Conference Keynote Cusa and Mankind the Immortal Species

by Helga Zepp-LaRouche

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When we decided to hold this conference shortly after the U.S. election, we anticipated, sort of, that it would be a very dangerous moment in history, so we named the title of the conference, "Creating a World Based on Reason." Now that may sound a very far distance away, but this conference is not meant to just discuss academically the issues

raised, but it is supposed to function as an appeal to all institutions, governments, elected officials, people of good will, to help the Schiller Institute to organize an international alliance of people who will intervene in this present situation, because solutions are there. It is absolutely possible to find a way out of each of the crises. But it requires that people get activated and act as state citizens.

Now, if you look at the world, many people can easily start to despair. The proverb, "Whom the gods want to destroy they first drive mad," echoes this in many corners. We can ask ourselves, does mankind



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have the moral fitness to survive? Because the behavior of many institutions, and people, sometimes seems to say the opposite.

The combination of crises is really unprecedented. Let me just touch upon some of them. We have a pandemic. This pandemic has been managed relatively well in Asia, in several Asian countries, but it is completely out of control in the United States, in Europe, and also in many developing countries. Just on December 10, the number of new in-

fections in the United States was 217,729. In one week, from December 3-9, 16,850 people died. Germany did relatively well in the beginning, but now, on December 11, there were 27,217 new cases—it's completely out of control; 524 deaths in one day. And the different governors and the government are talking about the possibility of a complete, total lockdown, even before Christmas, then into the New Year.

This would not have to be like that. Had people done what has proven to be an effective method, which is general testing, testing, testing, contact tracing, using digitalization and modern technology; and then putting



United Nations World Food Program (WFP) responds to the critical needs of more than 164,000 South Sudanese refugees in war-ravaged Sudan.

people into quarantine-it could have been brought under control. And it's still not being done.

On top of the COVID crisis, and as a matter of fact aggravated by it tremendously, is a famine, which is called by the World Food Program, a famine of "bibli-

cal dimensions," meaning that if nothing is done dramatically to change it, next year, there could be the deaths of 270 million people. This could be remedied very quickly, also, by saving agriculture in the United States and Europe and other socalled advanced countries, and doubling the food production.

But this is just the front end of the underlying crisis, which is that the entire system is collapsing: The financial system is hopelessly bankrupt, and all the trillions of money which have been pumped by the European

Central Bank, which pumped altogether €1.85 trillion, mainly through a Pandemic Emergency Purchase Program; the Federal Reserve, somewhere between \$6 and \$7 trillion, which all went to save the bankrupt system and not going much into investment in the real economy. And then, on top of this ongoing collapse, which is not ended, you have the really insane effort by the European Union to implement a Green Deal. They just met yesterday, and they decided to cut the emission of CO₂ by 2030 from a planned 40% to increase that to even 55%; the same is being attempted with the Green New Deal in the United States, if Joe Biden becomes the new President. That is the utmost insanity, because it would mean further weakening an already collapsing economy by imposing the direction of all investment only into Green technologies-and we cannot maintain modern industrial societies this way.

The European and American economies are collapsing, last year by about on average 10%, while China, for example, in the third quarter, after they very well recovered from the COVID crisis, had a growth rate of 4.9%, and in the month of November, Chinese exports increased on average 25%.

That is the real reason, or one of the contributing reasons, for this absolutely hysterical anti-China campaign. Because what we are looking at in an underlying way, is the collapse of the old paradigm, the neoliberal system, that which has constituted the so-called "Western finan-



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The European Central Bank in Frankfurt Germany (left) and the Federal Reserve Board Building (right) in Washington, D.C. have pumped in trillions to prop up the hopelessly bankrupt financial system, but hardly any into investments in the physical economy.

cial system," the trans-Atlantic system, and this is why Secretary of State Mike Pompeo has made one speech after another causing an anti-Chinese hysteria, which is going way beyond McCarthyism: He just spoke in Georgia, saying every Chinese student in the United States, every professor is a Chinese spy. And very dangerously, [Marshall] Billingslea, the special presidential envoy for arms control just on November 17 made a speech before the National Institute of Public Policy, where he went into a rampage against Russia and China, saying Russia cannot be trusted on arms control, that China is responsible for unleashing the coronavirus pandemic around the world, and that Russia's nuclear doctrine promotes the early use of nuclear weapons with the strategy, "escalate to win."

Now, that assertion is a complete lie. It is actually what the present NATO doctrine is saying, but they assert that Russia has a plan to attack NATO, counting on the capitulation of NATO. Billingslea, in that speech, also said that he advised the Trump Administration, or President Trump personally, not to reaffirm the Reagan-Gorbachev statement that nuclear war cannot be won by anybody. This is why the Russian Foreign Minister Sergey Lavrov has recently warned many times, that there is a very dangerous illusion that a limited nuclear war can be won. And as many other experts, also from the Federation of American Scientists, have warned, there is no such thing as a "limited" nuclear war, because it is the very nature of nuclear weapons, that once you use one, all of them will be used.

