of R_1: R_2 must also be justified. Without R_2 being justified, neither R_1 nor the belief that P supported by R_1 is justified in virtue of R_1's being supported by R_2. So, the initial question of whether the belief that P is justified has not yet been answered by citing R_1 in its support and citing R_2 in support of R_1. The same point clearly applies to all the forthcoming steps. It is because the justification condition holds for inferential justification that an answer to the initial question regarding the justificatory status of a target belief requires there being available to the subject an infinite series of reasons.

To further appreciate the connection between the justification condition and the idea that inferential justification requires an infinity of reasons, suppose that (IJC) is rejected in favor (IJS), which reads:

> (IJS) A belief held by a subject is (prima facie) inferentially justified if, and only if, that belief is (adequately) supported by some of the other beliefs of the subject.

(IJS) is what one gets by dropping the justification condition from (IJC). If (IJS) were the principle that is true of inferential justification, then there would be no troubling regress of justification because it would then be sufficient for the inferential justification of a belief that the subject has another belief that evidentially supports it, whether or not that other belief itself is justified. So, if (IJS) were true, John's belief that his boss is going to fire him, for example, would be justified on the basis of the support it gets from his belief that his boss distrusts him. The question about the justificatory status of the target belief (that John's boss is going to fire him) would then be *settled* by John's citing the belief that his boss distrusts him. True, we could still raise the "what reason?" question for the belief that John's boss distrusts him. So, there will still be a *sort* of regress of reasons. But the crucial point is that the sole rationale for raising that question would then be to figure out whether *that* belief itself is justified, *not* whether the original target belief that John's boss is going to fire him is justified. In other words, if (IJS) were true, the belief that John's boss is going to fire him would no longer be 'targeted' by the "what reason?" questions raised in subsequent steps once another belief that adequately supports it is cited in its defense. And, that is what makes the ensuing regress non-troubling against the skeptic questioning the justificatory credentials of our beliefs. If (IJS) were true, then we would *have* as many justified beliefs as the number of our beliefs that receive adequate support from other beliefs we have. This means that if (IJS) were true, epistemic infinitism would not be suggested by the dialectic involved in the reason-giving game as the correct account of justification.

However, given (IJC), the "what reason?" question raised at each step is an attempt to figure out whether John's original belief under scrutiny—the belief that his boss is going to fire him—is justified. Its justificatory status is not settled by citing another belief that adequately supports it as long as the justificatory status of that belief is not settled. And, this is what makes the ensuing regress troubling against the regress skeptic. Given (IJC), the "what reason?" question keeps targeting the very first belief for which it is raised at all forthcoming steps, and this is what suggests that the justification of one and the same belief requires an infinity of reasons, i.e. what suggests epistemic infinitism as the correct normative account of epistemic justification.

Before proceeding further, there is one final point I want to make about how the "if and only if" in (IJC) is to be understood. Suppose that a given subject's belief that P is supported only by one of her other beliefs, R_1. Suppose further that the belief that P is (inferentially) justified. If this is so, then given (IJC), R_1 must be justified. However, R_1's being justified is not merely necessary for P being justified. It is *in virtue of* R_1's being justified that P is justified—R_1's being justified *explains why* P is justified. There is a sort of explanatory dependence relation between P being justified and R_1 being justified, one that is not captured by noting that R_1 being justified is necessary for P being justified. Klein's remarks are helpful here:

> Consider a line AB and some subsegment of it, say s. Now, s is a subsegment of AB only if there is another subsegment of s, say s_1, that is not identical to s (or AB), and there is some subsegment, s_2, etc. In addition, any subsegment *consists* (*in part*) of its own subsegments, but it is not a subsegment *in virtue of* its having subsegments. Rather, each is a subsegment *in virtue of* being a segment between the endpoints of the given segment that is not equivalent to the given segment. That explains why it is a subsegment. My point is that necessary conditions, even those that entail the existence of a constituent, are not necessarily part of explanatory or in-virtue-of conditions. In other words, "A holds only if B holds" can be true without "A holds in virtue of B holding" being true. (2003: 722)

Adopting Klein's terminology, we can say that R_1 being justified in the scenario above is not merely a necessary condition for P being justified but is an explanatory (in-virtue-of) condition for P being justified: it is a part of the explanation why P is justified. As I understand it, (IJC) specifies not only the necessary conditions but also the explanatory conditions for an inferential justification of a belief. What it says is to be understood along the following lines: if a given belief is inferentially justified, then it is inferentially justified *in virtue of* the fact that it is supported (at least) by another belief and the fact that that other belief is justified. The "if and only if" condition involved in (IJC) is to be conceived as an explanatory condition.

