Six Axiarchic Arguments

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ABSTRACT: Axiarchism argues that concrete reality is ultimately generated by the logic of value. Although axiarchism has produced an interesting literature spanning nearly five decades, it is hard to find any explicitly stated axiarchic arguments. I derive axiarchic arguments from the texts of Kiteley, Ewing, Rescher, Leslie, and Millican. For each argument, I state the axiarchic principle which links abstract value to concrete existence. Most of these principles are hard to justify. But there is a justification for the axiarchic principle derived from Leslie. All these axiarchic arguments fall prey to a well-known objection. So I will add a sixth axiarchic argument which avoids that objection.

1. Introduction

An *axiarchist* argues that value is creatively responsible for the existence of all concrete things.[i] The classical axiarchists include John Leslie (1979; 1989; 2001) and Nicholas Rescher (1984; 2000; 2010). Classical axiarchism has seen some critical discussion (Parfit, 1998; Pruss, 2005). And axiarchism more generally has seen renewed interest (Collins, 2012; Roberts, 2014; Mander, 2016: ch. 7; Mulgan, 2015: ch. 3; Mulgan, 2017). This continuous interest suggests that axiarchism is attractive and deserves careful philosophical study. Nevertheless, in all the literature on axiarchism, I have not found any explicitly stated axiarchic arguments. Axiarchism therefore remains difficult to understand and assess. I aim to remedy this situation.

I explicitly state five axiarchic arguments. These are derived from texts by Kiteley, Rescher, Millican, Ewing, and Leslie. The first three arguments quantify over properties while the last two quantify over propositions. As I work from the texts by these authors, I try to state the *axiarchic principles* which link abstract value with concrete existence. After all, it is these principles which make axiarchism a distinctive doctrine. So I will discuss some strategies for justifying these axiarchic principles. Yet all these arguments rely on a common structural assumption which has been widely criticized. To avoid that troublesome assumption, I will use a technique from modern mathematics to construct a sixth axiarchic argument. Axiarchism deserves more study.

2. The Axiarchic Argument of Kiteley

The first illustration of an axiarchic argument comes from Kiteley (1958). He states his argument like this: “Divinity is perfect; Were nothing divine, divinity would not be perfect; Therefore, something is divine” (1958: 534). It seems plausible to say that this is an ontological argument for God. But several key premises are missing from his argument. His argument requires the existence of abstract objects. Specifically, it seems to require the existence of first-order properties (such as divinity), which may or may not have concrete instances. It also requires that these first-order properties have second-

order properties (divinity has the second-order property of being perfect). There are at least two degrees of perfection, namely, being imperfect and being perfect. This means that the degrees of perfection are ranked by an order relation: being perfect is better than being imperfect. Of course, there may be more degrees.

His second premise states that "Were nothing divine, divinity would not be perfect." More formally, this premise states that if divinity does not have an instance, then divinity is not perfect. It does no harm to state this as a general *axiarchic principle*: for any first-order property P, if P does not have an instance, then P is not perfect. This principle says that perfection demands instantiation. It links the value of a first-order property with its instantiation. The idea seems to be that a first-order property which lacks an instance is defective. But perhaps this principle applies, not just to first-order properties, but to all properties. After all, perfection is a second-order property which has an instance, namely, divinity. So we can say: for any property P, if P has no instance, then P is not perfect. It is hard to justify this principle. Perhaps the Platonists thought that abstract forms naturally emanated concrete images of themselves. So if some abstract form fails to emanate its concrete images, then something is wrong with it.

If this analysis is correct, then Kiteley's argument can restated as: (K1) There are some abstract properties (or natures, forms, essences) which can be instantiated by concrete things. (K2) There exists an order relation on properties that ranks them by value (or greatness, excellence). (K3) The value of properties has a unique maximum. Say this unique maximum is perfection. So exactly one property is perfect. (K4) The perfect property is *divinity*. (K5) For any property P, if P has no instances, then P is not perfect. (K6) Assume for *reductio* that divinity has no instances; if divinity has no instances, then divinity is not perfect; hence divinity is not perfect; but that is a contradiction. (K7) Therefore, there does exist some concrete *x* such that *x* instantiates divinity. (K8) The concrete *x* that instantiates divinity is God; so God exists.