Billingslea also accused China of building up its nuclear weapons arsenal behind a "Great Wall of Secrecy." Now, the reality is, while both the United States and Russia have, I think, somewhere between 6,000-7,000 nuclear warheads each, China has a meager 290. Given the fact of this continuous anti-China campaign, naturally, China feels compelled to build up its nuclear arsenal. And you have a dynamic where there is a hardening in China, very clearly, and there is a German proverb that says, "As you yell into the forest, so you get the echo back." So you're in an escalation spiral that is extremely dangerous. Maria Zakharova, the Russian Foreign Ministry spokeswoman, said this all is just a pretext for the U.S. to modernize its medium- and shortrange nuclear missiles.

It is an irony that just five days before this raving speech by Billingslea, the Trump Administration denied a request from the Federation of American Scientists to publish the size of its nuclear warhead stockpile. They used to do that until 2018, but no longer. And Hans Kristensen basically said that Billingslea's accusations against China would be a lot more credible if the United States would reveal their numbers in this respect.

So you have an unbelievable situation on all of these fronts. And what we discussed in the last panel, the unbelievable events in the United States, the five years of operations against Trump, first as a candidate, then in the entire time of his presidency; Russiagate, which could not be proven; impeachment, which was based on lies; and now finally the attempted, or actual fraud in the election—and, an unbelievable censorship by the major TV stations, declaring who won the election, and by the social media censoring content! So you have a situation which is really out of control. And that is why we should think back, and think, how can we develop a different approach of thinking? Because I think that is the most urgent question. And the overarching idea of this conference is the "Coincidence of Opposites."

I want to take it back a step to what my late husband, Lyndon LaRouche, has emphasized in every single country he ever travelled to: He asked people, especially young people, that they should start to reflect about their particular ideology. Because, when you are in the United States, it's very easy for you to see that people think differently in European countries, each one of them still thinks differently; people in Latin America think differently. But, when you are in a country, you don't think about it much; you think everything is self-evident. And Lyndon LaRouche is very famous, and you can verify that by reading his many books—which will keep you busy for a while—because he was very much concerned for how to give people a method how to become selfconscious about your own method of thinking.

We have right now, as part of this civilizational breakdown crisis, a real crisis in the method of thinking. There is enormous confusion about opinions, and that has reached an absolute crisis point after the breakout of the pandemic, where people who up to that point were quite rational, went into the wildest interpretations and conspiracy theories, and efforts to explain something which is obviously very frightening. Now, most people don't question the axiomatic basis of their views. They regard them as self-evident truths, as a matter of fact, as the only true truth. But if one undertakes an epistemological investigation of those opinions, one finds that they are many times formed on the basis of nominalism-that people just take a word, and then jump off, as if that would be the explanation; or empiricism, positivism, and conclusions are arrived as a result of reductionist method, of deductionism, or an analysis is made on the basis of looking at the world through concave glasses: Now, if you do that, you project the map of your own mind and own beliefs on the intentions of the supposed view of the other person.

Now we can see that right now: This is typically the case for people, who, for example, define the supposed

geopolitical interest—let's say, of the EU, against that of Russia and China. Or, what you have presently in the United States, the circles that are accusing China of imperial designs, are exactly promoting such designs themselves, where anybody who is honestly investigating the matter, has to come to the conclusion that the Chinese model of development has not only eradicated extreme poverty in China itself—they just did that two weeks ago, and altogether, China has lifted 850 million of its own people out of poverty into a growing, large middle class; but China is also offering that model of development to the developing countries, which obvi-

ously challenges the imperial designs of the accuser.

Now, as I said, the overall subject of this conference is the concept of the Coincidentia Oppositorum, the coincidence of opposites, a concept which was developed by Nicolaus of Cusa, who is the most important thinker of European intellectual life in the 15th century. And, actually, very importantly, he was the first one to develop principles of the modern, sovereign nation-state. He did that mainly in his Concordantia Catholica, which presented for the first time the idea that the government has to work with the consent of the governed, and there must be a reciprocal relationship between the government, the representatives, and the governed.

He is also the father of modern natural science: He developed a method of thinking—of thinking something completely new—and he was very self-consciously saying that he was proposing something which no human being ever had thought before. And that method also is underlying all the philosophical writings and economic-scientific method of my late husband, Lyndon LaRouche, and his physical economics. It is basically the idea, that human reason has the capability to define a solution on a completely different and higher level, than those on which all the conflicts and contradictions arose. It addresses the capacity to think a One, which is of a higher magnitude and power, than the Many. And once you train your mind to think that way, you have the inerrant key to creativity, and one can apply this way of thinking to virtually all realms of thought.