The upshot of this section is this. (RR) is the thesis that epistemic infinitism takes at face value what is suggested by the reason-giving game. (RR) is true simply because the reason-giving game suggests

that the justification of one and the same belief requires an infinity of reasons. And, what explains why the reason-giving game suggests this is (IJC) or, more particularly, the justification condition for inferential justification (viz. a belief is inferentially justified on the basis of another belief only if that other belief itself is justified, where the "only if" is meant to capture a sort of explanatory dependence).

6. *RS and the regress skeptic*

The question I now want to answer is whether (RS) is true. In this section, I will argue that even if it is true that the reason-giving game for a given belief between the regress skeptic and the subject satisfying the infinitist criteria ought rationally to result in a tie, skeptical attacks from the regress of justification are still not circumvented. If so, (RS) is also false.

Suppose that I and the regress skeptic have been playing the reason-giving game for my belief that P for quite a while, and we have left, say, thousands of steps behind, and both of us have started to lose patience. The skeptic recognizes that I have skillfully managed to cite an adequate reason for each belief that I have so far asserted and now openly concedes that I deserve a tie in the reason-giving game, that he cannot win the reason-giving game. This is a concession that the skeptic cannot succeed by continuing to raise the "what reason?" question in rationally concluding that my target belief is not justified. But now the skeptic realizes a crucial fact about the structure of my reasons, which he concedes to be infinite and non-repeating, and decides to change his strategy. Rather than continuing pointlessly to raise the "what reason?" question, the skeptic argues as follows:

> Look, I agree that you are in a position to provide an adequate answer to every "what reason?" question I raise for your beliefs. This is a remarkable feat; and to be honest, I was not expecting this. But now I realize that your victory is Pyrrhic, one that in effect signals your demise. You must agree with me that your belief that P can be justified on the basis of the reason you cite in its support only if that reason itself, which I grant you believe in, is justified, and this reason you cite in support of P is justified on the basis of another reason you cite in its support only if that latter reason itself, which I grant you believe in, is justified, and so on. This is just to take note of the fact that there is justification condition for inferential justification. Now, combine this with my concession that the structure of your reasons are infinite, and we get the result that your belief that P is not justified. This is because, given the infinity of the structure, the justification condition is never satisfied for your belief that P—the "only if" (as an explanatory dependence condition) is never eliminated or discharged: what we get is an infinity of conditionals structured

> like e_0 *is justified only if e_1 is, e_1 is justified only if e_2 is, and so on,* and it is clear that one can never get that e_0 is justified from such a structure.

Let me call this argument *the argument from the justification condition.* The argument is an old one, various versions of which have been presented by a number of philosophers in the past. To take just a few examples, the central point of the argument is made, sometimes metaphorically or cryptically, by the following remarks:

> The mode of reasoning based upon the regress ad infinitum is that whereby we assert the thing adduced as a proof of the matter needs a further proof, and this again another, and so on ad infinitum, so that the consequence is suspension, as we possess no starting point for our argument. (Sextus Empiricus 1976: 166)

> If there is a branch with no terminus, that means that no matter how far we extend the branch the last element is still a belief that is mediately justified if at all. Thus, as far as this structure goes, whenever we stop adding elements we still have not shown that the relevant necessary condition for the mediate justification of the original belief is satisfied. Thus the structure does not exhibit the original belief as mediately justified. (Alston 1986: 82)
> Consider a train of infinite length, in which each carriage moves because the one in front of it moves. Even supposing that fact is an adequate explanation for the movement of each carriage, one is tempted to say, in the absence of a locomotive, that one still has no explanation for the motion of the whole. And that metaphor might aptly be transferred to the case of justification in general. (Harkinson 1995: 189)

