ISSA Proceedings 2002 – The Dialogical And Logical Structure Of A Strategy To Block Certain Vicious Infinite Regresses

I will examine two examples that illustrate a particular pattern of reasoning occasionally advanced to block a certain kind of vicious infinite regress, and use their mistakes and weaknesses to describe generally overlooked logical and dialogical properties in this kind of pattern. The reasoning can be summarized in five stages:

a. A proponent asserts that an entity *y* has a relation *R* to *x1: yRx1*. The entity *x1* usually has an important role for the proponent, e.g. it can stand for a divine being, or an explanation.

b. An opponent argues from *yRx1* that there follows an infinite regress: *x1R x2R x3R x4…*, and

c. then shows that the regress is vicious.

d. The proponent responds by claiming that *x1* has a certain property that blocks the regress at *x1*.

e. The opponent retorts by showing that y also has that property, and consequently, just as *~(x1Rx2)*, then *~(yRx1): x1* is thus rendered unnecessary, superfluous, with respect to *y*.

1. Hume

I will begin with an example from Hume because, unlike most arguments of this type, it explicitly includes most of the stages of the general pattern of reasoning that I have just summarized. His goal in Part IV of *Dialogues Concerning Natural Religion* is to show "that there is no ground to suppose a plan of the world to be formed in the divine mind consisting of distinct ideas, differently arranged, in the same manner as an architect forms in his head the plan of a house which he intends to execute" (Hume, 1948, 33). So stage (a), the position to be criticized, is the relational statement that the physical world is created by a divine mind: *wCd1*.

At stage (b) Hume wants to show that given this relational statement, the divine cause must itself also have a divine cause, and so on for each divine cause: *d1Cd2Cd3Cd4*…. His general procedure is to argue that the material world and the divine cause are similar in the relevant respects, and thus that a divine cause also requires a distinct divine cause, just as the material world requires one. An infinite regress logically follows if and only if those similarities are established, and all subsequent divine causes are also similar in the same relevant respects.
Hume first examines the material and mental worlds from the points of view of *a priori* reason, and tacitly assumes that the material world is to a divine mind just as the material world is to a mental world:
[A] mental world or universe of ideas requires a cause as much as does a material world or universe of objects, and if similar in its arrangement, must require a similar cause. For […] in an abstract view, they are entirely alike; and no difficulty attends the one supposition which is not common to both of them. (Hume, 1948, 33)

Secondly, he looks at the material and mental worlds from the perspective of experience. Here the analogical assumption is explicit: "We have specimens in miniature of both of them. Our own mind resembles the one [i.e. the ideal/divine world]; a vegetable or animal body the other [i.e. the material world]" (Hume, 1948, 33). However the focus of the argument is on the resemblances between the mental and physical worlds, not between the required resemblances between the physical and the divine worlds:

Nothing seems more delicate, with regard to its causes than thought; and as these causes never operate in two persons after the same manner, so we never find two persons who think exactly alike. Nor indeed does the same person think exactly alike at any two different periods of time. [For] [a] difference of age, of the disposition of his body, of weather, of food, of company, of books, of passions – any of these particulars, or other more minute, are sufficient to alter the curious machinery of thought and communicate to it very different movements and operations. (Hume, 1948, 33)

Hume then contrasts this to the physical realm:
As far as we can judge, vegetable and animal bodies are not more delicate in their motions, nor depend upon greater variety or more curious adjustment of springs and principles. [He then concludes with the rhetorical question:] Have we not the same reason to trace the ideal world into another ideal world or new intelligible

principle? (Hume, 1948, 33-34)

This is certainly not a successful derivation of the intended regress. He focuses his attention mainly on some vague causal similarities between physical and mental worlds, and not on relevant similarities between the physical and divine worlds. The analogy is very weak because even if we grant that there are mental causes just as there are physical causes, the mind is not as obviously immaterial with respect to vegetable or animal bodies as a divine cause is supposed to be with respect to the material world. So what is true of the mental and physical worlds is not clearly true of the divine and material worlds. Hume has not established that a divine cause of the material world requires a distinct divine cause, just as the material world requires one.

