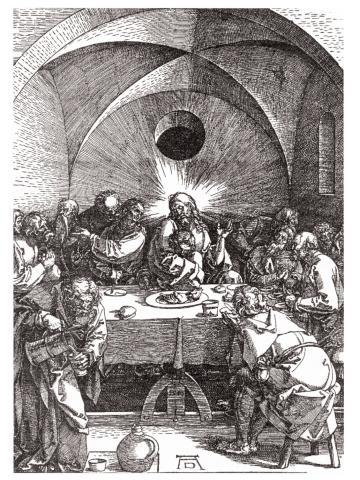
The Method of Learned Ignorance

by William F. Wertz, Jr.



Albrecht Dürer, "The Last Supper," 1510.

Lyndon H. LaRouche, Jr. has correctly emphasized, modern science was launched single-handedly by one individual, Cardinal Nicolaus of Cusa (1401-64), with the completion of his groundbreaking book, Learned Ignorance, on February 12, 1440. As we know from his letter dedicating the book to Cardinal Julian Cesarini, Cusanus was led to embrace the central methodological concept of learned ignorance while returning by sea from Constantinople to the Council of Florence via Venice between

November 27, 1437 and February 8, 1438. Cusanus had left the Council of Basel in order to travel to Greece on behalf of Pope Eugene IV. There he was to organize representatives of the Greek Orthodox Church to attend the ecumenical council in Florence which briefly achieved reunification of the Roman Catholic Church and the Eastern Orthodox Churches which had split from Rome in the year A.D. 1055.

As Cusanus also writes in his letter to Cesarini, in On

Learned Ignorance, he was able to attain an understanding of things, which he had "long desired to attain by various doctrinal approaches [variis doctrinarum viis], but could not." As we shall see, although Cusanus does not thereby deviate from the teachings of the Catholic Church, by employing the Platonic method with its emphasis on creative intellect and rejecting the Aristotelian method with its emphasis on inductive and deductive logic based on the "law of contradiction," Cusanus was able not only to render the "doctrines" of Christianity

intelligible, but in doing so to found modern science.

The method of learned ignorance is not the method of rote memorization. It is the Socratic method of negation and hypothesis, as is further clarified by another work, *On Conjectures,* which was also completed in the year 1440 and was conceived as a companion piece to *On Learned Ignorance*. In his *Defense of Learned Ignorance* (1449), Cusanus explicitly identifies his method as that of Socrates. He writes that Socrates excelled the Athenian

intelligentsia of his day, "in that he knew that he was ignorant, whereas the others [who were boasting that they knew something important, though being ignorant of many things] did not know that they were ignorant."

Cusanus writes further that he found a similar concept in Philo Judaeus, who wrote in *Questions on Genesis* that "the summit of knowledge is reserved only for God, whom the soul calls as a witness to the fact that with a pure conscience it is confessing its ignorance. For by itself the soul knows that it knows nothing unfailingly."

In the same location Cusanus likened doctrinaire theologians who boast of their knowledge of theology to blind men. "For almost all who give themselves to the study of theology spend time with certain positive traditions and their forms; and when they know how to speak as do the others whom they have set up as their instructors, they think that they are theologians."

As we shall see, the response of the Aristotelians to *On Learned Ignorance*, beginning with a work written by John Wenck entitled *On Unknown Learning* and written between March 26, 1442 and mid-summer of 1443, was to denounce Cusanus—who was later elevated to the position of Cardinal—for violating traditional "orthodoxy." To this day, if one consults a standard Catholic encyclopedia, Nicolaus of Cusa, the founder of modern science and defender of the Christian faith, is falsely characterized as a pantheist, in large part based upon Wenck's discredited writing.

Cusanus is also usually dismissed by such truly ignorant people as a conciliarist, that is, as an adherent of the view predominant at the Council of Basel (1431-38) that the church council should have supremacy over the Pope. In doing so, they ignore the fact that it was Cusanus who left the Council of Basel in support of Pope Eugene IV in 1437, based precisely upon the principles he espoused in his *On Catholic Concordance* (1433); while it was Wenck who, as Cusanus writes in his *Defense of Learned Ignorance*, "took up the condemned cause of the men of Basel."

As Wenck's attack on *On Learned Ignorance* and Cusanus' *Defense* make clear, the real issue then and as it continues to be today, both within and without the Catholic Church, is the issue of Plato versus Aristotle. From the standpoint of Plato, God is the Creator, man is created in His image (*imago Dei*) and is capable of creativity (*capax Dei*), and the physical universe is not-entropic. From the standpoint of Aristotle, God is not present in the world, man is merely capable of ratiocination and not of creativity, and the physical universe is entropic.

The primary polemic of both *On Learned Ignorance* and its companion piece, *On Conjectures,* was against the Aristotelian "law of contradiction," which denied

the "coincidence of opposites" in the Divine Mind. The fact that Cusanus' concept of the "coincidence of opposites" was an attack on Aristotelianism, was immediately recognized by John Wenck, who accused Cusanus of destroying the "fundamental principle of all knowledge, viz., the principle that it is impossible both to be and not to be the same thing, as we read in Metaphysics. But this man cares little for the sayings of Aristotle." Wenck attributed Cusanus' method to a "meagerness of instruction in logic" and insisted that Cusanus' notion of coincidence of opposites "destroys Aristotle's entire doctrine."

In response to Wenck, Cusanus wrote: "But the Aristotelian sect now prevails. This sect regards as heresy the method of the coincidence of opposites. Yet, the endorsement of this method is the beginning of the ascent unto mystical theology. Hence, this method, which is completely tasteless to those nourished in this sect, is pushed far from them, as being contrary to their undertaking. Hence, it would be comparable to a miracle—just as would be the transformation of the sect—for them to reject Aristotle and to leap higher."

From the 1440's to today, those, as Cusanus wrote, "laboring with the Aristotelian tradition," be they adherents of the later Reformation or the Counter-Reformation, have found common cause in rejecting and mischaracterizing the fundamental intellectual breakthrough achieved by Cusanus in *On Learned Ignorance*.

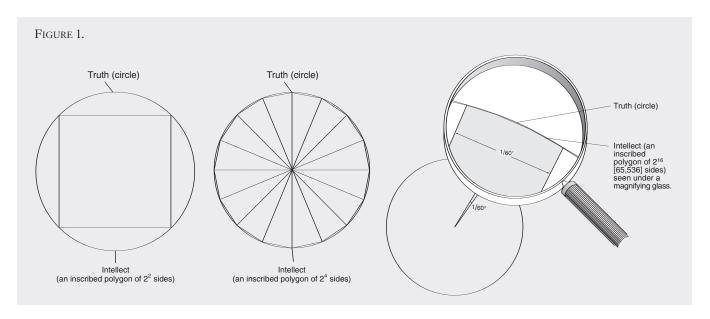
In this essay I intend to identify what is unique about this work, which in conjunction with Cusanus' later work, "On the Quadrature of the Circle" (1450), contributed to a qualitative shift in world history following the Council of Florence.