3. The Axiarchic Argument of Millican

An extremely clear interpretation of Anselm's ontological argument in *Proslogion 2* has been developed by Millican (2004: 457-8). The term *nature* is used in this argument to denote an abstract object which may be instantiated by a concrete thing. On Millican's interpretation, Anselm's argument appeals to this axiarchic principle: "A nature which is instantiated in reality is greater than one which is not" (2004: 458). This is the *Principle of the Superiority of Instantiation*. It asserts that for any natures F and G, if F is instantiated but G is not, then F is greater than G.[ii] To avoid confusions about existence, it will be helpful to state this Principle more precisely: for any natures F and G, if $(\exists x)(F(x))$ but $\sim(\exists y)(G(y))$, then F is greater than G. The Principle handles existence using quantifiers. It *does not* treat existence as a predicate, property, or perfection.

It seems easy to defeat the Superiority of Instantiation. Let *tyrannicality* be the quality common to all evil tyrants; let *sagacity* be the quality common to all sages. Unfortunately, tyrannicality has been instantiated many times. Yet many have argued that sagacity has never been instantiated: it is an ideal which no human has ever realized. The Superiority of Instantiation implies that tyrannicality is greater than sagacity *just because* there have been evil tyrants. But that looks wrong. Perhaps the Superiority of

Instantiation can be improved by restricting its natures to positive natures: for any *positive* natures F and G, if F is instantiated but G is not, then F is *better* than G. But this restriction also yields an anti-axiarchic principle: for any *negative* natures F and G, if F is instantiated but G is not, then F is *worse* then G.[iii] However, these restrictions do not appear in either Anselm's argument or in Millican's analysis of it. Whether or not the Superiority of Instantiation is plausible, it appears in their arguments.

Following Millican, the *axiarchic argument over natures* looks like this: (M1) There are some natures. (M2) These natures are ordered by greatness. (M3) There exists exactly one greatest nature, namely, divinity. (M4) Natures are either instantiated by things or are not instantiated. (M5) Some natures are instantiated (e.g. humanness is instantiated by Plato). (M6) Any instantiated nature is greater than any uninstantiated nature. (M7) Assume for *reductio* that divinity is not instantiated by any concrete thing. (M8) If divinity is not instantiated by any thing, then some other natures are greater than divinity (for example, humanity is greater than divinity). (M9) But then divinity is not the greatest nature. (M10) So the assumption that divinity is not instantiated by some thing leads to a contradiction. (M11) Therefore, divinity is instantiated by some thing. (M12) But the thing that instantiates divinity is God. So God exists.

4. The Axiarchic Argument of Rescher

Rescher directly appeals to an axiarchic principle to justify the existence of our universe. His *Principle of Axiology* states that "among otherwise equally possible law-arrangements, that one is (or tends to be) realized which is maximally value-enhancing" (1984: 43). Rescher later reformulates this as the *Law of Optimality:* "Whatever possibility is for the best is *ipso facto* the possibility that is actualized" (2000: 815). And he states that "in the virtual competition for existence among alternatives it is the comparatively best that is bound to prevail" (2010: 33-34). More formally, this is just a law of instantiation: for any system of cosmic laws L, if L is maximally valuable, then there exists some concrete universe U that instantiates L.

The Rescherian axiarchic principle states that for any cosmic possibility P, if P is the best cosmic possibility, then P is realized by some concrete universe. Its contrapositive states that for any cosmic possibility P, if P is not realized by some concrete universe, then P is not the best cosmic possibility. Once more this suggests that the failure to be concretely realized is a defect. But why is it a defect? The underlying assumption is that an actualized possibility exists more intensely than an unactualized possibility. An actualized possibility *has more being than* an unactualized possibility. But a long tradition in the West says that being is goodness. It is better to exist than to not exist and it is better to exist more than to exist less. So any actualized possibility is better than any unactualized possibility. And this reasoning applies to cosmic possibilities.