The argument from the justification condition purports to show that epistemic infinitism is not a non-skeptical alternative: if my beliefs are structured in the way the epistemic infinitist says they must, then none of those beliefs are justified because the justification condition for the inferential justification of each of those beliefs on the basis of (some of) the rest of my beliefs is *never* satisfied. Suppose that P is the proposition I believe whose justificatory status is in question. Suppose further that the justificatory status of P depends upon the justificatory status of R_1 (which I believe and provides evidential support for P), and the justificatory status of R_1 depends on R_2 (which I believe and provides evidential support for R_1), and so on to infinity in a non-repeating way. If this is so, then any member of this chain of propositions is justified only if the next member upon whose justification the justification of that member depends is justified. Since for each member in the chain there is another member upon whose justification its justification depends, and since there is no final member in the chain, none of the members of the chain is justified. The justification of each proposition in the chain involves a promissory note that is never paid, postponed to infinity. If so, (RS) is false.

The argument from the justification condition can be reformulated as a *reductio ad absurdum.* Suppose that P is justified. Where does its justification come from (or what does it depend on)? From (or on) R_1.

But where does R_1's justification come from? From R_2. So, we can say that P's justification comes from R_1 in the first instance and from R_2 in the second instance. Now where does R_2's justification come from? From R_3. So, P's justification comes from R_1 in the first instance and from R_2 in the second instance and from R_3 in the third instance. But now the question is: where does P's justification come from in the *last* instance? If P is justified, there must be an answer to this question: its justification must *ultimately* come from somewhere. This is because nothing can come from somewhere if it does not ultimately come from anywhere. Since given infinitism there is no answer to this question (there is no last instance), we arrive at the contradiction that P is both justified and unjustified. If this is so, the hypothesis that gives rise to the contradiction (i.e., *P is justified*) should be rejected.

7. *Infinitist responses considered*

My main aim here is not to argue that the argument from the justification condition is decisive but, more modestly, to argue that it is available to the regress skeptic willing to adopt the skeptical outcome approach but realizing that the reason-giving game played with a subject satisfying the infinitist criteria for justification ought to result in a tie. However, one might still reasonably wonder how strong the argument is or what the responses available to the infinitist are. In this section, I will address two objections the infinitist might level against the argument from the justification condition.

According to the first objection, the argument from the justification condition takes for granted a particular conception of inferential justification, one that the infinitist is not entitled to endorse. According to this conception, the structure of inferential justification is linear and the primary bearers of inferential justification are individual propositions (rather than systems of propositions). On this conception, a proposition's being inferentially justified is a property it might possibly have solely in virtue of another's proposition's transferring to it whatever justification it antecedently has thanks to there being suitable evidential relations between the two propositions. However, the infinitist might reject the linear conception of inferential justification and opt for accounting for the justification of a proposition on the basis of its relations to other propositions by adopting a holistic conception. In fact, this is what Klein qua the arch-infinitist exactly offers. Klein's infinitism is "warrant-emergentist" (2005a: 136), according to which justification is not property that can be *transferred* from one proposition to another but rather is a property that emerges whenever there is an endless, non-repeating sets of propositions available as reasons. Warrant-emergentist (or holistic) infinitism holds that "Being justified…is not a troublesome dependent property because a proposition being justified…does not arise in virtue of another proposition being justified—a proposition is justified for S in virtue of being a member

of a set of propositions each member having the required properties" (2003: 723).[14]

The skeptic might grant that the argument from the justification condition conceives the justification of a proposition on the basis of its relations to other propositions on the model of a transfer-account of justification, a model that takes justification-conferring relations to be linear rather than holistic; and, he might therefore grant that there might be some versions of infinitism, Klein's version being an example, that escape its threat. However, the skeptic might now wonder, quite plausibly I think, what motivation or rationale there is for adopting *holistic* infinitism. The crucial point is that what generates the regress of reasons *is* the linear conception of inferential justification: it is because a proposition, if it is inferentially justified, can receive its justification from another proposition that already has it that we are off to a regress of reasons each of whose justification depends on that of its successor. Infinitism is the view that fully embraces the regress of reasons that ensues from the linear conception of inferential justification. And, if the linear conception is abandoned, then it is unclear whether there is any good rationale for holding that justification requires an infinitely long sequence of reasons—the entire rationale that one might possibly have for preferring infinitism over its alternatives seems to be severely undermined. The moral is that *holistic* infinitism escapes the argument from the justification condition at the cost of undermining what might make *infinitism* an attractive option in the first place.[15]