Cusanus' Concept of God

ON LEARNED IGNORANCE is comprised of three books. The first book deals with God, with Absolute Maximality. The second book deals with the universe, which he describes as a contracted maximum. The third book deals with Jesus Christ, and in particular

with the notion of the Incarnation. Jesus Christ is described as the Absolute Maximum and the contracted maximum. In the third book, Nicolaus of Cusa attempts



to render intelligible the concept of the Incarnation, the idea that Jesus Christ is the *Logos* and man. This, of course, is something unique to Christianity and is not accepted by other religions, including Judaism and Islam.

If one wishes to understand the qualitative breakthrough in world history achieved in the aftermath of the Council of Florence, one must consider precisely this issue—not, however, at the level of blind faith, but rather, as Cusanus did, in his attempts to put forward an intelligible representation of the Incarnation which was coherent with the notion of the *Filioque*, the central issue at the Council of Florence.

In St. Paul's Letter to the Colossians, he writes that "all the treasures of wisdom and knowledge" are hidden in Christ. "He is the image of the invisible God, the firstborn of all creation. For in him were created all things He is before all things, and in him all things hold together." Similarly the Apostle John says: "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."

If these statements are true, then knowledge of Christ is the necessary key to understanding God, the physical universe, and man. If one believes that God is triune and all things are created through the Word of God, the second person of the Trinity, then there are certain implications that flow from that. There are certain scientific truths which flow from the paradox of Christ being Godman.

From Nicolaus of Cusa's standpoint, if one believes, i.e., gives intellectual assent to this presupposition and

studies its implications, then the Incarnation, specifically the person of Jesus Christ, is the one in whom all the treasures of wisdom and knowledge are hidden and to be discovered.

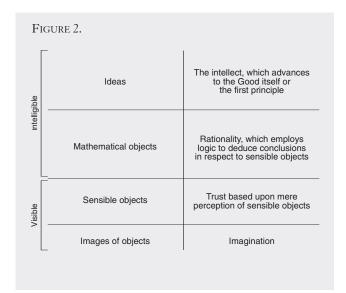
Since Cusanus' notion of Jesus Christ is that he is the Word of God and is therefore Maximal Reason, this is totally integral to the idea that, through the imitation of Christ, one rises to the level of creative reason and thus is able to act, as a microcosm, upon the universe or the macrocosm as a whole.

The Maximum-Minimum Principle

Cusanus' discussion of God builds on that of St. Anselm, who in his *Prologium* wrote that God is "that being than which a greater cannot be conceived." Cusanus writes that the Maximum is "that than which there cannot be anything greater." But Cusanus goes beyond Anselm to argue that the maximum is also simultaneously the minimum.

In Book I, Chapter 3 of *On Learned Ignorance*, Cusanus uses the impossibility of squaring a circle to demonstrate the inability of the finite, i.e., created human intellect in the realm of Becoming, to know the Absolute Infinite or God with precision (SEE Figure 1). He writes:

For truth is not something more or something less, but is something indivisible. Whatever is not truth cannot measure truth precisely. (By comparison, a non-circle [cannot measure] a circle, whose being is something indivisible.) Hence, the intellect, which is not truth, never comprehends truth so precisely that truth cannot be comprehended infinitely more precisely. For the intellect is to truth as

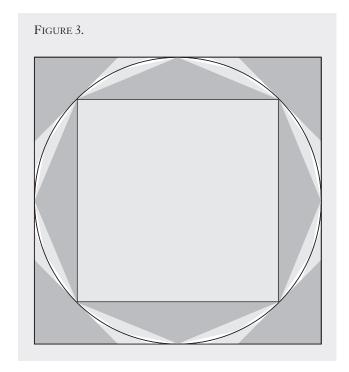


[an inscribed] polygon is to [the inscribing] circle. The more angles the inscribed polygon has the more similar it is to the circle. However, even if the number of its angles is increased *ad infinitum*, the polygon never becomes equal [to the circle] unless it is resolved into an identity with the circle.*

Now although the human intellect cannot know the Absolute Maximum with precision, by means of mathematical forms, the human intellect, as distinct from imagination, sense perception and rationality (*ratio*), can nonetheless ascend transcendentally "unto simple intellectuality," leaving behind "perceptible things."

Nicolaus of Cusa's concept of such mental ascension is based explicitly on Plato's discussion in Book VI of the *Republic* of four levels of cognition: imagination, sense perception, rationality (logic), and creative intellect (SEE Figure 2). The last level, which is the capacity which distinguishes man from a beast and defines him as created in the image of the Creator, is denied to exist by the Aristotelians. But as Cusanus points out, mere rationality, because it is incapable of combining "contradictories in their Beginning," is incapable of ascending to a vision of God, who is both Maximum and simultaneously Minimum.

In Chapter 4, Cusanus argues that "if you free the *maximum* and the *minimum* from *quantity*—by mentally removing *large* and *small*—you will see clearly that the maximum and the minimum coincide."



To demonstrate this, Cusanus refers to the impossibility of squaring a circle. If you circumscribe a polygon around a circle, as you create more sides, the polygon becomes smaller. If you inscribe a polygon in a circle and increase the number of sides, the polygon becomes larger. Neither polygon will ever attain to absolute identity or equality with the circle, because they can always become lesser in the case of the circumscribed polygon or greater in the case of the inscribed polygon. The circumference of the circle, which is of a different species nature than the polygon, is therefore the minimum and simultaneously the maximum (SEE Figure 3).

Nicolaus of Cusa thus uses this mathematical example as a metaphor for the fact that God, if He were compared to a circle, could not be described in terms of large or small. Moreover, if you want to "see" God, Who is the Minimum and the Maximum, you have to free yourself from comparative notions of greater or lesser.

In Chapter 5, Cusanus writes that "oneness cannot be number, for number, which can be comparatively greater, cannot at all be either an unqualifiedly minimum or an unqualifiedly maximum. Rather, oneness is the beginning of all number, because it is the minimum; and it is the end of all number, because it is the maximum."

The point that Cusanus is making is that God is oneness and that number presupposes oneness, because number is the multiplication of oneness. Without oneness, number would not exist.

Everything but the Absolute One is contracted (con-

^{*} See "On the Quadrature of the Circle," translation by William F. Wertz, Jr., *Fidelio* Vol. III, No. 1, Spring 1994, pp. 56-64; and "Nicolaus of Cusa's 'On the Quadrature of the Circle,' " *The New Federalist*, Nov. 28, 1994, pp. 6-7.

tractum) or concrete (concretum). In using the term "contracted" in opposition to "Absolute," Cusanus is here making the same distinction as is made by the Scholastics between God, the Creator of the universe, and the universe which is created. That which is contracted, is derived from the Absolute and imitates it, but because it is created, it exists contingently and with a certain plurality. Its infinity is therefore expressed finitely rather than absolutely.

