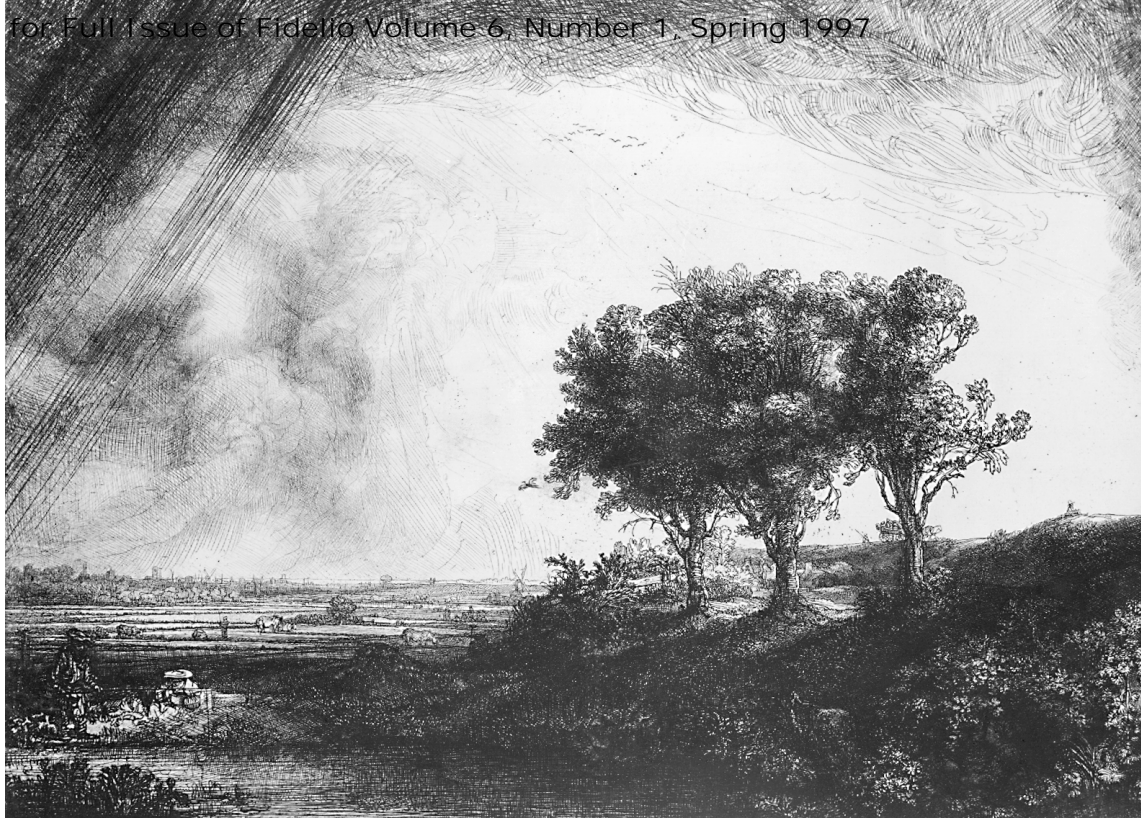


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The Platonic Christian Concept of Time-Reversal

by William F. Wertz, Jr.

The purpose of this essay is to elaborate the history of the Platonic Christian concept of time-reversal, which Lyndon H. LaRouche, Jr., has applied to the domain of mathematical economics in a number of recent essays. This concept was first developed by Plato (427-347 B.C.) and elaborated upon by some of the leading Christian theologians, from St. Augustine (A.D. 354-430), Boethius (A.D. 480-524), St. Anselm (A.D. 1033-1109), and St. Thomas Aquinas (A.D. 1225-1274), to Cardinal Nicolaus of Cusa (A.D. 1401-1464).

In his essay "The Truth About Temporal Eternity" (*Fidelio*, Summer 1994) and in two more recent articles cited below, LaRouche argues, contrary to the prevailing empiricist view, which assumes that the present and the future are determined mechanistically by the past and that the universe is entropic, that the future shapes the present through the power of human cre-

ativity, and that the universe is not-entropic.

LaRouche argues, as do Plato and the above theologians, that the Good Itself, or Being, is Absolutely Infinite, Eternal, and Immutable, while the created universe or realm of becoming is good, finitely or relatively infinite (transfinite, to use the language of the German mathematician Georg Cantor [1845-1918]) and characterized, as Heraclitus (500 B.C.) maintained, by change. However, LaRouche emphasizes that, because man is created in the image of God the Creator (*imago Dei*) and because the physical universe is created according to the *Logos* or Reason, man, by imitating God the Creator through the generation of hypotheses, higher hypotheses, and hypothesizing the higher hypothesis, has both

Rembrandt van Rijn, "The Three Trees" (1643).

the capacity (*capax Dei*) and mandate to exert dominion over, and thus develop, the physical universe (Genesis 1:28), which will obey him to the extent that his hypotheses are valid, i.e., in harmony with the lawful ordering principles according to which the universe is created (natural law).

Man is thus the instrument or agent of God's ongoing creation. Insofar as he acts in the image of God by generating valid hypotheses, his hypotheses, higher hypotheses, and he himself, in hypothesizing higher hypotheses, are relatively timeless. Such ideas or thought-objects (referred to by Cusanus as *entia rationis* or rational entities, and by Bernhard Riemann [1826-66] as *Geistesmassen*), share the characteristics of Eternity in the temporal domain, including the characteristic of simultaneity.

Thus, in his essay entitled "U.S. Law: Neither Truth nor Justice" (*Executive Intelligence Review*, Aug. 23, 1996), LaRouche writes in the section on the Good:

Given: a series of events, each and all consistent with a specific theorem-lattice. These events are located in time and place. The relevant theorems are determined by an underlying hypothesis. In what part of that span of time and place, does that hypothesis exist? The hypothesis never changes during any part of that span of space-time; it exists, "simultaneously," in all the places and times defined by that theorem-lattice, but is confined to none of them. Meanwhile, that hypothesis is the *necessary and sufficient cause* for the selection of all of the theorems adopted as propositions for the occurrence of the events. In this respect, as *sufficient and necessary cause*, the hypothesis has the form of the *Good*. Yet it is not, otherwise, The Good indicated by Plato, since the existence of the highest Good (*The Good, or Absolute Good*) can not be conditional, can not be the predicate of an hypothesis. Yet, as efficient *necessary and sufficient cause* the *Good (Absolute)* is located in no place or time, but simultaneously in all, just as the hypothesis relevant to a specific theorem-lattice. . . .