In order to get an approximation of the coincidence of opposites, one has to start with a rejection of the Aristotelian method. Now, Aristotle says, "if something is A, it cannot be at the same time B." But the coincidence is also not A plus B, divided by 2, or some other algebraic or arithmetic calculation. Nicolaus develops his concept in several of his writings, but extensively in the *De Docta Ignorantia (On Learned Ignorance)*, which was immediately attacked by the Heidelberg professor and scholastic Johannes Wenck, in an attack on *De Docta*

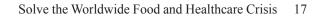
> Ignorantia, called De Ignota Litteratura (The Ignorant Scholar), meaning Nicolaus. Nicolaus answered several years later, because he didn't get this writing immediately, in a little paper, which I recommend to all of you to read, called, Apologia Doctae Ignorantiae (In Defense of Learned Ignorance), in which he laments that the Aristotelian tradition nowadays (meaning in Cusa's time) was prevailing, which would estimate the coincidence of opposites as a heresy, since that school completely rejects this approach as totally opposite to their intentions. Now, the intentions are really of an oligarchical nature, which he doesn't say here, but that is what it was. Therefore, Cusa says, it would be a total miracle, and would be a complete

Cardinal Nicholas of Cusa (1401-1464).

transformation of their school, if they would abandon Aristotle and arrive at a higher perspective.

Contrary to the Aristotelean method, which gets entangled in the fight between the contradictions, the view of the coincidence of opposites looks at the process from a higher level. And this was mentioned in the little video which you saw at the beginning [in Panel 1], in which I talk about the need to publish the collected works of Lyndon LaRouche: That the coincidence view is like looking at events as if from a high tower, where you see the hunter, the hunted, and the process of the hunting. And that gives you a completely different viewpoint, than if you were the hunter or the hunted, or just running around with your nose to the ground.

To arrive at this level of thinking, however, requires



an enormous exertion. It requires a tension of the mind. It's not something you can switch on, but it is an intellectual struggle. But, once you do that, you have power to enter areas which are otherwise completely closed off. Nicolaus references how thinkers like Avicenna (also called Ibn Sina) have resorted to negative theology in order to get the mind out of the habit of latching onto the factoid, provided by sense-certainty. But the most keen-witted one, Cusa says, was Plato in his argument in the Parmenides dialogue, which may be, for anyone who has struggled with Plato's dialogues, the most challenging of all of these dialogues. Parmenides was the leader of the methodologically reductionist Eleatic school, which taught that the essence of things could only be arrived at through the thought process, and not through anything having to do with material matter. But that this essence had to be a strict simplicity, without all multitude and diversity-and especially, without any change and motion. All multiplicity provided by the senses and the implied change thereby are only appearance, Parmenides said. They're illusory, therefore any diversity and change can neither belong to the essence of things, nor participate in them.

Now, in this dialogue Plato lures Parmenides into exposing that glaring paradox in his thinking, namely, that Parmenides leaves out the principle of change. In the tradition established by Plato, "change" is not a linear extension of a Euclidean space, but rather a sequence of original axiomatic-revolutionary acts of discovery, leading to a nested set of discoveries of universal physical principles, which deepen our knowledge of the physical universe and perfect the creative powers of all those human beings, to whom that progress is transmitted. Nicolaus says, at one point that through that education every human being recreates the evolution of the entire universe up to that point in his mind. It is that microcosm of the mind that corresponds to the macrocosm at large, which is the universe, which enables each human being potentially to have prescience, to know what the necessary next discovery has to be, in order to continue the lawful process of creation.

This is very important, and it has everything to do with the concept of relative potential population density, which was developed by Lyndon LaRouche. Relative potential population density gives you a yardstick for the absolutely necessary next discovery.

For Plato each individual such discovery is the result of an adequate discovery, which is that the human mind can generate in an "intuited" way. That is why

Einstein emphasized that imagination is more important than knowledge. For knowledge is limited, whereas imagination embraces the entire world, stimulating progress, giving birth to evolution.

Plato's answer to Parmenides, therefore, is his ontological notion of Becoming, as the continuing ability of the human mind to generate such hypothesis, or the hypothesis of the higher hypothesis, in which that all-encompassing change is the One, which includes the Many on a higher level.