Thus, the Absolute Infinite of Georg Cantor or the Absolute Being of Plato bounds the transfinite realm of Becoming, even though the realm of Becoming is boundless within its own contracted realm. The physical universe itself can be endlessly developed as mediated through man's own unending capacity for concept formation. But neither man nor the universe can ever become equal to God.

Oneness Is Trine

Cusanus then argues that, as Pythagoras taught, oneness is necessarily trine. As St. Augustine had previously argued, Cusanus describes the Trinity as oneness, equality of oneness, and union. The trinity, because it is the One unqualifiedly Maximum, exists eternally prior to creation, which is why the second person of the Trinity, the Son, is not "made," but rather "begotten." To distinguish begottenness from generation, Cusanus uses the following mathematical example: Begottenness is "one repetition of oneness—i.e., is oneness once [i.e., oneness times one]." In the case of generation, we multiply oneness two times or three times, so oneness will generate from itself another—e.g., the number two or the number three or some other number. "But oneness once repeated [i.e., oneness times one] begets only equality of oneness; this [repeating] can only be understood as oneness begetting oneness. And this generation is eternal."

In On Learned Ignorance, Chapter 10, Cusanus shows how the Trinity is reflected in the sentence, "Oneness is maximal." "Oneness," the subject of the sentence, is beginning without a beginning; "maximal" is a beginning from a beginning. It is begotten, but not made, because at the same time that it is from a beginning, it is a beginning (cf. "God from God, Light from Light, true God from true God" in the Nicene Creed); "is" is the procession from both. But to understand oneness as trine, as Cusanus writes, "we must leave behind the things which, together with their material associations, are attained through the senses, through the imagination, or through reason [ratio]—so that we may arrive at the most simple and most abstract understanding [intelligentiam]."

Next, Cusanus quotes St. Augustine, whom he refers to as the "Platonist Aurelius Augustine": "In the mind of the Creator number was the principal exemplar of the things to be created." The maximal One which is threeness is the Form of all forms. Therefore, one can attain certain insights into the Maximally One, Form of all forms through ascension from the finite geometrical forms which descend from it. On this basis, he proposes to ascend from the quantitative things to the non-quantitative. He will use mathematics in this way to ascend in the mind's eye to a vision of God.

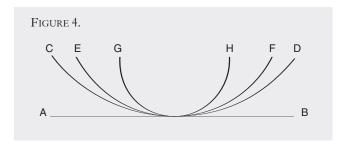
In Chapter 13, he writes, "if there were [si esset] an infinite line, it would be a straight line, a triangle, a circle, and a sphere." Thus, "an infinite line is, actually, whatever is present in the potency of the finite line."

All of the geometrical or mathematical examples he uses are oriented toward forcing the mind to rise above the quantitative to the Absolute Infinite, and thus to see that God is maximum and simultaneously minimum, that He is that oneness which enfolds everything created and that everything created is the unfolding of that oneness

God is all in one, He enfolds everything from the standpoint of eternity, but everything which is in God is unfolded in time. This concept of negentropic, evolutionary development in time of things created by God in eternity is derived by Cusanus from St. Augustine's *On Genesis*.

Cusanus writes that "it is evident that an infinite line would be a straight line: The diameter of a circle is a straight line, and the circumference is a curved line which is greater than the diameter. So if the curved line becomes less curved in proportion to the increased circumference of the circle, then the circumference of the maximum circle, which cannot be greater, is minimally curved and therefore maximally straight."

In Figure 4, we see that with a smaller circle, the horn (cornicular, or contingent) angle is much greater. Although you cannot interpose a straight line between the tangent and the circle, the horn angle can be divided by other curves, because the curves create angles of the same species as the cornicular. As the circle becomes larg-



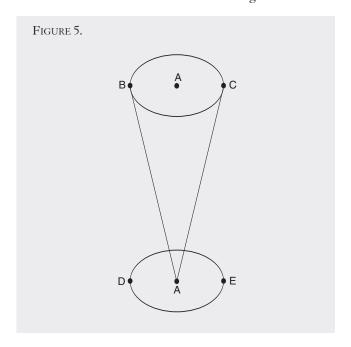
er, it becomes less curved and therefore more straight. "Hence, the minimum coincides with the maximum—to such an extent that we can visually recognize that it is necessary for the maximum line to be maximally straight and minimally curved."

This does not occur in terms of finite geometry. What Cusanus is asking you to do is to visualize the non-quantitative beyond the quantitative, and thus to see that if this larger circle is becoming less curved, then if we arrive at a maximum circle it will be minimally curved and maximally straight. As a result, "we see that a maximum, infinite line is, necessarily, the straightest; and to it no curvature is opposed. Indeed, in the maximum line curvature is straightness."

The reader may object at this point that Nicolaus of Cusa has already proved that it is impossible to square the circle because the circle and the polygon are two different species. This objection, however, brings to the surface the reality of what Cusanus is doing with his mathematical examples in Book I. Here he is not discussing a finite circle; rather he is forcing the reader to leave behind created nature in order to ascend to the Absolute.

The figures Cusanus uses do not actually describe an infinite line or an infinite circle. He uses a finite illustration, which is in itself incapable of representing the infinite, in order to force the reader to transcend the realm of Becoming and to ascend to the standpoint of the Absolute Infinite.

If this were a finite circle, there would always be a difference between the tangent and the circle, but it is not a finite circle or a finite line. He is forcing the reader to



hypothesize an infinite circle.

In many of his writings, Lyndon LaRouche cites Plato in identifying four levels of hypothesis. The first three of these have to do with the world of Becoming. The first is simple hypothesis; the second is a higher hypothesis, which describes the ordering principle of a valid sequence of hypotheses; and the third is hypothesizing the higher hypothesis, i.e., the capacity to generate higher-order higher hypotheses. LaRouche also discusses hypothesizing the hypothesis of a higher hypothesis. In respect to the latter, he is referring to God, the Absolute. It is not that God is a mere hypothesis, but that from the standpoint of our mental activity, we have to make an hypothesis in order to mentally visualize His existence. And using these mathematical aids, this is precisely what Cusanus is doing in Book I-hypothesizing the hypothesis of the higher hypothesis.

The reader should also be warned that Nicolaus of Cusa does not maintain that such an infinite line, or circle, or triangle, or sphere actually exists in created nature. As he writes in *Defense of Learned Ignorance:* "The impossibility of there actually being an infinite line is shown in many ways in *On Learned Ignorance;* however, by the positing of an infinite line the intellect is helped to make headway toward the unqualifiedly Infinite, which is Absolute Necessity of being."

Another Example

Before proceeding with Cusanus' argument in *On Learned Ignorance*, let me use another example, that of the top, from the work entitled *On Actual Potential*. This example makes clear how it is that the Absolute Infinite is present in all time and all space at the same time that it transcends all time and all space.

In Figure 5, we describe a circle, *bc*, which is being rotated about a point *a* as would the circular edge of the upper surface of a top. This circle is taken to represent eternity. At the bottom we describe another fixed circle, *de*, which is taken to represent time. Cusanus says,

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 of 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.