We have examined stage (b) of the extended argument, which consists of the attempt to derive an infinite regress. At stage (c), Hume presents two arguments to establish that it is vicious. First, "When you go one step beyond the mundane system [i.e. the material world] you only excite an inquisitive humour which it is impossible ever to satisfy" (Hume, 1948, 34).

There are a number of problems with this terse argument. First, he does not show that it is impossible to satisfy the "inquisitive humour". Secondly, even if he did, it is not clear why this psychological consequence would constitute an unacceptable consequence of the infinite regress. Thirdly, if instead of such a psychological problem Hume is in fact saying that the consequence of the regress is an unsolvable problem, then more evidence is required to show that there is a problem and that it is unsolvable. For the question "What causes divine cause$n$?" is always correctly answered by "divine cause$n+1$", and so at least one kind of "inquisitive humour" would be satisfied at each step of the intended regress.

In the second argument for the viciousness of the regress Hume questions the benefit or advantage of the relation, *wCd1*, which is thought to lead to the regress: "And if it [i.e. the material world] requires a cause in both, what do we gain by your system, in tracing the universe of objects into a similar universe of ideas?" (Hume, 1948, 34). Perhaps Occam's Razor is implicitly at work here, for even if we just consider the divine cause, without any reference to the regress that is supposed to be entailed, his question suggests that he sees the divine cause as an unnecessary multiplication of entities. However, the absence of any gain does not entail that the regress is vicious, because some (benign

superfluous) regresses also fail to provide any benefit or advantage, but they are not vicious.

Stage (d) is a response to the charge that an infinite vicious regress follows from the claim that the physical world is caused by a divine being, *wCd1*. The response consists of denying that an infinite regress extends from the divine cause on the grounds that the a Supreme Being falls into order of itself and by its own nature, and thus does not require a cause.

Stage (e) is a criticism to that response. Hume raises the questions, "if we stop [at the divine cause] and go no farther, why go so far? Why not stop at the material world?" (Hume, 1948, 34). He considers a reason for stopping at the divine world, and then attempts to show that the same reason also supports blocking the regress at the material world, thereby arguing that a divine cause is unnecessary, superfluous:

To say that the different ideas which compose the reason of the Supreme Being fall into order of themselves and by their own nature is really to talk without any precise meaning. If it has meaning, I would fain know why it is not as good sense to say that the parts of the material world fall into order of themselves and by their own nature. Can the one opinion be intelligible, while the other is not so? (Hume, 1948, 34)

Hume raises a good question, however, the fact that it is intelligible or conceivable for both the physical and divine worlds to "fall into order of themselves and by their own nature" does not show that the physical world in fact has such an order by its own nature.

He then provides some evidence that parts of the material world also "fall into order of themselves by their own nature and without any *known* cause. […] as in all instances of generation and vegetation where the accurate analysis of the cause exceeds all human comprehension" (Hume, 1948, 34). The problem here is that if we do not know their causes, then we have insufficient reason to infer that the order within the physical world results from its *own* nature. Secondly, even if a few parts of the physical world did fall into order by their own nature, it would not follow that the physical world *in its entirety* similarly falls into order by its own nature.

Subsequently, Hume supports the claim, expressed in the rhetorical question, "Why, then, should we think that order is more essential to one than the other?"

(Hume, 1948, 34). For "[w]e have also experience of particular systems of thought and of matter which have no order; of the first in madness, of the second in corruption" (Hume, 1948, 34). Even if these were genuine cases illustrating the lack of order in both the mental and physical worlds, it would not be sufficient to show that order is not more essential to one world than the other.