If one says, from this latter standpoint, that the future acts to shape the present, or that the present shapes the past and future, it is only in the Platonic sense of hypothesis and Good, that such an efficient role of time is to be premised. It is through the relatively timeless hypothesis which shapes past, present, and future, that these three aspects of a continuing process behave as if they might be efficiently interactive at all times. They do not interact directly, of course! Like the past, the future is presently implicit in the relevant hypothesis (hypothesis, higher hypothesis, or hypothesizing the higher hypothesis), and always implicit in the Good. It is through the mediation of *sufficient and necessary reason* (hypothesis), that the effect, which acts as if from future upon past, occurs. (pp. 27-28)

FIGURE I. *The Divided Line of Plato's "Republic."*

The Good itself (unhypothesized)		
Intelligible	Ideas or hypotheses	The creative intellect, which hypothesizes hypotheses, higher hypotheses, and the hypothesis of the higher hypothesis, thus advancing to the Good itself (Third Heaven)
	Mathematical objects	Deductive logic, to deduce conclusions based upon established hypotheses (assumptions) in respect to sensible objects (Second Heaven)
Visible	Sensible objects	Empiricist trust, which employs inductive logic to generalize based upon mere perception of sensible objects (First Heaven)
	Images of objects	Imagination

In his essay entitled "The Essential Role of 'Time-Reversal' in Mathematical Economics" (*Executive Intelligence Review*, Oct. 11, 1996; *Fidelio*, Winter 1996) LaRouche writes:

"When" is the future? At what point in time? Similarly, what is the beginning-point in time from which to define the cumulative past with which the future is to collide? The answer to this seeming paradox, was already known by Plato, by Augustine of Hippo, and, therefore, also, Thomas Aquinas: *All time is subsumed under a general regime of simultaneity!* The highest expression of *change*, is that lattice of higher hypotheses which expresses the transfinite notion of hypothesizing the higher hypothesis. What underlies that lattice? That lattice is underlain by what Plato distinguishes as *the Good*. In the analysis situs of hypothesis, that Good is "simultaneously" efficient in all times and places which might exist. Thus, in those terms of reference, the past and future, as hypothesis, are existent as efficient agency in each present moment.

He then indicates that this does not mean that there is therefore a mechanistic predestination or predetermination which annuls freedom:

Does this signify that each and all events are predetermined—"predestined." No The general set of relations defined by the principle of hypothesis are otherwise describable as relations within an hierarchy of available "pathways of change." The ordering principle underlying this hierarchy is cardinality, as we have indicated that principle of ordering of Riemannian physical space-time manifolds here. It is in terms of efficient choices of pathways of change, that the future acts upon the present.

The Platonic concepts of hypothesis, higher hypothesis, and hypothesizing the higher hypothesis employed by

LaRouche in the above passages, are most explicitly developed by Plato in his discussion of the “Divided Line” in Book VI of the *Republic*. [SEE Figure 1]

In Book VI of the *Republic*, Plato argues that hypotheses are the “children” (506e) or the “offspring of the Good itself.” (508c) They therefore have the form of the Good. Thus what is characteristic of the Good itself, i.e., being present simultaneously in all, while at the same time not located in any particular time or place, is also the characteristic of hypotheses as having the form of the Good. One translation of the *Republic* by Paul Shorey refers to the offspring of the Good, i.e., hypotheses, as “boniform.” (509a)

In his discussion of hypothesis in Book VI of the *Republic*, Plato writes that the human mind “using as images the things that were previously imitated, is compelled to investigate on the basis of hypotheses.” On the simplest level, the mind generates a hypothesis from which it derives theorems deductively. As Plato writes, through such hypotheses the mind “makes its way not to a beginning but to an end.” (510b) Such a simple hypothesis thus generates a deductive theorem-lattice. In this domain, as Plato argues, “a soul . . . is compelled to use hypotheses, and does not go to a beginning because it is unable to step out above the hypotheses, and it uses as images those very things of which images are made by the things below . . .” (511a)

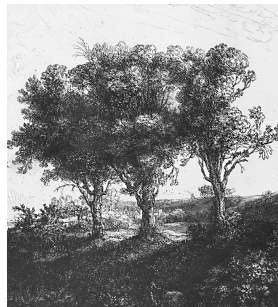
However, as Plato makes clear in the *Parmenides*, a paradox necessarily arises when new evidence emerges, which is inconsistent with the deductive theorem-lattice of a pre-existing or established fixed hypothesis. Since the characteristic of the created universe is change, any attempt to comprehend the laws of the universe based upon a fixed hypothesis is doomed to failure. The resultant paradox can only be resolved through the creation of a deductively discontinuous, superior or higher, hypothesis.

In the *Republic*, Plato writes, that in hypothesizing such higher hypotheses, the human mind “makes its way to a beginning that is free from hypotheses; starting out from hypothesis and without the images used in the other part, by means of forms themselves it makes its inquiry through them.” (510b)

Thus, the mind of man both has the capacity and is compelled to generate a sequence of valid higher hypotheses. Plato refers to this capacity and to the mental act of generating such a sequence of higher hypotheses as “argument itself” which operates with “the power of dialectic.” (511b) This is what Lyndon LaRouche refers to as “hypothesizing the higher hypothesis.” In hypothesizing the higher hypotheses, as Plato writes, the mind

makes “the hypotheses not beginnings but really hypotheses—that is, steppingstones and springboards—in order to reach what is free from hypothesis at the beginning of the whole. When it has grasped this, argument now depends on that which depends on this beginning and in such fashion goes back down again to an end; making no use of anything sensed in any way, but using forms themselves, going through forms to forms, it ends in forms too.” (511b-c)

In order to conceptualize the “idea of the Good,” one must hypothesize the hypothesis of the higher hypotheses. However, the Good itself, the First Principle, is itself “free from hypothesis,” because it is uncreated. It is the Good itself, which underlies this entire hierarchy of hypotheses as generated by man in God’s image. Because each valid hypothesis, higher hypothesis and the mental act of hypothesizing the higher hypotheses is an “offspring of the Good itself,” they are each relatively good and thus share in the characteristics of Eternity through participation.



Reflections on Temporal Eternity

FOR PLATO, the paradox of the participation of time in the Eternal, is a reflection of the paradoxical relationship between Being and becoming, or Unity and plurality.