God can be at rest and in motion at the same time. But from the standpoint of the Aristotelian "law of contradiction," this is not possible. Only to the extent that we leave rationality (*ratio*) behind and ascend to the level of creative intellect, therefore, can we see God, in whom opposites such as rest and motion, or the maximum motion and the minimum motion, coincide. Cusanus continues:

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, viz, 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 e, 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 the 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"; "that God as the Beginning and the End is at once and as a whole present in all things."

Thus, Cusanus uses the finite example of a top in order to force the reader to go beyond the finite to visualize intellectually—not with his physical eyes—because Cusanus' line of argument is not representable in the visible domain. In fact, the reader must negate the finite example to ascend to the thought-object (*ens rationis*), that the whole of God, as eternal and indivisible, is present at each moment and at each place in temporal time.

This is characteristic of Cusanus' method. He takes a finite metaphor with which the reader is familiar, in this case a top, and then redefines or transforms it, so that the reader must look at the finite example from the standpoint of Absolute Infinity. At that point the reader must abandon what applies to the finite top. By using this method, he translates (*transilire*) the reader into an intellectual realm, in which he is able to visualize the Absolute Infinite.

Cusanus is using finite examples in order to create a passageway by which, if the reader will relinquish the finite, visible domain, he will be able to rise to the level of the creative intellect and see the Absolute Infinite, at least negatively. Cusanus compares this ascension, from sense perception and rationality to the level of intellect, to being "raptured" or transported like the Apostle Paul from the first and the second heavens to the third heaven. Basing himself upon the writings of St. Augustine,

Cusanus thus maintains that the third heaven is the level of creative intellect and the "rapture" is not an irrational experience, but rather an intellectual, as opposed to a merely sensual or logical, state of mind. In his *Defense of Learned Ignorance*, Cusanus therefore states that "the sensual man does not discern the things which are of the Kingdom of God," "a superabundance of logic is injurious" and that learned ignorance "pertains to the high region of intellect."

In *On Learned Ignorance*, Cusanus is very concrete about what he is doing. In Chapter 12, he writes:

Since all mathematicals are finite and otherwise could not even be imagined: if we want to use finite things as a way for ascending to the unqualifiedly Maximum, we must first consider finite mathematical figures together with their characteristics and relations. Next, [we must] apply these relations in a transformed way, to corresponding infinite mathematical figures. Thirdly, [we must] thereafter in a still more highly transformed way, apply the relations of these infinite figures to the simple Infinite, which is altogether independent even of all figure.



Cusanus' Use Of Infinite Mathematical Figures

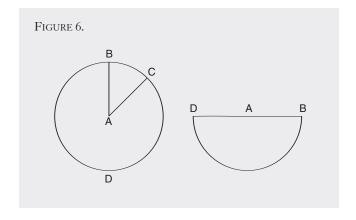
Now to return to the line of argument in *On Learned Ignorance*. Cusanus argues that

an infinite line is a maximum triangle, a maximum circle, and a [maximum] sphere. In

order to demonstrate this, we must in the case of finite lines see what is present in the potency of a finite line. And that which we are examining will become clearer to us on the basis of the fact that an infinite line is, actually, whatever is present in the potency of a finite line.

In Figure 6, we see that,

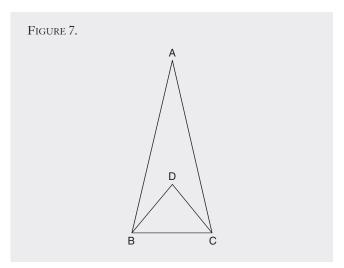
if while point *A* remains fixed, line *AB* is rotated until *B* comes to *C*, a triangle is formed. And if the rotation is continued until *B* returns to where it began, a circle is formed. Furthermore, if, while *A* remains fixed, *B* is rotated until it comes to the place opposite to where it began, *viz.*, to *D*, then from lines *AB* and *AD* one continuous line is produced and a semicircle is described. And if while the diameter *BD* remains fixed the semicircle is rotated, a sphere is formed.



If we look at what is merely potency in the finite line from the standpoint of the infinite line, which is actuality, then the infinite line is the infinite triangle, the infinite circle, and the infinite sphere.

In Chapter 14, Cusanus says that, "since in the case of quantitative things a line and a triangle differ incomparably, the imagination, which does not transcend the genus of perceptible things, does not apprehend that the former can be the latter." From the standpoint of the intellect, however, an infinite line is a triangle. If one side of a triangle is infinite, the other two sides are not shorter, because if one side is infinite the other sides must be infinite. Since there cannot be more than one infinite thing, an infinite triangle cannot be composed of a plurality of lines. And yet the truest triangle cannot be without three lines. The one infinite line must therefore be three lines. Similarly, there will be one infinite angle and this angle is three angles.

To explicate this concept, Cusanus proposes that we ascend from a quantitative triangle to a non-quantitative triangle. "Clearly, every quantitative triangle has



three angles equal to two right angles. And so, the larger the one angle is, the smaller are the other two." We are instructed to hypothesize that one angle is increased up to the size of two right angles, while the triangle remains a triangle. That triangle has one angle which is three angles and three angles which are one. Cusanus continues:

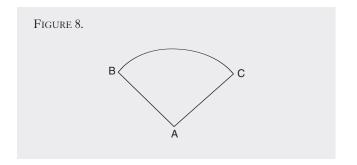
In like manner, you can see that a triangle is a line. For any two sides of a quantitative triangle are, if conjoined, as much longer than the third side as the angle which they form is smaller than two right angles. For example, because the angle *BAC* is much smaller than two right angles, the lines *BA* and *AC*, if conjoined, are much longer than *BC*. Hence, the larger the angle, e.g., *BDC*, the less the lines *BD* and *DC* exceed the line *BC*, and the smaller is the surface. Therefore, if, by hypothesis, an angle could be two right angles, the whole triangle would be resolved into a simple line." (SEE Figure 7)

However, Cusanus then says, this obviously does not hold true for quantitative things, but through this hypothesis the reader can be helped in ascending to nonquantitative things. "That which is impossible for quantitative things, you see to be altogether necessary for nonquantitative things."

In Chapter 15, Cusanus argues that the Maximum triangle is a circle and a sphere (SEE Figure 8):

Let us postulate the triangle ABC, formed by rotating the line AB—A remaining stationary—until B comes to C. There is no doubt that if line AB were infinite and B were rotated until it came all the way back to the starting point, a maximum circle would be formed, of which BC would be a portion. Now, because BC is a portion of an infinite arc, BC is a straight line. And since every part of what is infinite is infinite, BC is not shorter than the whole arc of infinite circumference. Hence, BC will be not only a portion but the most complete circumference. Therefore, it is necessary that the triangle ABC be a maximum circle.

Moreover, in the triangle ABC, AB was brought from B to C. But BC is an infinite line. "Hence, AB [which is the maximum circle] reached C by a complete coming around



upon itself. And since this is the case, it follows of necessity that from such a coming around of a circle upon itself a sphere is originated.

