

What is Cusa's *Coincidentia Oppositorum*?

by Daniel Burke and Jason Ross

The following is an edited transcript of the presentations by Daniel Burke and Jason Ross to Panel 3, "Overcoming the World Health Crisis and the Hunger Pandemic: Thinking on the Level of the Coincidence of Opposites," of the Schiller Institute's December 12-13 conference, "The World After the U.S. Election: Creating a World Based on Reason." Mr. Burke worked for a time with the LaRouche Science Research Team, focusing on Nicholas of Cusa. Mr. Ross is a science advisor to the Schiller Institute. Subheads and embedded links have been added. The video of Panel 3 is available [here](#).



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Daniel Burke



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Jason Ross

Daniel Burke: The purpose of my short presentation here is to give you a better understanding of what is meant when we discuss the *coincidentia oppositorum*, the coincidence of opposites, which is the method of inquiry that was established by Nicolaus of Cusa, the German Cardinal who was active in the 1400s in Italy, primarily.

Let me begin my discussion by reading to you something from Lyndon LaRouche which he wrote in 2007 in a [paper](#) called, "For Today's Young Adults: Kepler & Cusa":

The ability of the human species to increase, willfully, its potential relative population-density over the course of successive generations, is the empirical test of the proposition that the human individual expresses a distinction which is expressed as a power of the individual person. This is an individual who

possesses an essential quality, of a power, of being, which is in some fashion efficiently immortal, as it is distinguished by a power in the likeness of the Creator, to change the universe in which mankind exists: to make such qualitative changes in the relationship of the human species to the universe, and even to change the quality of the universe which our species inhabits, to do that creatively, in a manner like, and in the faithful service of the continuing work of the Creator.

I hope I have enticed you to read that document by Mr. LaRouche.

It is the case that Nicolaus of Cusa's coincidence of opposites freed Europe from the implicit

doom of an Aristotelian ontology, based on the doctrine of a fixed and unchanging universe. It opened up a completely different way of examining our ability to change this universe.



Nicolaus of Cusa

Two Examples of the Coincidence of Opposites from Cusa

I'd like to share with you two examples of the coincidence of opposites, which are given in Nicolaus's very important, just incredibly revolutionary work, *De Docta Ignorantia*, otherwise called in English, *On Learned Ignorance*, which was completed in 1440.

Begin from the idea that we can attain unto an understanding where what appears to be contradictory in fact has a different cause.

In Book I, Chapter 13 of that work, Cusa asks you to consider how it is that in the infinite line, curvature is straightness. If you look at the curves in **Figure 1**, you'll notice, or you can consider, that as we go from G-H, to E-F, to C-D, the curve is getting greater and greater and greater. And if, for example, you imagine a circle where here we have a curve, if that curve were to grow and grow and grow infinitely, so that you had an infinite circle, then you can see, he says, by this progression, that eventually, you would come—or that from the standpoint of the infinite, you would come to a straight line, so that the maximally curved coincides with the minimally curved, that is, the straight.

And from that standpoint, when we begin to free our minds from the rational limitations of deductive logic, and we begin to look at a higher level of what it would mean, in the infinite, you can find that these opposites coincide.

A second example I'd like to give you has to do with the idea even more on the infinite line. He asks you to consider a comparison between two infinite lines:

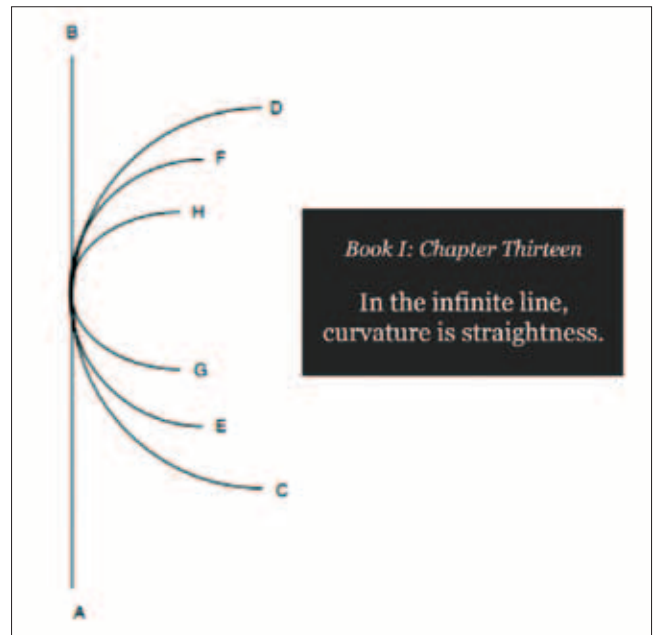
If an infinite line were constituted by an infinite number of one-foot sections and if another infinite line were constituted by an infinite number of two-foot sections, these lines would nevertheless have to be equal, since the infinite is not greater than the infinite.

Therefore, just as in an infinite line, one foot is not shorter than two feet, so it is not the case that an infinite line exceeds the length of one foot more than it exceeds the length of two feet.

Rather, since any part of the infinite is infinite, one foot of an infinite line is congruent with the whole infinite line, just as are two feet.

This is a way of thinking about the essence of things. When we talk about the finite line from the standpoint

FIGURE 1



of the infinite, we're investigating the way that there is an essence to the finite line, there is an essence to what appears before us in sense-certainty, that is actually of a higher order, and that we always implicitly are actually measuring our finite world, from the standpoint of the infinite, when we use this method.

An understanding of the coincidence of opposites demands that we view mankind from the standpoint of an immortal essence, in which every human individual participates. It's the means by which you can look upon any human individual and say that within this human individual is contained all of the, really, immortal potential of the human species itself, to go on ever greater, every generation.

The Coincidence of Opposites Is Not a Compromise

Imagine what President Abraham Lincoln had to say, in this fragment on slavery: "As I would not be a slave, so I would not be a master." There is a realm in which we acknowledge the true humanity of our fellow man, and we escape the categories that are imposed upon us. Compare it to Aristotle's view that the world is divided between slaves and masters, that the slaves are by nature incapable of reason and they need masters to control and use them.

Today, we have to beware of the sophists who would

argue that the contradictions of the world can be resolved through compromise. They would have us manage a status quo, for example, geopolitics, that is taking us to Hell.

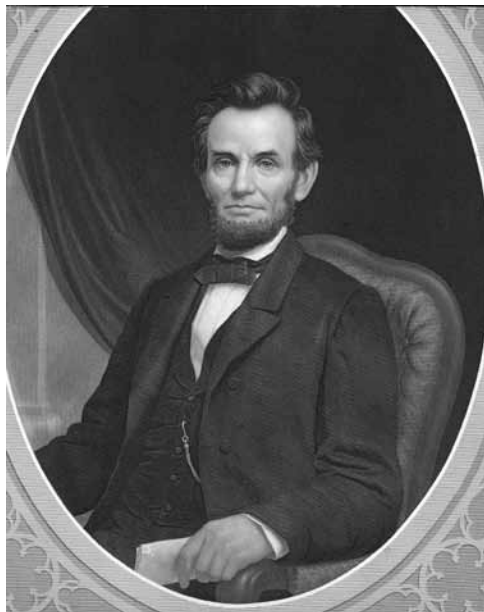
The coincidence of opposites is no mere mutual interest, although understanding of mutual interest will arise from the use of this method. It is the definition of a higher form of understanding, which takes account of the previously unknown prior cause of the apparent contradictions. It is the means by which we discover the essence of things which lies beyond appearance or mere deductive understanding. In the proposals discussed at this conference, we seek to establish a transformation of the image of man, to an hypothesis adequate for this physical world in which we live, a world which will no longer abide a less-perfect conception, without yielding mass death or even the extinction of our species.