This is the paradox of the One and the Many, which Plato develops negatively in the *Parmenides* dialogue, and positively in the *Philebus*.

In the *Parmenides*, as referenced above, Plato demonstrates that a devastating paradox necessarily arises, if one attempts to apply a fixed hypothesis (a One) deductively to a multiplicity (a Many), while excluding the possibility of change to a superior hypothesis capable of accounting for new evidence inconsistent with the fixed hypothesis.

In the *Philebus*, Plato resolves this paradox of the One and the Many, by pointing out that in addition to the One in the form of a fixed hypothesis, which limits the unlimited Many, the mind of man, which belongs to the family of the Cause or Maker of the universe, is capable of hypothesizing an unlimited family of limits, i.e., an unending multiplicity (Many) of higher hypotheses (Ones).

Thus, although the Eternal is unchanging, the mind of man, which is akin to God, is capable in the domain of temporality, through its capacity to hypothesize the

hypothesis of the higher hypothesis, i.e., Eternity itself, to assume a relationship in the world of becoming similar to that of God in respect to his creation.

Thus, in *On Beryllus*, Nicolaus of Cusa writes:

For just as God is the Creator of real entities and of natural forms, man is the creator of rational entities and artificial forms. These are nothing other than similitudes of his intellect, just as the creatures of God are similitudes of the divine Intellect. Therefore, man has intellect, which is a similitude of the divine Intellect, in creating. (pp. 303-304)

The distinctions between Eternity and time, Being and becoming, and Unity and multiplicity which underlie the concepts of temporal Eternity and time-reversal, are most explicitly developed by Plato in the *Timaeus*, Section 7. Every one of the Christian theologians, whom I shall discuss, bases his consideration of this subject matter upon the argument developed in this dialogue.

What Plato argues is, that the created universe is an image of its pattern, which is an eternal living being. He says that Eternity cannot be attributed fully to the created universe. In fact, Eternity is the actual pattern of the created universe, which latter is the image. Time is “a moving image of Eternity,” (37d) whereas Eternity remains ever one. In respect to time, one can say past, present, and future, but in respect to Eternity, all one can say is that it *is*. There are no such distinctions of time in Eternity, and parts of time cannot be attributed to Eternal Being. He writes,

We must in my opinion begin by distinguishing between that which always is and never becomes, from that which is always becoming, but never is. (27d)

He writes further that,

We say of it that it *was* and *shall be*, but on a true reckoning, we should only say *is*, reserving *was* and *shall be* for the process of change in time: for both are motions, but that which is eternally the same and unmoved can neither be becoming older or younger owing to the lapse of time, nor can it ever become so. (38a)

If one looks at the Old Testament, this is the meaning of God’s self-description as “I am who am.” (Exodus 3:14) We see this in St. Augustine’s discussion in the *City of God*, of the concept of God, in connection with Plato’s *Timaeus*. In Book VIII, Section 11, entitled “How Plato has been able to approach so nearly to Christian knowledge,” St. Augustine writes,

But the most striking thing in this connection, and that which most of all inclines me almost to assent to the opinion that Plato was not ignorant of those writings, is the

answer which was given to the question elicited from the holy Moses when the words of God were conveyed to him by the angel; for, when he asked what was the name of that God who was commanding him to go and deliver the Hebrew people out of Egypt, this answer was given: ‘I am who am; and thou shalt say to the children of Israel, He who *is* sent me unto you’; as though compared with Him that truly *is*, because He is unchangeable, those things which have been created mutable *are* not—a truth which Plato vehemently held, and most diligently commended. (pp. 256-257)

In the Gospel of John, it is similarly significant that Christ refers to himself in the same terms as “I am.” (Jn 8:28, 13:19)

In other writings of Plato, besides the *Timaeus*, it is clear that his concept of Eternity is cognate with his concept of Unity. As Plato argues, Unity cannot have parts, it is not divisible. In the *Sophist*, for example, Plato writes: “Surely unity in the true sense and rightly defined, must be altogether without parts.” (245a) Thus eternity, as in the case of unity, does not have parts, and can therefore not experience succession, which is characteristic of multiplicity, mutability, and divisibility.

Furthermore, in the *Republic*, in his discussion of the “Divided Line” in Book VI, Plato writes: “Therefore, say that not only being known is present in the things known as a consequence of the Good, but also existence and being are in them besides as a result of it, although the Good isn’t being, but is still beyond being, exceeding it in dignity and power.” (509b)

What Plato is developing here, is the notion that the Good is not being in the sense of existence or of the created universe, but is Infinite Being, which is prior in nature to and of a higher cardinality than existence. This is the distinction made by Georg Cantor between the Absolute Infinite, and the transfinite realm of becoming. Here, Plato is making the distinction between Eternal Being and the existence or being of the created universe: The Good itself transcends being in the sense of the created universe, both in dignity and in power.

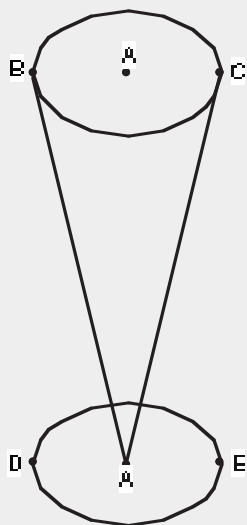
Let us now review the views of the Christian theologians concerning these issues.

Nicolaus of Cusa

Rather than proceeding chronologically, we will begin with Nicolaus of Cusa, who most efficiently communicates the concept of time-reversal.

In his book *On Actual Potential* (or as Jasper Hopkins translates it, *On Actualized Possibility*), Cusanus introduces the image of a spinning top. [SEE Figure 2] He writes,

FIGURE 2. From Nicolaus of Cusa, "On Actual Potential."



Nevertheless, we desire to be led by a sensible image—especially regarding questions how Eternal Being is all things at once and how the whole of eternity is within in the present moment—so that when we leap forth, having left this image behind, we may be elevated above all sensible things. . . .

I shall try to show you such an image. I will take the example of boys playing with a top—a game known to us all, even in practical terms. A boy pitches out a top; and as he does so, he pulls it back with a string which is wound around it. The greater the strength of his arm, the faster the top is made to rotate—until it seems while it is moving at the faster speed to be motionless and at rest. Indeed, boys speak of it as then at rest.

So let us describe a circle, *bc*, which is being rotated about a point *a* as would the upper circle of a top; and let there be another fixed circle, *de*: Is it not true that the faster the movable circle is rotated, the less it seems to be moved?