In this example, as well as the previous ones, Cusanus is helping the reader to proceed from the visible domain to the invisible attributes of God (*cf.* Romans 1:20 and Wisdom 13:5).

In Chapter 17, Cusanus argues that a finite line is divisible, whereas an infinite line is indivisible. However, a finite line is not divisible to the point that it is no longer a line. Hence a finite line is indivisible in its essence. From this he concludes that the infinite line is the essence of a finite line. Moreover, there is only one infinite line which is the essence of all finite lines. Since the infinite line is indivisible and one, it is present as a whole in each finite line, in such a way that each finite line is present in it. However, at the same time, the infinite line is not any particular finite line.

Thus we learn that the Maximum Equality or the Logos, which is the essence of all things, is in each and every thing, even as He is not any of all the things. In his Defense of Learned Ignorance, Cusanus explains, "God is present everywhere in such way that He is present nowhere; thus, God is present at every place non-spatially, just as He is great without quantity. Similarly: He is every place nonspatially, every time non-temporally, and every existent non-existently. But He is not on this account any existent thing, even as He is not any place or any time. And yet, He is all in all, even as the one is all things in all numbers."

In a later dialogue, *On the Not-Other*, Cusanus expresses the same idea by arguing that God is not-other, i.e., not a created finite thing, but rather Infinite. He is therefore transcendent, but the Not-Other is, simultaneously, the other of the other, that is, the essence of the created finite thing, while not being any particular other. As Cusanus stresses in *Defense of Learned Ignorance*, "what is caused can never be raised unto equality with its cause."

Thus the Maximum is in each thing and in no thing. The Maximum One is supersubstantial. God has created substantial forms, to use the language of St. Aquinas, or *monads*, to use the language of Gottfried Wilhelm Leibniz. Such substances do not admit of more or less. If we use the metaphor of the finite line, the infinite line is its essence and in its essence it is indivisible. God Himself, the Maximum, who is independent of all figure, is not a created substance, but rather is supersubstantial.

Cusanus then proceeds to show why it is that the Maximum Truth can truly be compared to an infinite line, an infinite triangle, an infinite circle and an infinite sphere. As he points out in Chapter 19, "the Maximum is actually

one trine essence" (essentia, trina, una actu). The Maximum can be likened to the linear maximum, which we can call essence; to the triangular maximum and can be called trinity; to the circular maximum and can be called oneness; and to the spherical maximum and can be called actual existence.

We have already discussed in what way he considers the infinite line to be the essence of the finite line. He now uses the image of an infinite triangle to argue that the Maximum one is three and no more than three. Cusanus states that the triangle is the minimum polygon and the minimum is coincident with the maximum. Therefore, there can be no more than three persons in the one God, because the quadrangle is not the minimum and therefore not coincident with the maximum. Therefore there cannot be four or five persons. There can only be three.

Ultimately, the triune nature of the One God derives from the notion of God as Creator and the very nature of creative activity. As Cusanus writes, "we regard the maximum triangle as the simplest measure of all trinely existing things—even as activities are actions existing trinely, (1) in potency, (2) in regard to an object, and (3) in actuality." As he wrote in Chapter 10, "We see that oneness of understanding is not anything other than that which understands, that which is understandable, and the act of understanding."

In Chapter 21, Cusanus writes, "all theology is circular and is based upon a circle." He is quick to caution that this is not to be taken literally, but metaphorically: "I do not mean that [the Maximum] really is the circle, the circumference, the diameter, or the center."

Accordingly, he writes, "in the Maximum the center is the circumference. You see that because the center is infinite, the whole of the Maximum is present most perfectly within everything as the Simple and the Indivisible; moreover, it is outside of every being—surrounding all things, because the circumference is infinite, and penetrating all things, because the diameter is infinite." And finally, "Since the Maximum is like a maximum sphere, we now see clearly that it is the one most simple and most congruent measure of the whole universe and of all existing things in the universe."

The Contracted Infinite

Having thus discussed in Book I the concept which Georg Cantor later described as the Absolute Infinite, Cusanus now turns in Book II to a discussion of the created universe or, as Cantor described it, the transfinite domain. The basic concept which Cusanus develops is, that in contrast to the Maximal One, which is the Absolute Infinite, the universe, which is also one, is a contracted infinite or rather is contractedly infinite. Since it is not the Maximum One, precise equality does not befit it. As Cusanus writes, "precise equality befits only God." Moreover, the "unqualifiedly Maximum or Minimum is not positable in finite things."

As a result, according to Cusanus in Book II, Chapter 1, "only the Absolutely Maximum is negatively infinite." The universe, in contrast, "cannot be negatively infinite, although it is unbounded and thus privatively infinite. And in this respect it is neither finite nor infinite." The universe is unbounded because "it is not the case that anything actually greater than it, in relation to which it would be bounded, is positable."

Cusanus' discussion of the universe, and therefore of physical science, is based precisely upon this fundamental distinction between the Absolute Infinite and the contracted infinite. In contrast to Aristotle, who argues that God is Infinite and created nature finite, and therefore not sharing in any way in God's infinity, Cusanus, like Aquinas before him, argues that all created nature is not finite, but rather relatively infinite, as opposed to Absolutely infinite.

In Book II, Chapter 2, Cusanus concludes that the physical universe is not primarily characterized by linearity, but rather by curvature. As Cusanus writes: "curvature follows upon finitude, since a line is curved because it is not the maximum line." If it were the maximum line, it would not be curved.

Furthermore, since all things in the created universe contain "traces" of the Trinity, nothing in the universe can be either strictly finite (in which case it would lack a trace of God's infinity) or absolutely infinite (in which case it would not be created). Therefore, Cusanus concludes that "all things are the image of that one, infinite Form and are different contingently—as if a created thing were a god manque, just as an accident is a substance manque, and a woman is a man manque. For the Infinite Form is received only finitely, so that every created thing is, as it were, a finite infinity or a created god...."

It was this concept of all creatures being a "finite infinity" which led Georg Cantor to write in a footnote to his Foundations of a General Theory of Manifolds (1883): "I find points of contact for my conceptions in the philosophy of Nicolaus Cusanus." Cusanus' notion that all created nature is finitely infinite, as opposed to the uncreated creating nature of God, Who is absolutely infinite, is the Platonic source in Christian theology of Cantor's concept of the transfinite.

From this standpoint, Cusanus resolves a number of epistemological questions. First, God's creation of the universe in eternity does not exclude the evolution of the universe in time. God is the enfolding and the unfolding of all things. Insofar as He is the enfolding, in Him all things are Himself, and insofar as He is the unfolding, in all things He is that which they are.

The "Infinite Oneness is the enfolding of all things. . . . And just as in number, which is the unfolding of oneness, we find only oneness, so in all existing things we find only the Maximum." Every number is an unfolding of oneness and the essence of every number is one. Similarly, everything created in the universe is a one, a *monad*, or a singularity. It is the unfolding of the Maximum One and the Maximum One is present in everything created. This is why everything created must have the characteristic of infinity, although not the Absolute Infinity of the Creator, because the infinite Form is received only finitely.