Next, Hume entertains a possible response from the proponent of the divine cause, whom he calls "anthropomorhites":

In like manner, when it is asked, what cause produces order in the ideas of the Supreme Being, can any other reason be assigned by you, anthropomorphites, than that it is a *rational* faculty, and that such is the nature of the Deity? But why a similar answer will not be equally satisfactory in accounting for the order of the world, without having recourse to any such intelligent creator as you insist on, may be difficult to determine. It is only to say that *such* is the nature of material objects, and that they are all originally possessed of a *faculty* of order and proportion. These are only more learned and elaborate ways of confessing our ignorance; nor has the one hypothesis any real advantage above the other, except in its greater conformity to vulgar prejudices. (Hume, 1948, 35)

There are a number of problems in this final stage of the extended argument. First, there seems to be an illegitimate shift of the burden of proof. For Hume seems to be asking the proponents of the divine cause to show that the same reasons for blocking the regress at the first divine cause do not also apply to the material world, but that burden falls rather onto Hume himself because it is only he who has the goal of showing that the divine cause is not necessary.

Secondly, Hume limits the possible response from the proponents of the divine cause to a single answer: rational faculty. Hume does raise important doubts about their attempt to block the regress, but this does *not* entail that there are no better answers that would succeed in blocking the regress at the divine cause *without* also eliminating the claim that the material world is caused by a divine being. (Of course the burden would then fall onto the proponents of the divine cause to present better alternatives.)

Thirdly, and more important, Hume fails to identify precisely the relevant respects in which the material and divine worlds would have to be similar in order to show that the physical world is not caused by a divine being. This is partly understandable because, forthly, *a priori* and experiential reasons both fail to perceive differences between the material and divine worlds: each kind of reason

is applied “beyond her sphere”. Though Hume explicitly acknowledges this only with respect to experiential reason, the *comparison* of *both* worlds is beyond the scope of either *a priori* or experiential reasons.

2. Miller

The next example, from Barry Miller (1999), further illustrates the recurring problems with respect to the derivation of a regress, the proof that it is vicious, and the attempt to block the entailment of a regress.

Miller’s argument makes use of Plantiga’s notion of haecceity. Plantinga understands it be an individual essence, which in his terminology means that it is both a necessary property for something to be an individual, and a property that no other individual could possess, and so it is not a qualitative property. A haecceity is said to exist and to be conceivable before ever being exemplified in any individual. On this view, therefore, an individual essence of Socrates would both exist and be conceivable before being exemplified in Socrates. And if that individual essence could be conceived of before Socrates existed, then that would be reason enough for saying that Socrates himself was conceivable before he existed. (Miller, 1999, 19). Miller’s goal in his article is to argue that no concrete individual could have been referred to before it existed, and consequently, that no concrete individual could have been conceived of before it existed. The infinite regress is one of his objections against Plantinga’s haecceitism.

Let us suppose that haecceities *H1* and *H2* have been exemplified in individuals *O1* and *O2*. One role of *H1* is to differentiate *O1* from *O2* and from all other individuals; *mutatis mutandis,* the same can be said for the role of *H2*. However, since *H1* differs from *H2*, we are now entitled to ask just what it is that differentiates them. Being themselves nonqualitative, their ultimate differentiator could obviously not be a qualitative one unless the Identity of Indiscernibles were true, which it isn’t. So what could their nonqualitative differentiator be? Since haecceities are nonqualitative differentiators, it might seem natural to appeal to haecceities of haecceities (second-level haecceities) as providing the required difference. Then, of course, third-level haecceities would be needed to differentiate the second-level ones, and so on *ad infinitum*. A more attractive alternative would be to block off the infinite regress by treating the individuation of haecceities as primitive, meaning thereby that they would differ from each other not in virtue of anything else (for example, a second-level) but simply in virtue of their being the kind of entity that they are.

