INCScience

What Is the Mission of Mankind in the Solar System?

by Megan Beets

The following presentation by Megan Beets of the LaRouchePAC Scientific Team is excerpted from the Feb. 25 New Paradigm weekly show, and continues an ongoing discussion of the work of Nicholas of Cusa and Johannes Kepler. A video of the program, which also features Ben Deniston and Jason Ross, is posted at https://larouchepac.com/new-paradigm.

What we're going to take up today is Lyndon LaRouche's emphasis on the absolute necessity of the work of Johannes Kepler, in setting the standard for coming to a discovery of a new understanding of what mankind is. The only way to get out of the current crisis

is not to rearrange some currently existing features of the global system: There's nothing to be rearranged. The entire system has to be scrapped, and, as LaRouche has said in the past, nations and the peoples of the world have to come to a new common discovery of what man is. What is the mission of mankind in the Solar System? And to do that, you have to go to the work of the last person who really defined that for mankind, which was Johannes Kepler.

Nothing short of that will ensure the success of man's continued existence on and off of this planet.

What Kepler did was to define the Solar System.



Kepler demonstrated "that the concept governing the Solar System could only be understood by the human mind."

And by that, I don't mean he defined the *objects* in the Solar System. He defined the *process* of the Solar System, which subsumes the Earth that we're all sitting on, as a human principle. And Kepler located the cause of the Solar System, the unity of the multiplicity of the Solar System, in a concept which was absolutely beyond mathematics, and beyond calculation and all logical use of number, logical use of the extrapolation of language and number, to come to some understanding of the Solar System.

And what he demonstrated is that the concept governing the Solar System could only be understood by

the human mind, in the same way that a group of human musicians are able to tune their various notes, and their various lines, to perform and unfold a beautiful piece of music, of a musical composition.

Now, this proof, that man's mind can know, beyond number, beyond and above mathematics—that there is some experience, there's mental life, which can detect and discover truth in the universe which is beyond the use of number per se—this set up a complete revolution in mankind, which we're still fighting to fulfill today, in actually moving out into that Solar System, and beginning to govern and organize, and have more and more

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influence over the activity of that Solar System today, as we see in the space program of China.

Aristotle's Empty Mind

Now, this distinction, between the lower species of mathematics, and the higher species of human discovery, and human mental activity, is rooted in somebody who lived a couple of hundred years before Kepler, the great Cardinal Nicholas of Cusa, who sparked the Italian Renaissance. And Kepler actually declared himself explicitly a follower of Cusa in his first work, the *Mysterium Cosmographicum*, which he published when he was in his mid-20s, where he notes, early on in the work—this is probably going to be a terrible paraphrase, but—something to the effect of, Nicholas of Cusa seems to me divine, in that he locates the absolute distinction between the polygon and the circle, and compares the polygon to the mind of man, and the circle to the mind of God.

I'll come back to that example in a few minutes, but that's eactly was Cusa did. Cusa established a new doctrine of the mind of man.

Now, Cusa is born in 1401 in Germany. The time that he's born into is completely dominated, in science, in social doctrine, in government, by the doctrine of Aristotle, by the idea that man is nothing but an intelligent beast. In Aristotle's work, *De Anima* (*On the Soul*), Aristotle says, man is nothing but a beast, and the way in which he is superior to all other beasts, is in his superior sense of touch, which is the only mode of direct perception. Aristotle said that it is the natural order not to be violated, that some are born to rule, and others are born to be slaves. He said that man's mind and soul are nothing but a blank tablet, a blank slate, upon which nothing is written, and over the course of the experience of life, sense impressions write, and form objects, in the mind of man.

So, man's mind is born empty, and through the course of his existence, his blank slate is written upon by objects of sense perception, and it's in being able to organize and draw conclusions about these facts of sense perception, that man comes to know.