In respect to time, Cusanus writes that "the present, or the now, enfolds time. The past was the present, and the future will become the present. Therefore, nothing except an ordered present is found in time." The reader should refer back to the example of the top presented above.

It is not the case that eternity is something which can be described in terms of temporal succession, which is, however, the way in which it is often conceived. We often think of eternity existing prior to Creation, rather than seeing that eternity is the present or now which embraces all temporality.

For Cusanus, the Trinity is not merely an article of blind faith, which has no implications with respect to our scientific knowledge of the physical universe. For Cusanus, if God is triune and He created the universe, then necessarily, the universe must reflect that triunity in a fundamental way.

In Chapter 7, entitled "The trinity of the universe," Cusanus shows that the unfolding or evolution of the universe, created by the Triune God, occurs by means of a contracted triunity. He writes as follows:

Absolute Oneness is necessarily trine—not contractedly but absolutely; for Absolute Oneness is not other than Trinity, which we grasp more readily by means of a certain mutual relationship. Similarly, just as maximum contracted oneness is oneness, so it is trine—not absolutely, so that the trinity is oneness, but contractedly, so that the oneness exists only in trinity, as a whole exists contractedly in its parts. In God it is not the case that Oneness exists contractedly in Trinity as a whole exists [contractedly] in its parts or as a universal exists [contractedly] in particulars; rather, the

Oneness is the Trinity. Therefore, each of the persons [of the Trinity] is the Oneness; and since the Oneness is Trinity, one person is not another person. But in the case of the universe a similar thing cannot hold true. Therefore, [in the case of the universe] the three mutual relationships—which in God are called persons—have actual existence only collectively in oneness.

The point that Cusanus makes is that there cannot be contraction, i.e., a contracted universe, without that which is contractible, what causes contracting, and the union which is effected through the common actuality of these two. Similarly there cannot be motion without possibility, actuality and united motion. Thus, nothing can exist without determinable matter, determining form and determined possibility.

God is Absolute Possibility. The contracted possibility is created by God and therefore is neither eternity nor coeternal with God as Aristotle had argued. In Chapter 9, Cusanus writes that the Aristotelians are also wrong in not admitting that there are exemplars or ideas. However, at the same time he criticizes those so-called Neoplatonics who thought that the exemplars exist abstracted from things. Rather, following Sts. Augustine and Aquinas, Cusanus writes that the Platonists are correct insofar as they argue that all things are derived from notions in the Divine Mind. Moreover, it must be admitted that all distinct notions or forms are enfolded in the one infinite Form, which is the Word in God. "Only one infinite Exemplar is sufficient and necessary; in it all things exist, as the ordered exists in the order." Cusanus thus shows that "only God is 'world-soul' and 'worldmind" and that His divine Word or "Logos" is the Form of all forms. Therefore, forms do not have actual existence except in the Word as Word and contractedly in things.

In adopting this Platonic conclusion, Cusanus explicitly embraces the Platonic theory of knowledge: "[The Platonists] added that the truth of forms is attained only through the intellect; through reason [ratio], imagination, and sense, nothing but images [are attained], according as the forms are mixed with possibility."

Cusanus' Refutation of Aristotelian Cosmology

The cosmology of Aristotle, which prevailed in the scientific world for centuries, entails the following fundamental assumptions: (1) the universe is spherical, has a center and a circumference, and is therefore a vast but finite structure; (2) the Earth lies at the center of the universe and is itself immobile, since the heavenly bodies revolve

in uniform circular motion around the center, and therefore around the Earth.

Long before Kepler, who pays explicit tribute to Cusanus in his *Mysterium Cosmographicum*, Cusanus exploded this pseudo-scientific Aristotelian view of the universe. Because the universe is privatively or contractedly infinite, it does not have a finite structure, it has no center or circumference other than God, the Earth is not the center of the universe and is not immobile, nor do the heavenly bodies have perfectly circular orbits.

In Chapter 11, Cusanus presents his argument to the above effect: the universe is trine; of all things there is none which is not *one* from possibility, actuality, and uniting motion; none of these three can at all exist without the other two; and of necessity these three are present in all things according to very different degrees. Therefore, no two things in the universe can be altogether equal.

Cusanus writes, "it is not the case that in any genus—even [the genus] of motion—we come to an unqualifiedly maximum and minimum." Therefore, "it is not possible for the world-machine to have, as a fixed and immovable center, either our perceptible earth or air or fire or any other thing. For, with regard to motion, we do not come to an unqualifiedly minimum—i.e., to a fixed center." Now, since the minimum must coincide with the maximum, if we do not come to an absolute minimum, we do come to an absolute maximum, i.e., a fixed circumference. If the world did have a fixed center and circumference,

it would have its own beginning and end within itself, and it would be bounded in relation to something else, and beyond the world there would be both something else and space. But all these [consequences] are false. Therefore, since it is not possible for the world to be enclosed between a physical center and circumference, the world—of which God is the center and the circumference—is not understood. And although the world is not infinite, it cannot be conceived as finite, because it lacks boundaries within which it is enclosed.

Thus, as Cusanus writes, "the world-machine will have its center everywhere and its circumference nowhere, so to speak; for God, who is everywhere and nowhere, is its circumference and center." God, who is the Absolute Infinite, is He who bounds the still increasable transfinitum, the realm of Becoming. The Transfinitum lacks boundaries in the sense of physical boundaries, for its center and circumference are God, Who is everywhere and nowhere.

On this basis, Cusanus argues that the Earth "cannot be the center of the universe and cannot be devoid of all motion." Moreover, "just as the Earth is not the center of the world, so the sphere of fixed stars is not its circumference."

Now that Cusanus has established that "the Earth is moved," based on the same principle that there is no fixed point in the universe, he argues that there can be no perfectly circular orbits. Thus he writes that "neither the Sun nor the Moon nor the Earth nor any sphere can by its motion describe a true circle, since none of these is moved about a fixed point."

At this point, Cusanus once again makes the point, that one cannot discern the true nature of the universe from sense perception or through deductive logic. Rather one can only begin to advance in one's knowledge of the universe "through the intellect, to which only learned ignorance is of help."

Finally, Cusanus argues contrary to modern-day "entropy" theory, that the universe is not-entropic. "It cannot be evident to us that anything is altogether corruptible; rather [a thing is corruptible only] according to one or another mode of being, for the causal influences—being contracted, as it were, in one individual—are separated, so that the mode of being such and such perishes. Thus, death does not occupy any space, as Virgil says." For this reason, as Cusanus writes in Chapter 13, "it happens that the world-machine cannot perish."



The Concept Of Jesus

THE ENTIRETY of *On Learned Ignorance* hinges on Book III, which is unique in the history of theology for its boldness in attempting to render intelligible the concept of Jesus Christ as both the Word of God and the Son of Man. Jesus Christ is the mediator of the Absolute Maxi-

mum and of the contracted maximum. He is the maximum contracted individual.