Here is the Rescherian axiarchic argument: (R1) There are some cosmic possibilities. They are systems of ultimate physical laws which may or may not be concretely instantiated by actual universes. (R2) The cosmic possibilities are ranked by value. (R3) There exists some unique best cosmic possibility. This possibility can be referred to as *Omega*. (R4) Our cosmic possibility is actualized. (R5) For any cosmic possibility P, if P is not realized by some concrete universe, then P is not the best cosmic possibility.

(R6) If Omega is not actualized, then our cosmic possibility is better than Omega; but that is a contradiction. (R7) Therefore, Omega is actualized by some universe. (R8) But there is exactly one actual universe. (R9) Consequently, the universe that actualizes Omega is just our universe. Our universe is the best of all possible universes.

5. The Axiarchic Argument of Ewing

Ewing seems to present an axiarchic argument (1965: 34-5). Ewing says that God exists because "it is supremely good that God exist" (34-5); he says "it is clearly better that something good should exist than that it should not" (35); and "Universals must be exemplified in particulars for there to be anything of value at all" (35). One way to analyze Ewing's reasoning just follows Kiteley. On this analysis, Ewing's argument looks like this: (1) the universal Divinity is supremely good; (2) if Divinity has no particular instance, then Divinity is not good at all; (3) therefore, Divinity has an instance. And now the further analysis just follows that for Kiteley.

But Ewing's reasoning probably has a better interpretation. Ewing says "it is supremely good that God exist". This has the form "it is supremely good that P", where P is the proposition that God exists. So this is the attribution of supreme goodness to a proposition. On this interpretation, Ewing's argument crucially involves propositions. It runs like this: (1) There are some abstract natures which can be instantiated by concrete things. (2) There exists an order relation on natures that ranks them by value. (3) The value of natures has a unique maximum. Say this unique maximum is *divinity*. That is, the divine nature is the best nature. (4) If any nature is the best nature, then it is supremely good that it has an instance. (5) Hence it is supremely good that divinity has an instance. (6) For any proposition P, if it is supremely good that P, then it is true that P. (7) Therefore, the divinity has an instance. Its instance is God.

The distinctive premises in Ewing's argument seem to be the fourth and sixth. The fourth premise seems expressed in his statement that "Universals must be exemplified in particulars for there to be anything of value at all" (35). But that is not an argument. So perhaps the fourth premise can get some support like this: (1) Let F be any best form. (2) If any form is the best form, then it is a good form. (3) So the form F is good. (4) If any form is good, then any instance of that form is also good. (5) So if any form is good, then the situation in which it has an instance contains more goodness than the situation in which it fails to have an instance. (6) A situation which contains more goodness is better than one that contains less. (7) So if any form is good, then the situation in which it has an instance is better than the situation in which it fails to have an instance. (8) And if any form is best, then the situation in which it has an instance is the best situation. (9) But it is supremely good that the best situation obtains. (10) Therefore, if F is any best form, then it is supremely good that F has an instance.

The sixth premise is an axiarchic principle. But it concerns propositions rather than properties or natures. It states that for any proposition P, if it is supremely good that P, then it is true that P. This propositional axiarchism moves from the value of a proposition to its truth. However, the move from value to truth is not obvious, and Ewing offers no argument for it. The contrapositive makes this move clearer, because it reveals that the lack of truth is a defect. So the principle that *goodness demands truth* states that:

for any proposition P, if P is not true, then P is not supremely good. The motivation here seems to be that truth is a kind of goodness for propositions. And if truth is some kind of goodness for propositions, then necessary truth has to be the best kind of truth. Thus if any proposition is supremely good, then it could not possibly be false.