Suppose, then, that the possibility-to-be-moved is actual in it; i.e., suppose that the top is actually being moved as fast as possible. In that case, would it not be completely motionless?

Since the motion would be infinite velocity, points *b* and *c* would be temporally present together at point *d* of the fixed circle—without its being the case that point *b* was temporally prior to point *c*. (For if *b* were temporally prior to *c*, the motion would not be maximal and infinite.) And yet, there would not be motion but would be rest, since at no time would points *b* and *c* move away from the fixed point *d*.

Hence the maximal motion would at the same time also be minimal motion and no motion.

In that case, just as the opposite points *b* and *c* would be always at point *d*, would they not always also be at the

opposite point from *d*, namely, at *e*?

Would this not likewise hold true for all the intermediate points of the circle *bc*?

Therefore, the whole of the circle would at every instant be simultaneously present at point *d*. And the whole of the circle would be not only at *d* and *d*, but also at every other point of the circle *de*.

Let it suffice, then, that by means of this image and symbolically we are somehow able to see that (if the circle *bc* were illustrative of eternity and circle *de* were illustrative of time) the following propositions are not self-contradictory; that eternity as a whole is at once present at every point of time and that God as the beginning and the End is at once and as a whole present in all things. (pp. 83-85)

This is an example of the simultaneity of Eternity, which cannot be divided into parts and is immutable. Therefore, Eternity is not located merely at the beginning before creation, because you can not refer to what is before time, in terms of time. Nor is Eternity in the future after some so-called end times. Rather, Eternity is simultaneously as a whole present in every moment, past, future, and present.

In *On the Vision of God*, Cusanus writes similarly in respect to Eternity versus temporal succession:

Now, posterior to most simple eternity no thing can possibly be made. Therefore, infinite duration, which is eternity itself, encompasses all succession. Therefore, everything which appears to us in a succession is not at all posterior to Your Concept, which is eternity. For Your one Concept, which is also Your Word, enfolds each and everything. . . . [A]ll things exist because You conceive them. Now, You conceive in eternity. but in eternity succession is—without succession—eternity itself, i.e., your Word itself, O Lord God. Any given thing that appears to us in time was not conceived by You before it existed. For in eternity, in which You conceive, all temporal succession coincides in one and the same now of eternity. Therefore, where the future and the past coincide with the present, nothing is past or future. (p. 167)

In the same work, Cusanus, using the metaphor of a clock, writes:

So let the concept of a clock be, as it were eternity itself. Then, in the clock, movement is succession. Therefore, eternity enfolds and unfolds succession, for the Concept of a clock—a Concept which is eternity—both enfolds and unfolds all things. (pp. 169-171)

St. Augustine

After his conversion, St. Augustine also discusses time in Book 11 of his *Confessions*. Addressing God, he writes,

Although You are before time, it is not in time that You precede it. If this were so, you would not be before all time. It is in eternity, which is supreme over time, because it is a never-ending present, that you are at once before all past time and after all future time. . . . Your years are completely present to you all at once, because they are at a permanent standstill. (p. 263)

Think of Nicolaus of Cusa's image of a top which is spinning so rapidly that there is no motion. Augustine continues,

You made all time; You are before all time; and the "time," if such we may call it, when there was no time was no time at all. (p. 263)

Boethius

Boethius, in the *Consolation of Philosophy*, Book 5, Section 6, writes that "God is eternal" and that eternity is the "whole simultaneous and perfect possession of boundless life." He continues:

Whatever comprehends and possesses at once the whole fullness of boundless life, and is such that neither is anything future lacking from it, nor has anything past flowed away, that is rightly held to be eternal, and that must necessarily both always be present to itself, possessing itself in the present and hold as present the infinity of moving time. (p. 423-425)

Boethius cites Plato specifically: "Following Plato, we should say that God is indeed eternal, but that the world is perpetual." (p. 427) In other words, the world cannot be eternal, since that which is eternal has no beginning or end, or rather is the beginning and end of the world, which as an image of the eternal is created, and therefore has a beginning. But the world, even though it has a beginning, does not have an end. Therefore, it is perpetual, although not eternal. The fact that the world is perpetual, means that it does not wind down and perish, but rather is not-entropic.

St. Anselm

St. Anselm, in Chapter Eighteen of the *Proslogion*, writes,

You are unity itself, divisible in no respect. . . . Your eternity exists always as a whole. (p. 106)

He then discusses the relationship of Eternity to space and time. In Chapter Nineteen, he writes,

He is not in space and time, but all things are in him. . . .

In no case, *were* You yesterday, or *will* You *be* tomorrow. Instead yesterday, today and tomorrow You *are*. Or better, You simply are, existing beyond time. You do not

exist yesterday or today or tomorrow, for yesterday, today, tomorrow are nothing other than temporal distinctions. Now although without You nothing can exist, You are not in space or time, but all things are in You. For You are not contained by anything, but rather You contain all else. (p. 106)

One should recall Lyndon LaRouche's discussion of hypotheses as having the same form as the Good itself, in that the hypothesis is present in the entire theorem-lattice defined by that hypothesis. It is present in all time and space within that theorem-lattice, without being itself contained by time and space, rather containing time and space.

This is a concept which Nicolaus of Cusa discusses in all of his writings. God is "all in all" (I Cor 15:28), and yet is not in any one thing. He cannot be defined or contained by anything created or finite, anything characterized by space and time. But He is nonetheless present in all.

In Chapter Twenty-two, St. Anselm continues:

In a proper and unqualified sense you are who you are [this is a reference to the self-description of God in Exodus as "I am Who am"—WFW] because You have neither a past nor a future, but only a present and because You can not be thought ever not to be. (p. 108)

In Chapter Twenty of the *Monologium*, St. Anselm writes,

The Supreme Being exists everywhere, in all things and through all things; and the fact that it neither began to be nor will cease to be entailed that it always was, is, and will be. (p. 31) . . . [I]t is necessary that it exist everywhere and always, i.e., in every place and at every time. (p.32)

Think back to what Plato wrote in the *Sophist* respecting unity not having any parts.