The first chapters of Book III are extraordinary. Chapter 1 contains the concept of negentropic evolutionary development as an unfolding of the Maximal One, including an explicit discussion of a "change of species." Cusanus writes:

Therefore, no species descends to the point that it is the

minimum species of some genus, for before it reaches the minimum it is changed [commutatur] into another species; and a similar thing holds true of the [would-be] maximum species, which is changed [commutatur] into another species before it becomes a maximum species. When in the genus animal the human species endeavors to reach a higher gradation among perceptible things, it is caught up [rapitur] into a mingling with the intellectual nature; nevertheless, the lower part, in accordance with which man is called an animal, prevails [vincit].

Thus, man endeavors to reach a higher, intellectual nature, rather than merely a perceptual nature, without negating that perceptual nature. He discusses this whole process as a number series:

It is evident that species are like a number series which progresses sequentially and which, necessarily, is finite, so that there is order, harmony, and proportion in diversity. . . . Thus, whether we number upwards or downwards we take our beginning from Absolute Oneness (which is God)—i.e., from the Beginning of all things. Hence, species are as numbers that come together from two opposite directions—[numbers] that proceed from a minimum which is maximum and from a maximum to which a minimum is not opposed.

Cusanus then argues that each thing in the universe enjoys a "certain singularity" [quadam singularitate] and that no two things are precisely equal. In order to illustrate this point, he once again uses the example of the quadrature of the circle:

Similarly, a square inscribed in a circle passes—with respect to its size—from being a square which is smaller than the circle to being a square larger than the circle, without ever arriving at its equal. And an angle of incidence increases from being lesser than a right [angle] to being greater [than a right angle] without the medium of equality.

Later in Book III, Cusanus will use this notion of man endeavoring to reach a higher gradation among perceptible things when he is caught up into a mingling with the intellectual nature, as a metaphor for the way in which God assumes human nature and the Word becomes flesh. In the same way that the intellectual subsumes the perceptual, the Divine subsumes human nature without denying human nature. Thus, what man does in imitating Christ, who is maximal Reason, is to rise to the level of intellect, which brings individual man into a state in which he can become an adoptive son of God.

The Incarnation is the notion from which the concept of *capax Dei* is derived. If the Word is to become

flesh and assume a human form, then the human form must be capable of receiving God. This is only possible insofar as man is created in the image of God and has a rational soul. To have *capax Dei* means that a human form or nature is capable of receiving God. The *capax Dei* is thus related to the notion of *imago Dei* and is required to render intelligible the Incarnation. The Word could not assume the form of an animal that lacked capacity for creative intellect. The Word had to assume the form of that nature which was capable of receiving God.

What Nicolaus of Cusa argues is that Jesus Christ is the contracted maximum individual, but that a contracted maximum individual were impossible unless he was both Absolute and contracted. The individual would not be a maximum unless he were in union with the Absolute One. To have a contracted maximum individual, that individual would have to be of two natures, God and man, while being one person.

In Book III, Chapter 3, Cusanus writes:

Now, if the nature of lower things is considered and if one of these lower beings were elevated unto [Absolute] Maximality, such a being would be both God and itself. An example is furnished with regard to a maximum line. Since the maximum line would be infinite through Absolute Infinity and maximal through [Absolute] Maximality (to which, necessarily, it is united if it is maximal): through [Absolute] Maximality it would be God; and through contraction it would remain a line. And so, it would be, actually, everything which a line can become.

It would be both a line and a Maximal Line. It would be maximum through Absolute maximality and through contraction it would remain a line. Cusanus continues:

But a line does not include [the possibility of] life or intellect. Therefore, if the line would not attain to the fullness of [all] natures, how could it be elevated to the maximum gradation? For it would be a maximum which could be greater and which would lack [some] perfections.

The point that Cusanus then makes is that man is a "middle nature," he is the highest of the lower nature and the lowest of the higher nature. Therefore, he enfolds within himself all natures. "All natures and the entire universe have, in this nature, wholly reached the supreme gradation."

Human nature is therefore a "microcosm or a small world." It "enfolds intellectual and sensible nature and encloses all things within itself." What is unique about the Renaissance effected by Cusanus is the fact that he brings forth the implications of this concept in respect to human creativity.

Cusanus writes: "Through the assumed humanity God Himself would, in the humanity, be all things contractedly, just as He is the Equality of being all things absolutely." "He would be the Son of God—just as [He would also be] the Word of God, in whom all things were created." For there to be a maximum contracted individual, he has to be united with the Absolute Maximum. At the same time, this maximum contracted individual has to be a human being in order for all natures and the entire universe to be enfolded within him.

Therefore, according to Cusanus, "God exists first of all as Creator. Secondly, [He exists as] God-and-man (a created humanity having been supremely assumed into oneness with God; the universal-contraction-of-all-things [i.e., the humanity] is, so to speak, 'personally' and 'hypostatically' united with the Equality-of-being-all-things). Thus, in the third place, all things—through most absolute God and by the mediation of the universal contraction, viz., the humanity—go forth into contracted being so that they may be that-which-they-are in the best order and manner possible."

Thus according to Cusanus, "every creature [exists] in the supreme and most perfect humanity, which completely enfolds all creatable things."

The obvious question which arises is how can the Word of God, which is before all creation, be manifested in time, after the Creation. From the standpoint of rationality, this appears as a logical impossibility. But if one attempts to render this paradox intelligible, then one gains an insight into the actual nature of time. Cusanus writes:

But this order should not be considered temporally—as if God temporally preceded the Firstborn of creation. 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.

By rendering intelligible what seems from the standpoint of finite perception to be a logical impossibility, Cusanus forces the reader to a conception of absolute time which embraces temporal time.

In order to help the reader visualize what it means for the Word to become flesh, Nicolaus of Cusa compares the subsumption of the humanity in the divinity in the case of Jesus to the subsumption of the perceptual in the intellectual nature of all men. He writes: In that species which is actually supreme within the genus *animal, viz.*, the human species, the senses give rise to an animal such that it is so animal that it is also intellect. For a man is his own intellect. In the intellect the perceptual contractedness is somehow subsumed in the intellectual nature, which exists as a certain divine, separate, abstract being, while the perceptual remains temporal and corruptible in accordance with its own nature.

In regard to Jesus the humanity is subsumed in the divinity. "For since the intellect of Jesus is most perfect and exists in complete actuality, it can be personally subsumed only in the Divine Intellect, which alone is actually all things."

If one looks back to what Cusanus was doing in Book I in discussing God and forcing one to rise above the perceptual to the intellectual, to actually subsume one's perceptual nature by one's intellectual nature, one sees that he was forcing the reader to become Christ-like, as he has defined Christ, in whom divinity has subsumed the human nature.