This analysis suggests that the best way to formulate Ewing's argument quantifies over propositions (which may be true or false) rather than natures (which may be instantiated or uninstantiated). If this is right, then his argument departs importantly from those of Kiteley, Rescher, and Millican. On this formulation, his argument goes like this: (E1) There are some propositions. (E2) There exists an order relation on propositions that ranks them by value. (E3) The value of propositions has a unique maximum; exactly one proposition is supremely good. (E4) The proposition that God exists is supremely good. (E5) For any proposition P, if P is not true, then P is not supremely good. (E6) Assume for *reductio* that it is not true that God exists; if it is not true that God exists, then it is not supremely good that God exists; but that is a contradiction. (E7) Therefore, it is true that God exists. (E8) So God exists. Moreover, if necessary truth is the best kind of truth, then it is necessarily true that God exists.

6. The Axiarchic Argument of Leslie

Leslie says that "Consistent sets of ethical requirements *can themselves bear creative responsibility* for the existence of a good thing or things" (1993: 73, italics his).[iv] This seems to express the idea that if it is ethically required that something exists, then it exists. This seems to express the following axiarchic principle: for any nature F, if it is ethically required that there exists some *x* that instantiates F, then there does exist some *x* that instantiates F. Rescher (1984: ch. 2.3) has argued persuasively that axiarchic principles should be formulated in terms of *axiological* rather than ethical requirements. So his axiarchic principle can be reformulated like this: for any property F, if it is axiologically required that there exists some *x* that instantiates F, then there does exist some *x* that instantiates F. However, since *axiological requiredness* is a propositional operator, it seems like Leslie's principle should be restated this way: for any proposition P, if it is axiologically required that P, then it is true that P. Call this principle *Optimality*. Optimality resembles a theorem in Andersonian deontic logic.[v] Of course, if supreme goodness entails axiological requiredness (and it would be very strange if it didn't), then Ewing's axiarchic principle is included in Leslie's principle.

An argument can now be given for Optimality. Leslie does not give this argument. But it seems to follow if the natures in Millican's argument (instantiated versus uninstantiated) are replaced with propositions (true versus false). The argument for Optimality involves two key premises. The first premise states that Optimality is the best of all possible principles. This seems analytically true. By asserting the truth of *all and only* the axiological requirements, Optimality can justifiably claim maximality. The second premise states that any true principle is better than any false principle. This can be called the *Principle of the Superiority of Truth*. Truth and falsity are values; but truth is better than falsity. Moreover, the Superiority of Truth looks analytically true. After all, any effort to refute it will have to rely on valid reasoning from true premises.

The ontological argument for Optimality now runs like this: (1) Optimality is the best of all possible principles. (2) Any true principle is better than any false principle. (3) There are some true principles. (4) Assume for *reductio* that Optimality is false; if it is false, then some principles are better than Optimality; but then Optimality is not the best of all possible principles; and that is a contradiction. (5) Therefore, Optimality is not false; (6) by the law of the excluded middle, Optimality is true. That is, for any proposition P, if it is axiologically required that P, then it is true that P. Optimality is the only axiarchic principle which is justified by any argument. Since this is an ontological argument for Optimality, some may want to identify God with Optimality. Leslie says some theists might want to identify God with an axiarchic principle.[vi]

We still need to identify the axiologically required propositions. One traditional approach says that if some nature F is maximally valuable, then it is axiologically required that $(\exists x)(F(x))$. Along with Anselm and other theists, you might say that F is the divine nature; along with Leibniz and Rescher, you might say that the F is the system of laws for the best possible universe. If you stick with this traditional approach, then Leslian axiarchism doesn't seem to advance much beyond Ewing. However, the turn to propositions allows Leslie to make a remarkable move. Suppose F is the nature of some infinite divine mind (Leslie, 2001). Although monotheists say there is exactly one such nature, a polytheist says there are many. Thus Leslie proposes that there are infinitely many infinite divine minds. Here is where propositional axiarchism shows its logical power. Let *Polytheist* assert that every perfect nature is instantiated. More precisely, Polytheist states that, for all F, if F is perfect, then $(\exists x)(F(x))$. Leslie thinks it is axiologically required that Polytheist. Hence it is true that Polytheist. And the result is an infinite class of infinite divine minds. Alternatively, you might follow Kraay (2010) and argue that any cosmic form above some threshold of excellence merits instantiation. Thus axiarchic principle entails an infinite class of meritorious universes.