In Chapter Twenty-one of the *Monologium*, St. Anselm writes, "Neither the Creative Being, its life time nor its eternity admits in any way of a past or a future." (p. 34) And, in Chapter Twenty-two, entitled, "How the Supreme Being Exists in Every Place at Every Time and at No Place at No Time":

Only those things which exist in space and time in such way that they do not transcend spatial extension or temporal duration are bound by the law of space and time. (pp. 35-36) . . . [The Supreme Being] does not receive into itself distinctions of space and time. . . . Nor does it exist in the fleeting temporal present, which we experience, nor did it exist in the past, nor will it exist in the future. For these are distinguishing properties of finite and mutable things; but it is neither finite nor mutable. (p. 38) . . . [Nevertheless,] it is

present to all finite and mutable things. . . . According to the consistent truth of two different meanings, the Supreme Being exists everywhere and always, nowhere and never—i.e., in every place and time, and in no place and time. (p. 38)

In succeeding chapters, St. Anselm argues that the Supreme Being “contains all things by its pervasive presence” (p. 38):

The Supreme Substance is without beginning and without end, and it does not have past, a future, or a temporal, i.e., a fleeting present, such as we experience; for its lifetime, or eternity, which is identical with itself, is immutable and without parts. . . . Hence, what else is true eternity, befitting the Supreme Being alone, other than unending life existing as a complete whole at once? (p. 39)

St. Thomas Aquinas

In the *Summa Theologica*, St. Thomas Aquinas writes in answer to Question VIII in respect to The Being of God in Things: “God is in all things, as an agent is present to that upon which it works.” (Q.VIII.a.1) With this argument, Aquinas introduces the concept that the Eternal is present in the temporal world, as a cause is present in that which is caused or created.

Think of what Lyndon LaRouche emphasizes in respect to the ontological issue in “U.S. Law: Neither Truth nor Justice”:

If all elements of a theorem-lattice are efficiently generated by the efficiency of the hypothesis underlying the entirety of that theorem-lattice, is reality located primarily in that hypothesis, or in the elements explicitly referenced by a theorem? Or: If one element is the result of a change imposed upon another element, which is more “real,” those elements, or the agency which imposes the change

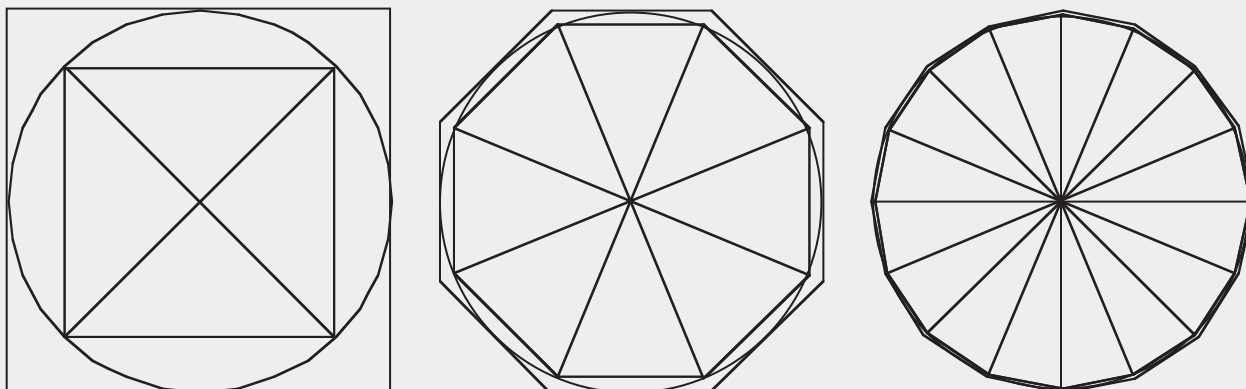
upon their existence? Equivalent: Which is more real, the Creator of the universe, or the elements within that created universe? (p. 29)

What we are dealing with here is the question of causality in the sense of a final, rather than instrumental cause, i.e., the hypothesis which underlies an entire theorem-lattice. We see the same method in Nicolaus of Cusa, where, for example, using geometry, he demonstrates in *On Learned Ignorance* and in *On the Quadrature of the Circle*, that circular action is primary in respect to any polygon, or as Plato would have put it, the circle exceeds the polygon “in dignity and power.” The polygon, no matter how many times its sides are multiplied, can never attain to equality with the circle which circumscribes it. [SEE Figure 3] However, a polygon is generated, i.e., caused, by folding a circle. For example, a line is generated by folding a circle once, and a square is created by folding the circle twice and then connecting the points where the folds intersect the circumference. [SEE Figure 4] Thus, the circle has a higher cardinality and ontology than the polygon. The circle is therefore present in every polygon, as a result of the fact that it is the causal agent of the polygonal figures upon which it works, in the same way that the Creator is present in the created universe as the cause of that which He has created. St. Thomas continues:

Spiritual things contain those things in which they are as the soul contains the body. Hence also God is in things as containing them. (Q.VIII.a.1) . . . He is in all things as giving them being, power and operation, so He is in every place as giving it being and power to be in a place. (Q.VIII.a.2) . . . He is in all things by His essence, because He is present to all as the cause of their being. (Q.VIII.a.3)

On the question of the immutability of God, and

FIGURE 3. No matter how many times its sides are multiplied, the polygon can never attain equality with the circle.[