So, out of this, the idea that it's but a logical arrangement of, essentially, things, that all knowledge is derived from this, comes the really crippling lie which held back science, held back the progress of society for centuries: of the impossibility of contradictories. In other words, a thing cannot be both A and not-A at the same time. Something cannot be both very hot, and very cold at the same time. A man can't be very tall, and

very short, at the same time. And actually, thinkers before Cusa had declared Aristotle's doctrine to be against the Christian religion, which is something that Kepler himself notes in his *Harmony of the World*.

Cusa's Great Discovery

It's against exactly this that Nicholas of Cusa intervenes, in 1437, when he is sent to Constantinople on a diplomatic mission by the Vatican, in the attempt to reunite the Western and the Eastern churches. Cusa is sent to Byzantium to bring back representatives of the Eastern Orthodox Church, to the Council of Florence, in the West, as an attempt to reunite the two churches. And his mission was incredibly successful. He actually ends up bringing back 700 representatives of Byzantium, including the Patriarch of the Orthodox Church, the Byzantine emperor, and an advisor to the emperor, Plethon, who was the greatest scholar of Plato in existence on the planet.

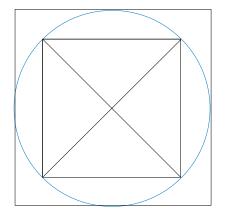
It's on the boat returning from Constantinople that, as Cusa relates, he had his great discovery of a completely new method of thinking, and a completely new method, or concept, of mind, which crushes and overturns the Aristotelean lie, as opposed to Aristotle's impossibility of opposites, or contradictories, Cusa asserts the truth of the *coincidence of opposites*: that before you had contradictories, you had a principled unity in the mind of God, which can be understood in a certain way by the mind of man. In other words, man is not limited to the contradictories of sense perception, but he can leap beyond them.

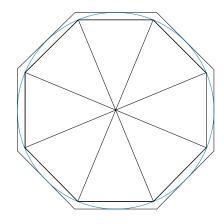
One example he gives, is the polygon and the circle. That is, you have a circle and a polygon inscribed in the circle; they're different. You can imagine a circle with a triangle inscribed in that circle. Now if you keep doubling the number of sides—say, from 3, to 6 sides, now to 12 sides, 24, and so on—that polygon inside the circle begins to approximate the circle, begins to look very much like the circle. You get to the thousands of sides, and you can't distinguish the polygon from the circle by looking at it.

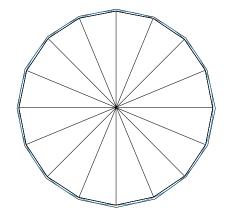
So, Cusa points out that, although the polygon is more and more approximating, and seeming to come into unity with, the circle, there's a crucial irony, which is that, as you add more sides, and more angles to the polygon, you're actually getting farther and farther away from the quality of a circle, which is that it has no angles, and no sides. So, as Cusa says, the only way to proceed, and to resolve this—there's no way to proceed

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FIGURE 1







from the polygon to the circle. They're two completely different species. But you have to, almost as a leap, think on a higher level; that once you understand that these are two different species, man's mind can begin to think as the higher species, on the higher level.

Now, he uses a different image to attempt to illustrate his meaning, in a work called *On the Vision of God*, where he compares God, who is absolute infinity, absolute truth—he says that God dwells as if within the Garden of Paradise, which is guarded by the wall of contradictories, and that it's only if man can vanquish the guard to the gateway into Paradise, which is his reasoning; vanquish the reason, the back-and-forth reasoning, as in Aristotle's impossibility of contradictories. It's only if you can banish the kind of logical use of mind that comes with objects of sense perception, and take almost a leap of faith over this wall of contradictories, can you begin to conceive of the infinite.

And one example of the infinite he gives is that God's light is infinite light, beyond all perceptible light, and is, therefore, absolute darkness. And so, can the mind come to conceptualize a quality of light, which is so infinitely light, that it's absolute darkness.

I know these are quick examples, and Cusa is relentless in that he never lets you sit with one particular image; he keeps driving these images forward. But it is this elimination of the Aristotelean tyranny of man's mind as a derivative of the body. You know, from the body up. And Cusa reasserts the mind of man as an image of the Creator's mind, which bears the light of Truth.