The problem with allowing haecceities to be self-differentiating is that it is tantamount to admitting that they are entirely superfluous. Part of their *raison d'être* is to differentiate one individual from another. If, however, in order to account for the difference between individuals, it were acceptable to say that haecceities are themselves self-differentiating, it should be equally acceptable to say that individuals are themselves self-differentiating, thus eliminating the need for haecceities at all. Individuals would be primitive, differing from each other not in virtue of any haecceities but simply in virtue of their being individuals. (Miller, 1999, 24-25)

The intended final conclusion is that haecceities have no role to fulfill: they are unnecessary, superfluous.

The first stage begins with the relational statement that object *O1* is differentiated from all other entities by haecceities *H1: oDh1.*

At the second stage Miller attempts to derive an infinite regress from that relational statement. He tries to show, in the first paragraph of the above quotation, that haecceities cannot be differentiated by qualitative properties: "Being themselves nonqualitative, their ultimate differentiator could obviously not be a qualitative one unless the Identity of Indiscernibles were true, which it isn't". The argument is deductively valid: *if* nonqualitative entities are differentiated by qualitative differentiators, *then* the Identity of Indiscernibles is true, which it isn't. However, the truth of the conditional statement is questionable. For it is not clear which version of the identity of indiscernibles he considers to be false. But even if this argument were sound, it would only show that *H1* and *H2* are not differentiated by qualitative properties. In order to prove that they are in fact differentiated by haecceities, Miller has to assume that if something functions as a differentiatior but is not qualitative, then it is a differntiating haecceities. In other words, he must assume that there is no other kind nonqualitative differentiator. Not only does he not establish this assumption, but given his goal to show that there is a vicious infinite regress of haecceities in order to show that haecceities are superfluous, this reasoning seems question-begging.

It is perhaps because of this weakness that Miller hedges his conclusion in the following argument: "Since haecceities are nonqualitative differentiators, it *might seem* natural to appeal to haecceities of haecceities" (my italics). Since he can only conclude that there *might* be haecceities of haecceities, no infinite regress of

successive levels of haecceities is actually entailed.

At the third stage of Miller's extended argument a further difficulty arises: even if there were an infinite regress, it is not shown to be vicious. For if there were an infinite regress, *h1Dh2Dh3Dh4Dh4…*, each haecceity at level*n* would in fact be differentiated at level*n+1*, and no reason is advanced to show that the haeccieties at each level is somehow problematic. The reason he advances in the above quotation for avoiding the regress seems to be aesthetic: "A more *attractive* alternative would be to block off the infinite regress" (my italics). But this is certainly inadequate to show that an infinite regress is vicious. Though we are not even told why it would be more attractive to block the regress, perhaps a version of Occam's Razor is being tacitly used here, for there would seem to be an unnecessary multiplication of entities.

In order to evaluate the forth and fifth stages of the argument, let us assume for the sake of argument that there is a vicious infinite regress that one would naturally want to block it. His strategy is to identify reasons supporting the conclusion that *H1* and *H2* do not require to be differentiated by further haecceities, and then showing that those same reasons also support the conclusion that *O1* and *O2* similarly do not need to be differentiated by *H1* and *H2*, thereby rendering *H1* and *H2* superfluous with respect to their purported differentiating role. The major problem with his argument is that he considers *only one* way of stopping the regress at *H1* and *H2*: "by treating the individuation of haecceities as primitive, meaning thereby that they would differ from each other not in virtue of anything else (for example, a second-level) but simply in virtue of their being the kind of entity that they are". Miller would also have to show that "treating the individuation of haecceities as primitive" is the *only* way for the haeccieties to differentiate themselves. For if there are other reasons why haecceities differentiate themselves, it is possible that those reasons do not apply to objects *O1* and *O2*, and thus that *H1* and *H2* are in fact necessary to differentiate *O1* and *O2*. However, he does not establish that this is the only way for the haeccieties to differentiate themselves.

Just as with Hume's argument, there is a failure to derive an infinite regress, to show that the regress would be vicious if it were entailed, and to halt the regress in a way that eliminates what seems to begin the infinite regress.