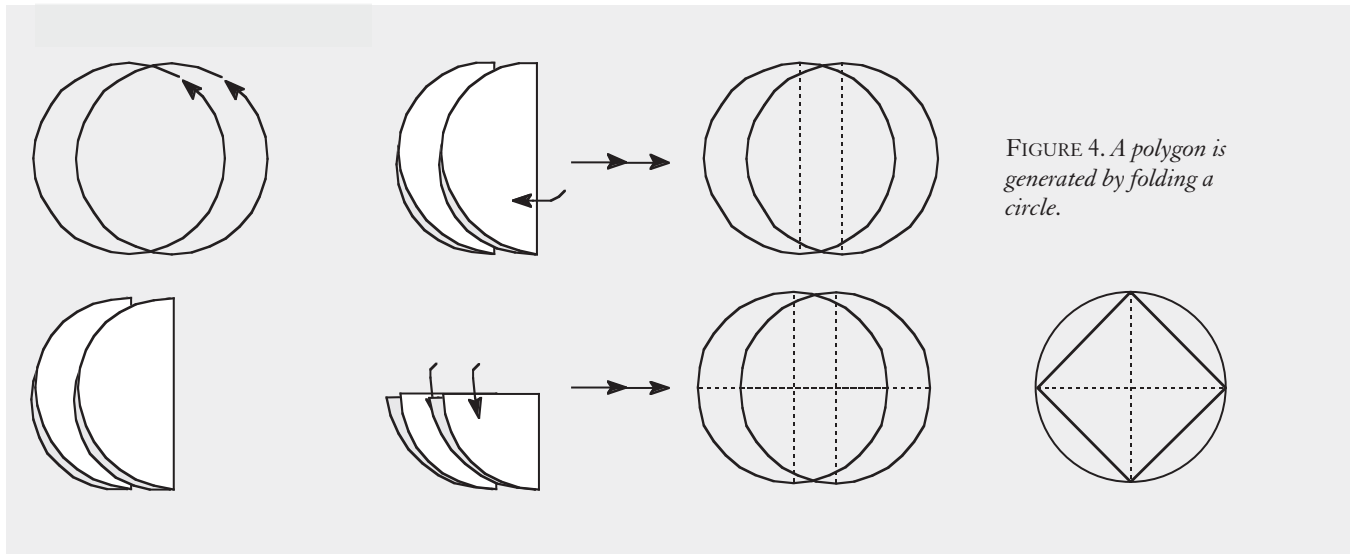


FIGURE 4. *A polygon is generated by folding a circle.*

therefore His Eternity, Aquinas cites the Book of Malachi 3:6, in which it is said, “I am the Lord and I change not.” (Q.IX.a.1) In that respect, Aquinas answers by citing St. Augustine, who wrote, “God alone is immutable; and whatever things He has made, being from nothing, are mutable.” (Q.IX.a.2) Again we have here the distinction between the domain of the Absolute and that of the transfinite, the latter being characterized by change, whereas that of the Absolute is unchanging.

In respect to Eternity, Aquinas quotes Boethius: “Eternity is the simultaneously whole and perfect possession of interminable life.” (Q.X.a.1) He continues:

Time is nothing else, but the measure of before and after in movement . . . Whatever is wholly immutable can have no succession, so it has no beginning and no end. . . Eternity is interminable—that is, lacks beginning and end. . . Eternity lacks succession, being simultaneously whole. (Q.X.a.1) . . . The notion of Eternity follows immutability as the notion of time follows movement. . . Eternity is nothing else, but God Himself. (Q.X.a.2)

Citing Boethius, he concludes: “Eternity is simultaneously whole, which cannot be applied to time, for eternity is the measure of a permanent Being, while time is the measure of movement.” (Q.X.a.4)

The New Testament

This concept of Eternity is also reflected in the New Testament concept of God as the “Alpha and the Omega.” (Rev 1:8) God is simultaneously both the beginning and end, while having no beginning or end. God is the beginning in the sense that He is the Origin, the Source or the First Principle of everything

created, but also the End in the sense of the purpose of the created universe. In the transfinite domain of becoming, the end of the created universe as mediated by man is to come closer to the Good itself through a process of directive change. By hypothesizing higher hypotheses, man brings himself and the universe, of which he, as created in the image of God, i.e., *imago Dei*, is the master, into increasing harmony with the Origin of creation, i.e., God. Man is the only being who can conceive of the Good itself and who desires Eternity. Therefore, the mandate he receives in Genesis is to use his agapic reason to exert dominion over nature.

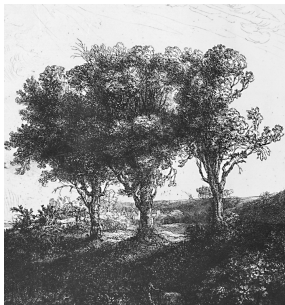
The paradoxical concept of time-reversal is otherwise central to the concept of the Incarnation as expressed in the New Testament. As the Gospel of John states, “In the Beginning was the Word, and the Word was with God, and the Word was God. He was in the beginning with God. All things came to be through him, and without him nothing came to be.” (Jn 1:1-3) And yet in time, “the Word became flesh and made his dwelling among us.” (Jn 1:14). This paradox, which defies mere logic, is only comprehensible from the standpoint of temporal Eternity.

In *On Learned Ignorance*, Nicolaus of Cusa writes,

And we ought not to believe that the Firstborn—viz., God and man—preceded the world temporally but should believe that He preceded it in nature and in the order of perfection and above all time. Hence, by existing with God above time and prior to all things, He could appear to the world in the fullness of time, after many cycles had passed. (p. 133)

Cusanus writes further in the same work:

And all these things were done not serially (as a concept is temporally expressed by us) but by an instantaneous operation—beyond all time and in accordance with a willing that befits Infinite Power. (pp. 136-37)



Does God's Foreknowledge Deny Man's Free Will?

AS INDICATED earlier, this concept of Eternity does not mean that man is predetermined in such a way as to deny him his freedom. Free will is necessary, if man is to have the capacity (*capax Dei*) to hypothesize the higher hypotheses, required to exert dominion over nature, and to bring himself and the universe into ever greater proximity and harmony with the Good itself. The universe, as we have seen, is perpetual or not-entropic. However, man, who is the highest expression of that created universe, has a responsibility to contribute to the ongoing creation and to make progress by overcoming fixed hypotheses and the entropy, or attrition, which is the result of remaining within a fixed mode of behavior or production.

As Nicolaus of Cusa indicates in the *Game of Spheres*, what distinguishes man from an animal is that animals

lack the free power that is in us. When I invented this game, I thought, I considered, and I determined that which no one else thought, considered or determined, because each man is free to think whatever he wishes. In the same way he is free to consider and determine whatever he wishes. This is why everybody does not think the same thing, because each person has his own free spirit. But beasts do not have this freedom. Therefore they are impelled to do those things that they do by their nature so that all the members of each species hunt and make nests in the same way. (p. 71)

In contrast to the animal, who is moved by the “necessitating command of nature,” Cusanus argues that “our regal and imperial spirit is not bound by this structure. Otherwise it would not invent anything, but would follow only the impetus of nature.” (p. 71)

It is this concept of free will, not merely of the freedom to choose between good and evil, but rather of a not-entropic freedom based upon creative reason, which characterizes man as in the image of God. Man's true

freedom consists of the “free power” to invent something new and thus, in contrast to the beast, to change the social reproductive behavior of our entire species in an evolutionary, not-entropic manner.

This concept of the free will, which participates in Eternity through creative intellect, is the solution to the *Parmenides* paradox of the One and the Many. With such freedom, man is not a slave to either sense perceptions, nor to a fixed hypothesis, on the basis of which his conclusions are predetermined. Rather, man is capable of rising to the level of creative reason and hypothesizing higher hypotheses. As LaRouche develops in all of his writings, the validity of this hypothesizing power is manifested in increases in the potential relative population-density of mankind, as mediated through axiomatic-revolutionary discoveries of principle and their application technologically and culturally.