Jason Ross: I'd like to follow up on what Daniel laid out on Cusa's work, by taking up a few more examples of this coincidence of opposites. As Daniel just put it, it's not a moderation between two extremes. Or, as Helga put it yesterday, if you're facing *A* and *B*, you don't add them and divide by 2 and get a sort of midpoint. There's something higher, a subsuming concept.

Do Self-Interests Necessarily Conflict?

So, let's look at a few examples of this, where the dichotomy between let's say *A* and *not-A* simply doesn't hold, especially when *A* is a meaningless word.

So, here's an example:



Abraham Lincoln

LoC

Mike Pompeo, our terrible Secretary of State. As he sees the world, China's gains are America's losses, because, in his view, Beijing's view is the same sort of world domination that animates Pompeo himself, or the oligarchical-imperial view that he represents as a continuing echo of the British Empire, the British financial empire.

In the Classical Greek play, *Prometheus Bound*, the great tragedian Aeschylus presents us with a conflict between the Titan, Prometheus, who has given fire and knowledge to mankind, and the Olympian god, Zeus, who wants to keep fire for himself. If mortal men and women have fire, how does

Zeus maintain his identity, his superiority? Zeus sees the self-interest of Prometheus and mankind, as being in opposition to his own self-interest, since the benefit to mankind is his loss.

Now, in this dispute, obviously, Prometheus is right, but is this conflict inevitable? Do different people's self-interests necessarily diverge? Zeus's outlook is what drives empire: a lust for dominion and power over others, and identifying with that.

Is that what China seeks? China seeks security, stability, expanding markets, but not a global empire of the sort developed by Great Britain. China is not a European imperial power. This seeming conflict is resolved not by an uneasy truce, but by reconceptualizing self-interest, by reconceptualizing that scale on which the conflict is seen. Speaking personally, for me as a human being, it is in my self-interest that extreme poverty has been entirely eliminated in China. These are human



public domain

Those who think like the Olympian god Zeus, see the interest of mankind as in opposition to their own self-interest.

beings! Our brothers and sisters. It is in my self-interest to contribute to a world in which poverty is a thing of the past, in which a potential genius born in Addis Ababa, Nanjing, Cairo, Paris, or Cleveland, is able to realize his or her potential in a society that allows her to contribute something great to the future. That's my self-interest; that's our self-interest, really.

So the self-interest of the United States is in contributing the great lessons of the American Revolution, of the American System of economy, of the great parts of our history, of contributing this to the world, in collaboration with our natural partners, like Russia, and China, India. These should be our friends; these are not our enemies. It's not a rebalancing of extremes, but reconceptualizing the goal: That's how these opposites coincide.

The Relationship of *A* and *not-A*

So, let's come back to this idea of *A* versus *not-A*, that in logic, if it's either *A* or *not-A*, one or the other must be true! That's Aristotelian logic. But let me ask: If you ask whether love is a solid, a liquid or a gas, people would think you're crazy. If your friend inquired what color your favorite song is, would you have an answer? Could you measure how large a box is, using a thermometer? No.

Choosing *A* or *not-A*, but looking on this scale, is impossible when either this *A* is a false concept, or just inadequate. So let's take a specific example of this: consider the terminology in politics in talking about the Left versus the Right, which comes to us from the chairs that people sat in, in a room in France, two centuries ago. Is this relevant? So, is Donald Trump on the extreme right? Is AOC *Alexandria Ocasio-Cortez* on the extreme left? Is left versus right, is this the right kind of ruler to use? The right measurement? Are we measuring something with a thermometer, when we should be a ruler, or something completely different? Is left to right, is this the most useful dimension for understanding a

process of infinite depth—human social relations? It isn't.

Instead of choosing a collection of policies called “a platform,” associated with two silly things we call “parties,” start with a guiding intention to shape the development of specific policies, of choices, of decisions of a path to the future: What's your view of humanity and the future that we should enjoy. I kind of doubt that you will find the left/right ruler as being the right place to pin the answer to that question.