If this analysis is correct, then the Leslian axiarchic argument goes something like this: (L1) There are some natures (or forms, essences). (L2) The natures are ordered by value (or greatness, excellence). (L3) There are some maximally valuable natures; these natures satisfy the second-order property of perfection. (L4) Maximally valuable natures axiologically require instantiation. Thus it is axiologically required that for any nature F, if F is perfect, then there exists some x such that x instantiates F. (L5) And the axiarchic principle states that for any proposition P, if it is axiologically required that P, then it is true that P. (L6) Therefore, it is true that, for any nature F, if F is perfect, then there exists some x such that x instantiates F. (L7) Consequently, there exists a class of perfect things, that is, things whose natures satisfy perfection. An Anselmian monotheist will say this class is singleton, containing only God. However, a Leslian polytheist will say this class is infinite, containing infinitely many infinite divine minds.

7. A Mathematical Axiarchic Argument

All these axiarchic arguments rely crucially on the assumption that there exists some maximally valuable nature or natures. Here a *nature* is just the abstract specification of some concrete thing. Natures could be properties, universals, etc. Now the *mathematical objection* states that there are no maximally valuable natures: every nature is surpassed

by some more valuable nature. Thus every possible universe is surpassed by some better possible universe; every divine mind is surpassed by some greater divine mind. Natures can be ranked by ordinal numbers: if the rank of this nature is greater than the rank of that nature, then this nature is more valuable than that nature. Just as there does not exist any biggest ordinal, so there does not exist any best nature.

It may seem that this mathematical objection defeats all axiarchic arguments. However, the turn to propositions defeats this objection. The objection assumes that there exists some ordinally-indexed hierarchy of valuable natures. Just as there are initial, successor, and limit ordinals, so also there are initial, successor, and limit natures. There exists some minimally valuable *initial natures*. Every nature is surpassed by at least one minimally better *successor nature*. Every infinite progression of natures is surpassed by at least one *limit nature* minimally better than every nature in its progression. Of course, here minimal value might be infinite value. The least valuable natures might be the natures of infinitely excellent divine minds. The lesson from mathematics is that smaller infinities are surpassed by bigger infinities. Presumably not all consistently definable natures are in this ordinally-indexed hierarchy.

It is now possible to define a property of *worthiness* rather than perfection. Thus initial natures are worthy; successor natures are worthy; limit natures are worthy. Any other natures are unworthy. The iterative hierarchy of worthy natures is an unsurpassable class of surpassable natures. Its ranks rise through all consistently definable ordinals. It is a *proper class* of natures. It is immune to the mathematical objection. Axiarchism now says that it is axiologically required that for every nature F, if F is worthy, then $(\exists x)(\mathrm{F}(x))$. And Optimality states that for any proposition P, if it is axiologically required that P, then it is true that P. Hence all these worthy natures have instances.

Another way to look at this involves deontic logic. The main point of axiarchism is that the logic of value plays a foundational role in all questions about concrete existence. Suppose some natures *ought to* be instantiated while other natures *ought to* not be instantiated. Let *Demand* be the principle that, on some iterative concept of value, all and only the worthy natures ought to be instantiated. Demand expresses the axiological obligation of abstract existence. The system of abstract objects has a *duty* to generate some concrete things (such as divine minds or universes). If abstract existence has this duty to itself, then it is reasonable to call it an *ontological duty*.