The apparent contradiction between God's foreknowledge in Eternity, and man's free will in time, can only be resolved from the standpoint of time-reversal as discussed above. For example, Boethius writes,

If you should wish to consider God's foreknowledge, by which He discerns all things, you will more rightly judge it to be not foreknowledge, as it were of the future, but knowledge of a never-passing instant, and therefore it is called not prevision (*praevidentia*), but providence (*providentia*), because set far from the lowest things, it looks forward on all things as though from the highest peak of the world. (p. 427)

The notion of foreknowledge, if it is seen from the standpoint of temporality, implies that the foreknowledge occurs in the past in respect to the future and therefore predetermines the future. But what Boethius suggests is, that foreknowledge is not “prevision,” in the sense of seeing from a temporal standpoint. It is a mistake to impose upon God's foreknowledge, the notion of temporality. One should not conclude that God, in the past, has foreknowledge of the future, and that He is therefore making that future necessary, i.e., predetermining or predestining it. Rather, it is a question of providence from the highest peak. The paradox results from not actually having a correct understanding of Eternity in respect to time, i.e., not having a correct understanding of the paradox of temporal Eternity.

There is no past in God, from which standpoint He predetermines the future. Rather, God in Eternity only has an eternal present, or rather, is only an eternal present, which is all-embracing of what in the temporal transfinite domain is seen as succession. What we do now, is only foreknown by God, Who is Eternity, from

the standpoint of an all-embracing or enfolding present. Thus, Boethius argues,

There are really two necessities, the one simple, as that it is necessary that all men are mortal; and the other conditional, as for example, if you know that someone is walking, it is necessary that he is walking. Whatever anyone knows cannot be otherwise than as it is known, but this conditional necessity by no means carries with it the other simple kind. For this sort of necessity is not caused by the thing's proper nature but by the addition of a condition; for no necessity forces him to go who walks of his own will, even though it is necessary that he is going at the time when he is walking. (pp. 429-431)

And, continuing,

But God beholds those future events which happen because of the freedom of the will, as present; they, therefore when related to the divine perception, become necessary to the condition of the divine knowledge, but considered in themselves do not lose the absolute freedom of their nature. Therefore, all those things which God foreknows will come to be, will without doubt come to be, but certain of them proceed from free will. And although they do come to be, yet in happening they do not lose their proper nature, according to which, before they happen, they might also not have happened. (p. 431)

In "The Harmony of the Foreknowledge, the Predestination, and the Grace of God with Free Choice," St. Anselm makes the same distinction as Boethius:

For although God foreknows all future events, he does not foreknow that all of them are going to occur by necessity. Rather he foreknows that some of them will occur as a result of the free will of a rational creature. . . . For since what God wills is not able to not to occur, when He wills for no necessity either to compel the human will to will or to prevent it from willing, and when He wills that the effect follow the act of human willing, it is necessary that the human will be free and that there occur what it wills. . . . And before these things occur it is possible that they never occur. Nevertheless, in a certain sense they occur necessarily and this necessity derives, as I said, from free will. (pp. 186-187)

St. Anselm cites the following statement by the Apostle Paul: "Whom He foreknew, He predestined to become conformed to the image of His Son, so that His Son would be the firstborn among many brethren and whom he predestined, these He also called, and whom he called, these he also justified and whom He justified, these He also glorified." (Rom 8:28-29) St. Anselm argues that the Apostle Paul is merely using the past tense,

because there is no verb for the eternal present, and that the past tense, because it is completed action, is closer to the eternal present, than is the temporal present, which is merely fleeting. He writes,

Thus we can recognize that for lack of a verb properly signifying the eternal present, the Apostle used verbs of past tense; for things which are temporally past are altogether immutable, after the fashion of the eternal present. . . . Free choice and God's foreknowledge are not at all inconsistent with each other. There consistency results from the nature of Eternity, which encompasses the whole of time and whatever occurs at any time. (pp. 190-191)

Thus, both Boethius and Anselm emphasize that God's foreknowledge, which should be seen from the standpoint of the eternal present, is a foreknowledge that man will act with free will, because that is the nature of man as created in God's image and therefore, that is the nature of God's foreknowledge in respect to man, as opposed to a creature which was not created with free will.



The Trinity: Man's Mind As a Similitude Of Eternity

AS LYNDON LAROCHE has written in *The Science of Christian Economy*, "economic science was developed, in fact, by Christianity; furthermore, the evidence is that perhaps economic science could not have been developed except by Christianity. The essence of this connection is expressed by the *Filioque* of the Latin Creed . . ." (p. 230) The Creed states that the Holy Spirit proceeds from the Father and the Son. (*Filioque* means "and the Son.") Since the Holy Spirit, the third person of the Trinity, is love (*agapē*), and the Son, the second person of the Trinity, is the *Logos* or Reason, through which all things are created, and since the *Logos* or Word became man, the Christian concept of the Trinity implies that all men and women created in the image of God, through imitation of Christ, have the capacity and the responsibility to express their love (*agapē*) for God by hypothesizing the higher hypotheses necessary to benefit their fellow man, by enabling him to exert increasing dominion over the physical universe.

As LaRouche writes in the *Science of Christian Economy*, chapter V, entitled "*Agapē*": "What is em-

phasized at this immediate juncture, is the agreement, the coextensive congruence of *agapē* and of universal acts of creative reason. The reaching out to the universality of mankind's past, present, and future, *for the love of God*, is *agapē* expressed practically, as a creative act directed toward perfection of the creative powers of mankind." Echoing the Apostle Paul's first Epistle to the Corinthians (I Cor 13), he writes "Without such *agapē*, there is no creative power, no creative act." (p. 238)

Since man is created in the image of God, in Christian theology, the human intellect is triune. Moreover, since man is in the image of God in respect to his creative capacity, which he shares with God, the Trinity must be reflected in the creative process of the human mind.