In such works as *On the Filiation of God*, Cusanus argues that to become an adoptive son of God, requires that one rise above the perceptual level of cognition, above deductive logic to the level of intellect, which he describes as the third heaven unto which Paul reports that he was raptured. To become Christ-like is to act from the standpoint of intellect in harmony with Maximal Reason. To live intellectually as an adoptive son of God means to live temporally in eternity.

In this connection, Cusanus comes back to the discussion of the quadrature of the circle. He writes:

Assume that a polygon inscribed in a circle were the human nature and the circle were the divine nature. Then, if the polygon were to be a maximum polygon, than which there cannot be a greater polygon, it would exist not through itself with finite angles but in the circular shape. Thus, it would not have its own shape for existing—[i.e., it would not have a shape which was] even conceivably separable from the circular and eternal shape.

For Cusanus, Jesus Christ, as the maximum contracted individual, is the highest expression of creative intellect, in fact the creator of the world. He thus writes, "Now the maximality of human nature's perfection is seen in what is substantial and essential [about it]—i.e., with respect to the intellect" In Chapter 5, in discussing the Incarnation, he writes that the Eternal Father through the Holy Spirit "added reason so that it would be a human nature. [To it] He so inwardly united the Word of God the Father that the Word would be human nature's center of existence. And all these things

were done not serially (as a concept is temporally expressed by us) but by an instantaneous operation—beyond all time "

Thus he writes: "There is no doubt that a human being consists of senses, intellect, and reason (which is in between and which connects the other two). Now, order subordinates the senses to reason and reason to intellect. The intellect is not temporal and mundane, but is free of time and of the world."

In a later work, *On Equality,* Cusanus describes the soul as "timeless time." The soul is not eternal in the same sense that God is absolutely eternal, because the soul is created. Rather it is timeless time, in that, insofar as it is creative intellect, it is in time and yet is elevated above the empirical, material world. Thus Cusanus writes: "When the soul is in time, where it does not apprehend without images, it seeems to be the senses or reason rather than the intellect; and when it is elevated above time, it is the intellect, which is free from images."

Man thus becomes more Christ-like (*Christo similior*), insofar as he rises to the level of intellect. "But if reason governs the senses, still it is necessary that the intellect govern reason in order that the intellect may adhere—by formed faith and above reason—to the Mediator, so that it can be drawn unto glory by God the Father." By "formed faith," Cusanus means faith formed by works of love, as opposed to faith without the works of love, which is thereby formless or dead.

What is more, Cusanus writes: "For the maximality of human nature brings it about that in the case of each man who cleaves to Christ through formed faith, Christ is this very man by means of a most perfect union—the numerical distinctness of each being preserved."

For Cusanus, "Christ is the center and the circumference of intellectual nature" Thus, "it is not the case that, with respect to location, He is seated on the circumference rather than at the center. And, therefore, He who is the 'Fount of life' for souls, as well as their goal, affirms that the Kingdom of Heaven is also within men."

In Chapter 9, Cusanus continues: "Christ, the head and the source of every rational creature, is Maximal Reason, from which all reason derives." Moreover, "the intellect is the incorruptible locus of incorruptible forms."

In this context, he discusses the Resurrection. For Cusanus, "the perfection of the universe cannot occur apart from resurrection, since human nature (which is an intermediate nature) is an essential part of the universe; and without human nature not only would the universe [not] be perfect but it would not even be a universe." Moreover, "a whole resurrected man *is* his intellect,

which is spirit and a true body is engulfed by his spirit."

In Chapter 11, Cusanus reports that the Apostle John "states that faith in the Incarnation of the Word of God leads us unto the truth in order that we may be made sons of God." This understanding of the Incarnation allows one to become a son of God, because to become a son of God is to act in imitation of Christ, which is to act in a manner based upon agapic creative intellect. He writes that "Christ is the incarnated Concept of all concepts."

For Cusanus, "conversion" to Christianity means converting one's intellect to Christ by maximum faith. "Accordingly, since the intellect is of a nature which is convertible toward the intelligible, it understands only universal, incorruptible, abiding things." And if man's intellect is so converted, he can have power over all things not in union with Christ. "If the [believer's] faith is whole, then with the power of Jesus, with whom he is united, he commands even the evil spirits and has power over nature and motion. And it is not he himself but rather Jesus who—in him and through him—works wondrous things, as the deeds of the saints bear witness."

Thus, if man truly converts to Christianity, if he elevates himself to the level of creative intellect in imitation of Christ, the incarnated Concept of all concepts, then he too will have Christ-like power to transform nature, to command spirits, the sea, and the winds. And in fact to convert to Christianity means to do precisely what Christ did in order that the *Logos* might continue the process of creation through man. From this standpoint, the man who converts to Christianity "is transformed into Jesus on account of the spirit of Christ which dwells in him."

Conclusion

As we have seen, the revolution effected by Nicolaus of Cusa in *On Learned Ignorance* begins with a distinction between the Absolute Infinite and the contracted infinite or finite infinite. He arrives at the idea of God as Absolute Infinite by ascending from the effects of God as seen in His creation of the physical universe. As Lyndon LaRouche would say, he hypothesizes the hypothesis of the higher hypothesis through a process of ascending from hypothesis to higher hypotheses to hypothesizing the higher hypothesis. This is none other than the Socratic method Christianized.

If one wishes to understand the last 550 years of world history since the Council of Florence, one must realize that modern history begins with this book and specifically with the concept of man in imitation of Jesus Christ developed therein. If properly understood, the Incarnation as discussed by Cusanus leads necessarily to the concept of man as a microcosm responsible for the further

development of the macrocosm, as a creator responsible for the continuing creation. By rising to the level of intellect in imitation of Christ, through whom all things were created and who is the Maximal Reason from which all reason derives, man gains the power to transform nature and to defeat evil.

The essential concept that Cusanus puts forward is not only a method of creativity, but also a concept of man, in which man, to be fully human, must exercise his intellect. And intellect must be rigorously defined as creativity, as opposed to formal-logical reasoning or sense perception. To read and comprehend *On Learned Ignorance* is to go through a process in which Cusanus forces the reader's mind to rise to the level of intellect above the level of finite mathematical figures. That is his method in all of his writings, to create a paradoxical situation in which the reader is forced to make a leap from the perceptual or logical-deductive into the realm of creativity, which is the third heaven. In doing so, he deliberately brings about an intelligible rapture, a true conversion of the individual mind to the intelligible.

For Cusanus, the human species embraces all of creation and is therefore responsible for the continued creation. It is this concept which is the basis for the Golden Renaissance which followed the Council of Florence.

To deny the intelligible representation of the paradox of the Incarnation of God-man as Cusanus presents it, as John Wenck and his Aristotelian heirs have done, is to deny oneself access to the most profound treasures of wisdom and science. On the other hand, if we master the method of learned ignorance, nothing will be impossible for us to accomplish. As Cusanus concludes Book II, "If you wish to know something about us, seek it in our Cause and Reason, not in us. *There* you will find all things, while seeking one thing. And only in Him will you be able to discover yourself."

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