3. The general form of the argument

The examination of the above examples can help us to identify the general form of

this type of argument. We can better grasp the general structure of the argument, and avoid mistakenly imputing inconsistency to the reasoning by seeing the development of the extended argument as an exchange between a protagonist and an antagonist.

STAGE 1: the relational statement
Protagonist:
1. There is an object *a*.
2. There is a property (or properties) *x* in *a* that is sufficient for *a* to have the relation *R* to *b1*: a*Rb1*.

STAGE 2: the derivation of a regress
Antagonist:
3. *b1* has *x*.
4. (*Usually overlooked*) There is no property (or group of properties) in *b1* that prevent *x* in *b1* from continuing to be sufficient for *b1* to have relation *R* to object (usually of the same kind) *b2*. In other words, there is no significant difference between *b1* and *a*, that prevents *x* in *b1* from remaining sufficient for *b1R b2*.
5. (*Usually overlooked,* even though it is a necessary condition when dealing with an infinite regress constructed from a binary relation.) All possible loops along the regress are blocked: no term in the regress can recur.
6. Each entity that will be successively ordered by *R* satisfies conditions (3) and (4).
7. There are infinitely many *b* entities that can be ordered by *R.*
8. There follows from (1)-(7) the infinite regress: *b1Rb2Rb3Rb4…* .

STAGE 3: the infinite regress is vicious
Antagonist:
It is very important to establish that the infinite regress is vicious. For from that viciousness it follows that *x* is not sufficient for *a* to have relation R to *b1: ~(aRb1)*, and so *b1* is superfluous with respect to its relation to *a*. It is because of these consequences of the viciousness of the regress that the protagonist is logically compelled to advance reasons to block the regress at *b1*. If the regress is not vicious, this consequence does not arise, and consequently, there is no need to block the regress. Despite the importance of establishing the viciousness of this infinite regress, philosophers (e.g., Miller) typically fail to do so, or fail to do so convincingly (e.g., Hume), or they just assume that it is vicious.

STAGE 4: the attempt to block the regress at *b1*
Protagonist:
Since the regress is vicious, the protagonist must advance reasons to justify ending the regress at either *b1* or at some later term along the regress.
9. There is a property *y* in *b1*, or at some later term along the regress, that is sufficient to block the regress at *b1*, or at that later term along the regress.

STAGE 5: the attempt to block the regress at a term earlier than *b1*, and thus to render *b1* superfluous
Antagonist:
10. The first term a also has *y*.
11. (*Usually overlooked*) There is no property in a that prevents *y* in a from being sufficient to block a from relating to *b1*. This is a crucial premise that was not established in the two examples. It is often here that these arguments fail when the two terms of the relational statement, from which it is argued that an infinite regress follows, are different. For from the mere fact that they are different (e.g., a material world and a Divine cause; an object and a haecceity), it follows that it is possible that the reason that prevents *b1* from relating to *b2* fails to prevent a from relating to *b1*, and thus ultimately fails to show that *b1* is superfluous with respect to its relation to *a*. Such a possibility must be excluded if one is to prove that *~(aRb1)*, and thus prove that *b1* is superfluous.

This completes my description of the general form of the extended argument. It is important to see it as a series of exchanges between a protagonist and an antagonist. For if we fail to see such dialogical structure, we can be disposed to impute the following contradiction to the argument: *a* has the property *x* that is sufficient for *aRb1*, and a has the property *y* that is sufficient for *~(aRb1)*. This would lead one to mistakenly judge the reasoning to be unsound.

In this paper I have examined two arguments in order to identify the general logical and dialogical form of a particular way of blocking certain vicious infinite regresses. The recurring weaknesses and mistakes in the two arguments have helped me to identify some of the problem areas of this kind of argument. The two examples further illustrated the common practice of leaving implicit many important premises and inferences in infinite regress arguments.

REFERENCES
Hume, David. (1948) *Dialogues Concerning Natural Religion,* New York: Hafner

Press.
Miller, Barry (1999) Future Individuals and Haecceitism. *Review of Metaphysics 45*, 3-28.