Engraving by Pierre Savart, 1768
Gottfried Wilhelm Leibniz

Three More Examples: Change

And then three quick, brief examples to wrap up here:

First, is living well in the short term, at odds with our long-term survival? Are these opposite interests? Are there limits to growth? Does consumption in the present draw down nature's finite bounty, leaving future generations with a sad future? Or, is this concept of “natural resources” itself in error? Is it the wrong metric? Don't we humans actually create resources, by discovering new concepts and scientific conceptions?

Coal: Coal wasn't exactly the greatest resource if all you could do is use it to stay warm in the evening. How did the steam engine change the meaning, the reality, the resource of coal?

Without nuclear science, uranium wasn't a resource, it was a yellow rock.

Second: When Leibniz developed the infinitesimal calculus, he added an entirely new concept to mathematics, that of representing *change* itself. But how big is change? If you take a snapshot of the world, made a drawing, “here's the world at this moment,” the change hasn't yet occurred, but it still exists. It exists in potential in that moment. It's ready to act; it's an unfolding.

So at that moment, the change is both nothing, because in an instant, it's not acting, you might say. But it's not nothing; it is something. It's a change which will occur in the future. It's a potential. So Leibniz devel-

oped these infinitesimals, these differentials. It was a new kind of magnitude. It was neither something, nor nothing. It was smaller than anything you could imagine, the smallest thing you can think of, Leibniz’s concept is even smaller. But, it’s bigger than zero. It exists in a new world. It’s where these opposites come together, something and nothing, in a certain way, it is both. It’s a new idea, a new development.

Last example: Returning to the circle example that Daniel used, there’s a contradiction here. The circle is a single idea. It’s all the

points the same distance from the center—simple. But if we consider it as a polygon, it has not three sides like a triangle or four like a square; a circle would have an infinite number of sides, as a polygon. So is the circle, one simple shape, one thing? Or is it an infinite concept?

These opposites come together in the idea of what became known as “transcendentals”—again, an opposition comes together to resolve to something higher, a better framework for looking at something that appeared contradictory, when you are trying to understand it with a language or framework that was unsuitable.

‘Insteads, not Alsos’

If we look at the world today, there are some choices, where between *A* and *B*, you should definitely choose one over the other. But no understanding is perfect, and every framing, every hypothesizing about the universe and other people, it’s *never* able to fully capture the depth of their mysteries. Was Ptolemy right about the Sun moving around the Earth which stood still? Or was Copernicus right, about the Earth moving around the Sun? Well, Copernicus was less wrong than Ptolemy, but Johannes Kepler took the whole question to a higher level. He asked, “*Why are the planets moving?*” And he developed a new quality of science, calling it physics, rather than mathematics. Kepler’s idea wasn’t an



Joos van Ghent and Pedro Berruguete, 1476

Claudius Ptolemy with an armillary sphere.



Johannes Kepler

addition to Copernicus, it was a superseding, a replacement; it was *instead*, not *also*.

Let me close with a quote from Lyndon LaRouche in 2012, from his [paper](#), “End the Folly of Sense-Perception: Metaphor!”

The crucial principle is that to be located in the distinction of the functions of the true human mind, as distinct from the relatively superficial human practice of sense-perception. The crucial conception needed for that principled purpose, is that of metaphor when properly defined. [Emphasis in original.]

Metaphor is a joining of contradictory sense-impressions that are resolved in a way that lies outside sense-perception. In this way, Nicolaus of Cusa’s concept of the coincidence of opposites, or Carey’s idea of the “harmony of interests,” or where LaRouche took this concept with the principle of metaphor, this is an ongoing, developing idea that guides understanding and science forward.

So we will never be done discovering, on a journey with exciting episodes of *insteads*, rather than *alsos*. The great joy of that adventure, which takes us, or at least some of us, off this planet to the Moon and beyond, this is in all of our self-interests to pursue. This is our common future.