This yields an axiarchic principle: for every nature F, F is instantiated if and only if F ought to be instantiated. This axiarchic principle can be called *Supremum*. It is easy to see that Supremum is the best principle. Any other principle either instantiates some natures which should not be instantiated or fails to instantiate some natures which should be instantiated. If Supremum is true, then abstract existence satisfies all its obligations; it does its duty. If it is false, then abstract existence fails to satisfy its obligations; it fails to do its duty. Fortunately, the argument for Optimality applies to Supremum. Since Supremum is the best principle, it is true; moreover, it is necessarily true.

So the sixth axiarchic argument runs like this: (S1) There exists some class containing all consistently definable natures. (S2) The natures are ranked by value; however, there are no maximally valuable natures. (S3) Demand states that all and only the worthy natures ought to be instantiated. (S4) Supremum states that exactly those natures which ought to be instantiated are instantiated. (S5) Since Supremum is the best principle, it is true; moreover, it is necessarily true. (S6) Therefore, exactly those natures which ought

to be instantiated are instantiated. (S7) Hence there exists some non-empty class of these instances. Say this class is the Totality. If the natures are cosmic forms, then the Totality is an unsurpassable class of surpassable universes. If natures are the forms of gods, then the Totality is an unsurpassable class of surpassable gods. This need not defeat Anselm. A modal pantheist can say that the Totality is God. Others will say no God is needed here. God has been replaced by the impersonal logic of value.

8. Conclusion

I have presented axiarchic arguments derived from five philosophers. Each involves an axiarchic principle. Of all these axiarchic principles, the Leslian principle seems to be the only one with any clear justification. The justification of the Leslian principle might also work for the Ewing principle. The axiarchic principles of Leslie and Ewing benefit by quantifying over propositions rather than over properties (or universals or natures). They benefit because it seems obvious that truth is better than falsity. Since these first five axiarchic arguments suffer from trouble concerning maximality, I have stated a sixth axiarchic argument which avoids that trouble. Of course, all these axiarchic arguments, and the axiarchic principles they use, remain open to criticism. But the main insight of axiarchism is that logics of value, including deontic logics, play an essential role in the generation of concrete existence. This insight deserves additional study.

Notes

[i]According to Leslie, *axiarchism* pictures the world as ruled by value (1970: 286; 1979: 6). He says *extreme axiarchism* is the doctrine that the rule of value is principled or lawful rather than the result of divine personal intentions (1970: 286; 1979: 6).

[ii]For the Superiority of Instantiation, see Hartshorne (1941: 317-18); Kiteley (1958); Makin (1988: 85); Millican (2004: 457-8); Nagasawa (2007: 1029).

[iii]The anti-axiarchic principle leads to an ontological argument for the devil, or some worst of all possible beings (Haight & Haight, 1970).

[iv]Leslie also presents the axiarchic principle like this: "the world's existence and detailed nature are products of a directly active ethical necessity" (1970: 286; 1989: 8.4-8.13).

[v]Lokhorst (2006: 385) says that in Andersonian deontic logic, the obligation operator O is defined by introducing a term e and saying that for any proposition p, Op iff ($e \Rightarrow p$). On his interpretations of e, it is plausible that e is Optimality. Lokhorst proves that $e \Leftrightarrow (\forall p)(\mathrm{O}p \Rightarrow p)$. But the sense of obligation here is axiological rather than ethical. Thus Op means that it is axiologically required that p. The *axiarchic principle* states that $(\forall p)(\mathrm{O}p \Rightarrow p)$. Thus Optimality is equivalent to the axiarchic principle.

[vi]Leslie acknowledges that some may want to say "God" refers to creatively effective goodness (1970: 297; 1979: 1.1, 1.8; 1989: ch. 8; 2001: 179-82). Thus $(\forall p)(\mathrm{O}p \Rightarrow p)$ is God. But Leslie sees little point in this identification (2001: 185-6).

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