In *The Game of the Spheres*, Nicolaus of Cusa discusses how this is the case through the example of the invention of a game. He writes,

I thought to invent a game of knowledge. I considered how it should be done. Next I decided to make it as you see. Cogitation, consideration, and determination are powers of our souls. No beast has such a thought of inventing a new game which is why the beast does not consider or determine anything about it. (p. 69)

Cusanus stresses that these are three distinct powers of the one intellective soul, "because thinking is the first, and the next consideration, and the last determination. Thinking generates consideration, and determination proceeds from them." (p. 71)

As Cusanus emphasizes, when man rises above sense perception and ratiocination, both of which are based on temporal images, to the level of creative intellect, which functions in the realm of hypothesizing higher hypotheses, his mind, which is a similitude of Eternity, experiences a form of timelessness appropriate to a creature in time.

In this argument, Cusanus bases himself both upon the discussion of the "Divided Line" in Book VI of Plato's *Republic*, and the Apostle Paul's description of the Third Heaven in II Corinthians 12:2-4. Thus, in *On Learned Ignorance*, Cusanus writes, "For when the soul is in time, where it does not apprehend without images, it seems to be the senses or reason (ratio) rather than the intellect; and when it is elevated above time, it is the intellect, which is free from images." (p. 142) He further argues that when we ascend to the level of creative intellect, we have been "raptured" into the "third heaven of the most simple intellectuality." (p. 150) Because "the intellect is not temporal and mundane, but is free of time

and of the world," (p. 138) it can be described as "timeless time."

Thus, in *On Equality*, Cusanus writes,

The soul sees also that it is timeless time. For it perceives that time is in transmutable being and there is transmutation only in time. It perceives therefore, that time is always other in the temporal. Consequently, it sees that the time in it, removed from all otherness, is timeless. If it therefore sees that number is in the various numbers, it also sees that the all-numerating, innumerable number is in it. (p. 367)

Cusanus presents a paradox. Man as created is finite, but as created in the image of the Creator, he is also relatively infinite. He is therefore a finite infinite. He is in time as created, but insofar as he rises to the level of creative intellect in the image of God Who is Eternity, he is relatively timeless. Time is defined by change, but when man utilizing his creative intellect hypothesizes higher hypotheses, he has the form of the Good itself, and thus is timeless. If one removes everything other, and locates one's activity from the standpoint of Eternity, then one has risen to a level of intellect, which is characterized by timeless time. If he sees that plurality presupposes unity, then he sees that God, Who is Absolute Unity, is present in his own mind. Cusanus continues:

And thus it sees that the time in it and the number in it are not other and diverse. And if it sees time contracted in the temporal and in itself absolved of contraction, then it sees that time is not eternity, which is neither contractible nor participable. Hence the soul also sees that it is not eternity, since it is time, although timeless. It sees therefore, that it is temporally incorruptible beyond the temporal in the horizon of eternity, however, not simply, as eternity, which is simply incorruptible, since incorruptibility precedes all otherness. Hence the soul sees that it is conjoined to the continuous and the temporal. Therein indeed are the operations which it effects with help of the corruptible organs, as for example perception, ratiocination, deliberation and the like, successive and temporal. And it sees, however, that it is absolved of the continuous in the work of the intellect, which is separate from the organ, since while it understands, it understands suddenly. And thus it finds itself between the temporal and the eternal. (p. 367)

Because man is created, he cannot be eternal, he cannot be God, Who is Absolute, although he can be an adopted son of God, or, as Cusanus writes in *On Learned Ignorance*, a "created god" (p. 93) and in *On Conjectures*, a "human god." (p. 127) His temporality refers to his finitude; his timelessness to his relative infinitude as created in the image of God. His intellect is therefore beyond the temporal in the horizon of Eternity. As such, the work of

the intellect, hypothesizing the higher hypotheses, occurs suddenly beyond time. Cusanus continues:

However, how it is with the vision of time, consider the following: The Hebrews say that the beginning of time is the past, after which comes the present, and the future follows. If you look at the past as time gone by, you see that it is past in the present and in the future will be past. If you look at the present, you see that it was present in the past and will be present in the future. If you look at the future, you see that in the past it has been future and in the present is future and in the future will be future. And the soul, which is timeless time, sees all this in itself. It sees itself therefore as timeless triune time, as past, present and future. However, the past time, which always is and will be past, is perfected time. Likewise the present time, which always was and will be present, is perfected time. Thus also the future, which always was and is future, is perfected time. And there are not three perfected times, but rather one perfected time, perfected in the past, perfected in the present, and perfected in the future.

This time will never be able to pass away. The past as past does not vanish, because it always is and will be past, just as little do the present and the future. Therefore, there is nothing new in that timeless time, where nothing is past that were not also present or future, although the past has indeed passed in the past and the future is not yet in the future, but rather only the present exists in the present; however, otherwise in the past and future time, as previously stated.

Therefore, the soul, which is timeless time, in its essence sees the past and future as present and names the past memory, the present intellect, and the future will. . . . (p. 368)

This consideration of timeless time makes manifest that the soul is the similitude of eternity and that it intuits everything through itself as through the similitude of eternity, while it itself aims towards the eternal life, which it alone desires. . . .

Therefore, what the soul finds in itself in respect to the perfection of its essence—namely the untrinity of timeless time and the generation of the second, which succeeds the first time, and the procession of the third from both; the equality of nature in the three hypostases of timeless time and the existence of one hypostasis in the other, etc.—that it transfers to its Origin, which is eternal, in order to be able somehow to intuit this Origin in itself as though in a mirror and enigma. (p. 369)

The human mind as triune, having memory, intellect, and will, is an image of eternity. Therefore, man has a foretaste of and shares in eternal life, in hypothesizing higher hypotheses. The human mind as past, present, and future shares in the simultaneity of Eternity. Man is not merely finite. He is also relatively or contractedly infinite. The characteristics of Eternity are not just in Eternity, and not not experienced in any way by man.

Rather, man, insofar as his mind is timeless time, has the capacity through hypothesizing the higher hypotheses to share in the form of the Good itself. As Plato says, hypotheses as offspring of the Good are boniform, even though not the Good itself. Therefore, as LaRouche emphasizes, a hypothesis is simultaneously present throughout a theorem lattice defined by that hypothesis. It is present in all places and time within that theorem-lattice. That which underlies hypothesizing the higher hypothesis is the Good itself.

Even as there is a qualitative distinction between Eternity and temporal time, in the form of man's mind, that is not an unbridgeable gap, because man's mind is a similitude or image of Eternity. Therefore, man himself is capable of experiencing Eternal Life within temporal existence, in the agapic hypothesizing activity of his intellect, in which he transcends time in the "horizon of Eternity."

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