The Layman and the Philosopher

He lays this out really brilliantly in a work called *The Layman on Wisdom and the Mind*, which is a won-

Cusa proves the incomensurability of the polygon and the circle, and compares the polygon to the mind of man, and the circle to the mind of God.

derful dialogue between a very learned philosopher and a layman, a simple craftsman, where the philosopher is constantly being educated by this simple layman as to matters of great import.

At a certain point in the dialogue, the philosopher asks the layman, "From where does Mind have this power of judgment, in as much as Mind seems to make judgments regarding all things?" The layman responds: "The Mind has this power of judgment by virtue of the fact that it is the image of the Examplar of all things, for God is the Exemplar of all things. Hence, since the Exemplar of all things shines forth in the Mind, as a true object shines forth in its image, Mind has within itself that unto which it looks."

I'll read that again. "Since the Exemplar of all things shines forth in the Mind, as a true object shines forth in its image, Mind has within itself that unto which it looks. And in accordance with which, it judges

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about external objects. It is as if a written code of law were alive. Because it was alive, it could read within itself the judgments that were to be dispensed. Hence the Mind is a living description of eternal infinite wisdom. But in our minds, at the beginning, that life resembles someone asleep, until it is aroused to activity by wonder, which arises from the influence of perceptible objects"—which is completely different from Aristotle's idea of the relationship of perceptual objects to man.

He says, "Thereupon, by the operation of its intelligent life, Mind finds described within itself that which it is seeking. The situation is as if an indivisible and most simple pointed tip of an angle of a very highly polished diamond were alive. And as if, in this pointed tip, were reflected the forms of all things. By looking at itself, the living tip would find the likenesses of all things. And by means of the likenesses, it could make concepts of all things."

So, it's this idea, a completely new idea, of the nature of the existence of the mind of man, with respect to the mind of God. There's a lot to say about Cusa, without whom the Renaissance couldn't have happened, and the possibility of the resolution of all the religious conflicts, and so forth, couldn't have happened—also without that, really, what Kepler did wouldn't have been possible. And modern science, as we know it today, wouldn't have been possible.

Learned Ignorance

It's from his conception of the nature of the man as Creator, in relation to the Creator of the Universe, that he's also able to make certain assertions about the Solar System, and the Earth, which I just wanted to read.

This is from his work, *De Docta Ignorantia*, or *On Learned Ignorance*. He says that created things reflect the universal whole, but no two created things are so equal, that they couldn't be more equal. So you'll never find two absolutely identical created things. So from this, he says: "Hence, if we consider the various movements of the spheres [in other words, the planets], we will see that 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 [that is, to a fixed center]. Hence, the world does not have a fixed circumference. For if it had a fixed center, it would also have a fixed circumference."

So, what did he say? He said, from this doctrine, we can assert that there can be no fixed center to the Solar System, and that our Earth is not going to be the fixed center of the Solar System. He also says: "Therefore the Earth, which cannot be the center, cannot be devoid of all motion." *The Earth moves*. He also says, "Nor does the Earth or any other sphere even have a center, for since a center is a point equidistant from the circumference, and since there cannot exist a sphere or a circle so completely true, that a truer one could not be posited, it is obvious that there cannot be posited a center which is so true and precise, that a still truer and more precise center could not be posited."

So, the Earth is not the center; the Earth must move; and the Earth cannot be a perfect sphere, a spherical body with an absolutely perfect shape.

There's more, but I think I'd like to leave it there, and to come back to Kepler. Cusa was able to assert these things because of what he understood about Mind. But then, Kepler, 150-200 years later, did this: Kepler, in his discovery of the Solar System, took what Cusa knew to be true in principle, in concept, and Kepler actually discovered scientifically that this was the case, and gave man a completely new concept of the Solar System.

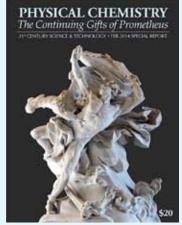
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