According to the second objection, the argument from the justification condition rests on a failure to distinguish a *local* explanation of the justification of a particular proposition from a *global* explanation of why there are any justified propositions at all.[16] Suppose I want to explain why this billiard ball is moving now. Here what is to be explained is a particular event, the motion of this particular billiard ball. It seems that I can make reference to another particular event, Mr. Billiard's hitting that ball with his cue, in order to explain (at least partially) why it is moving. This is a local explanation of the motion of the ball, one that is purported to explain that particular event. However, suppose now that I want to explain why there is motion *at all*, why there is some motion rather than none at all. If this is the case, then I seek a global explanation of the very fact that there are things that move. The billiard ball is among the things that move; but if the explanandum is why there is motion at all, it seems that an appeal to Mr. Billiard's hit-

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[14] Klein also writes: "The infinitist, like the coherentist, takes propositional justification to be what I called an emergent property that arises in sets of propositions. In particular, the infinitist holds that propositional justification arises in sets of propositions with an infinite and non-repeating structure such that each new member serves as a reason for the preceding one" (2007: 26).

[15] For further discussion, see, for instance, Demircioglu (2018).

[16] The distinction is widely discussed in the literature on the cosmological argument for the existence of God. I borrow it from Cameron (2018).

ting the ball is inadequate as an explanation of the motion of the ball since that hitting is an action that causes the motion of the billiard ball in virtue of the motion it itself exhibits. Such an "explanation" appears to be blatantly circular in its attempt to provide an explanans by an appeal to the explanandum itself. Armed with this distinction, the infinitist might now claim that the regress of reasons is purported to provide a local explanation of the justification of particular propositions but not a global explanation of why there are any justified propositions at all, and as such it is not threatened by the argument from the justification condition.[17]

There are a number of things the skeptic might say in response to this objection. First, the skeptic need not let the distinction between local and global explanations go unchallenged. The point of the distinction is to make room for local explanations of particular things of a certain kind (e.g., this moving ball) while admitting that there might be more to global explanations of the existence of things of that kind in general (e.g., things that are moving) than what local explanations can provide. However, it is not clear that there is really room for such a maneuver. It might be plausibly argued that one can only provide a local explanation of particular things of a certain kind if one can provide a global explanation of the existence of things of that kind. (Can I really explain the motion of this ball without being in a position to explain motion in general? Can the local explanation of the motion of that ball be divorced from the global explanation of motion in general?) Secondly, even if a distinction between local and global explanations can be plausibly drawn in the way suggested by the objection, it is not clear that a *philosophical* theory of knowledge and justified belief can rest satisfied with a local explanation of why a given particular belief is justified. A natural meta-epistemological view is that an epistemological theory aims to achieve a level of generality characterized by a sort of *global* worry: How can there be justified beliefs *at all*? If all infinitism has to offer is local explanations of why some particular beliefs are justified without a global explanation of how there can be justified beliefs at all, then it appears to be seriously incomplete as an epistemological theory of knowledge and justified belief.

I do not for a moment presume that this is the end of the dialectic between the regress skeptic and the infinitist, but I hold that the dialectic so far attests to the power of the skeptical outcome approach the regress skeptic might adopt by endorsing the argument from the justification condition.

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[17] Klein (2003) suggests that this response is available to the infinitist but does not explicitly endorse it.

8. *Conclusion*

To sum up the discussion above, here then lies what I think is an ultimate tragedy of epistemic infinitism. Epistemic infinitism is suggested by the rules governing the reason-giving game as a proper response to the skeptic: the only way for us not to lose the reason-giving game against the skeptic is by our having at our disposal an infinity of reasons structured in a certain way. And, the reason why epistemic infinitism is suggested by the rules governing the reason-giving game is that there is justification condition for inferential justification: simply citing a reason in support of a belief is not enough to justify it, the subject must also be justified in believing the reason she cites. However, the justification condition for inferential justification can be deployed in an argument that epistemic infinitism fails to deliver a non-skeptical result. So, what makes epistemic infinitism come out as a viable option against the skeptic in the reason-giving game (namely, the justification condition) also renders it susceptible to a powerful skeptical assault. It is true that if our beliefs are structured in the way the epistemic infinitist says they must, then we do not lose the reason-giving game against the regress skeptic. But, despite this, I have argued that the skeptical outcome approach is still very much alive.

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