An Analytic Introduction to Ordinal Polytheism

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ABSTRACT: This is a short introduction to ordinal polytheism for philosophers well-versed in analytic metaphysics. It offers no arguments and very few details. It merely states the ontological commitments of ordinal polytheism. If you're looking for a less technical introduction, or for arguments, see my other papers on ordinal polytheism.

1. The Hierarchy of Sets

According to ordinal polytheism, there is an abstract background of mathematical objects. This abstract background is the iterative hierarchy of pure sets. The iterative hierarchy is base on the axioms of von Neumann – Gödel – Bernays class theory plus axioms for all consistently definable large cardinals. These axioms define the Long Line of ordinal numbers. The Long Line is that ordinal number line than which no longer is logically possible. Using the Long Line, ordinal polytheists define the *iterative hierarchy* of pure sets as expected. They use three class theoretic rules:

1. *Initial Rule*. For the initial ordinal 0 on the Long Line, there exists an initial generation V(0) of sets. This generation is empty. Hence V(0) = {}.

2. *Successor Rule*. For every successor number $n+1$ on the Long Line, the non-empty successor generation of sets V($n+1$) is the power set of V(n).

3. *Limit Rule*. For every limit number L on the Long Line, the limit generation V(L) is the union of all generations V(k) for k less than L.

2. The Hierarchy of Gods

Some of the structures in the iterative hierarchy of pure sets are the abstract forms of computers. Ordinal polytheists argue that some of these abstract forms are realized by concrete computing machines. These computers are foundational concrete objects – and they are entirely *natural* objects. The deepest laws of nature are computational. Each of these computers has some power, intelligence, and benevolence. It has some perfection. For ordinal polytheists, these computers are divine – they are *digital gods*. Since they are natural objects, they are *natural gods*. The rules that define the system of natural gods resemble the rules for the iterative hierarchy of sets. Hence the system of natural gods is the *divine hierarchy*. The rules for the divine hierarchy look like this:

1. *Initial Rule*. For the initial ordinal 0 on the Long Line, there exists an initial generation D(0) of *initial gods*. There is exactly one initial god in D(0). The initial god in D(0) is a necessarily existing unproduced divine mind. It is minimally perfect. It has minimal degrees of power, intelligence, and benevolence.

2. *Successor Rule*. For every successor number $n+1$ on the Long Line, there is a non-empty successor generation D($n+1$) of gods. For every god x in D(n), there are some ways that x can create a minimally more perfect version of itself (an improved version of itself). And for every way that x can create an improved version of itself, x does create an improved version of itself. The improved version of x is a *successor god* in D($n+1$). Hence D($n+1$) contains every improvement of every god in D(n).

3. *Limit Rule*. For every limit number L on the Long Line, there is a non-empty limit generation of gods D(L). Each limit generation contains every improvement of every progression of gods defined up to L. For every progression P defined up to L, for every way that that P can create an improvement of itself, P does create an improvement of itself. The improvement of P is a *limit god* in D(L). Every god in the progression contributes to the design and creation of each of its limit gods.

3. The Hierarchy of Universes

Some of the structures in the iterative hierarchy of pure sets are abstract programs for computers to run. And every digital god runs some program. According to ordinal polytheists, the digital gods are *cosmological engines* – every digital god runs a program that generates a universe. Each universe is to its god as software is to hardware. Gods programmatically generate but do not miraculously penetrate their universes – they produce the local laws of nature, which they do not violate. Since every digital god supports exactly one universe, the divine hierarchy supports a *cosmological hierarchy*. As expected, the cosmological hierarchy is defined by the three class theoretic rules:

1. *Initial Rule*. For the initial number 0, there is an initial non-empty generation R(0). The initial generation contains the *initial universe*. This initial universe is generated by the one initial god in D(0). This is the minimally intrinsically valuable universe. It does not contain any evil. It merely contains simple things.

2. *Successor Rule*. For every successor number $n+1$ on the Long Line, there is a successor generation R($n+1$). Every universe in R($n+1$) is a *successor universe* designed and created by some successor god in D($n+1$). Each successor generation contains every improvement of every universe in its predecessor. Thus R($n+1$) contains every improvement of every universe in R(n). More formally, for any x, if x is in R(n), then for any y, if y is an improvement of x, then y is in R($n+1$). Every successor universe is more intrinsically valuable than its predecessor.

3. *Limit Rule*. For every limit number L on the Long Line, there is a non-empty limit generation R(L). Every universe in R(L) is a limit universe designed and created by some limit god in D(L). Each limit generation contains every improvement of every progression defined up to L. For any progression P, if P is defined up to L, then for any y, if y is an improvement of P, then y is in R(L). Every limit universe is more intrinsically valuable than any universe in the series of which it is the limit.

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4. The Hierarchy of Counterparts

At some stage in the cosmological hierarchy, universes emerge that contain things. And the improved versions of universes contain improved versions of those things. When a god designs an improved version of an old universe, it has to satisfy four design constraints. The first constraint is that every thing in the old universe must have at least one new version of itself in the new universe. The new version of the old thing is a *counterpart* of the old thing. The second constraint says that distinct things in the old universe must have distinct counterparts in the new universe. The third constraint says that no thing in the old universe can have a worse counterpart in the new universe. The fourth constraint says that at least one thing in the old universe must have a better counterpart in the new universe.

Since you exist in our universe, you have more perfect counterparts in the more perfect descendents of our universe. Your more perfect counterparts realize more perfect versions of your life. All your positive potentials will be realized by your counterparts. Your present earthly life is the root of an endlessly ramified tree of better lives. This tree is your *tree of life*. You are *saved* in your tree of life. Since your counterparts are all generated by natural gods according to natural laws, this is a purely naturalistic theory of life after death. It is a naturalistic soteriology. Your tree of life rises through infinitely many generations in the cosmological hierarchy. More precisely, for every number on the Long Line, your tree of life contains a generation of revised lives indexed by that number. As expected, three class theoretic rules are used to formalize your tree of life. They look like this:

1. *Initial Rule*. For the initial number 0 on the Long Line, there is an initial life in your tree of life. This initial life is your present earthly life. This initial life is the sole member of the initial generation T(You, 0) of your lives.

2. *Successor Rule*. For every successor number $n+1$ on the Long Line, your tree of life contains a successor generation T(You, $n+1$). The successor generation T(You, $n+1$) contains every improvement of every life in T(You, n). For every n on the Long Line, for every life x in the n-th generation of lives T(You, n), for every way to improve x, there is a successor life x^* in T(You, $n+1$) that is improved in that way.

3. *Limit Rule*. For every limit number L on the Long Line, your tree of life contains a limit generation T(You, L). The limit generation T(You, L) contains every improvement of every ethical progression up to L. For every limit number L on the Long Line, for every ethical progression P defined up to L, for every way to improve that entire progression, there is a limit life in T(You, L) that is improved in that way.