That same method of thinking was employed by Nicolaus, when he solved a problem which had left many thinkers and mathematicians sleepless, since ancient times, namely the problem of the quadrature of the circle. Archimedes, an earlier mathematician, had tried to solve the problem with the method of exhaustion, by inscribing and circumscribing an ever-increasing number of polygons on the circle. The mistaken assumption is that eventually the perimeters of the two polygons would ultimately coincide with the circle. In this way Archimedes did find a workable approximation of the number *pi*, but in reality, the problem was not solved. Because Cusa says that the more angles a polygon has, the further away you get from the circle.

It took Cusa's revolutionary method of thinking to solve the problem of the quadrature of the circle by making clear that a circle cannot be constructed by a geometry that is based on the axiomatic assumption of self-evident points and straight lines, but that an axiomatically different geometry has to be applied, whereby circular action replaces the Euclidean self-evident assumption of the point and the straight line. The isoperimetric principle, as it's called, of the primacy of the circle makes clear that from the circle one can arrive at the polygon, but not the other way around. In this way Nicolaus provided the conclusive demonstration of the difference of the domain of mathematics limited to the commensurables and the completely distinct domain of the incommensurables.

This progression from the understanding of Archimedes of the quadrature of the circle, to the superior one of Cusa also illustrates the role of human discovery of a preexisting universal principle and the change of its existence as a potential, but as one which had been previously hidden from the view of mankind's knowledge, to the "realization" of that principle through the act of human discovery. It is that continuous process of discovery, which is ontologically primary, that is the One, that is primary relative to the content of each and all of the Many.

Bernhard Riemann, whose scientific method lent itself to contribute to name the LaRouche-Riemann economic model, elaborated the same idea in a writing quoted by Lyndon LaRouche, "Zur Psychologie und Metaphysik" ("On Psychology and Metaphysics"), by describing the human soul as a compact and tightly and multiply connected body of ideas, Geistesmassen, as this notion was developed by Herbart and then taken up by Riemann; or as Lyn named them, "thought-objects." Each new such Geistesmasse, or idea, resonates with all the previously accumulated ones and interacts in a reciprocal way, the more so as there is an inner affinity among them. Riemann also says that these compact Geistesmassen continue to exist, even if the person who has created them has died, and becomes part of what he calls the soul of the Earth. Essentially the same idea is expressed by Vernadsky, in a lecture he gave in Paris in 1925, where he described the human species and the collective human mind as a "geological force" in the universe. Vernadsky insisted, that the entire history of the universe proves that the Noösphere-that which is influenced by human intellectual activity and reason-will gain more and more dominion over the biosphere. And it is that anti-entropic character of the creativity of the human mind as the most advanced part of the driving force of the physical universe, which is the reason for optimism for the future of mankind.

It implies, that more and more human beings, in all different nations and cultures, will be able to elevate themselves above the infantile level of sense-certainty, and overcome failed ideological traditions, such as the rhetoric school of sophistry, which is not concerned with truth, but with the victory of whatever assertion the sophist wishes to make, in order to promote his own particular self.

Now, the concept of the coincidence of opposites can be applied to the present strategic situation, and actually, every area of human knowledge. The interest of mankind, if you define it, not as the interest of the present living people, and in the here and now, but if you take into mind the interest of all future generations to come, essentially the same idea which is the Preamble of the American Constitution: That it's not just the present, but all future generations who must be served with the common good, and in this time, the entire world, the entire human population.

To get an understanding of what this means, think about how you would apply what I just said theoretically to the present world situation. If you take each nation as a microcosm, according to Nicolaus of Cusa, peace in the macrocosm is only possible if each microcosm has the best possible development, and takes it as its own self-interest that all the other microcosms develop. That means that you're not taking the so-called geopolitical self-interest of the nation or a group of nations, positioning themselves against the supposed interest of all the others, but that you have a different conception, rejecting the Aristotelian method of contradiction. If you take Plato's concept of change and becoming as the ontological primary, then the development of each microcosm can be seen like in a contrapuntal, fugal composition, where the development of each note and each idea contributes to the future development of all others.

There are already functioning examples, where you can see an approximation of how that can function. One in the international cooperation in the thermonuclear fusion reactor in France, in Cadarache, the ITER, which is the joint collaboration of 34 nations, which all profit from the discoveries. Now, it is also obviously the potential international cooperation in space research and travel: We have presently three very fascinating missions to Mars, which will all arrive in a few weeks on Mars, and would it not make sense to join the research together? Now, it's not the question of who puts the first flag on Mars, or who puts the first woman or man on Mars, but it is the question of how do we conquer the Solar System for human habitation.

Now, our galaxy is incredibly big. I don't know if you recently looked, for example, up to the stars, to the Milky Way, But our galaxy is only one of 2 trillion galaxies which have been discovered by the Hubble Telescope so far!

Just think about the long-term existence of mankind: Well, mankind has been around for a couple of million years, but really, we know in terms of verifiable recorded history, a little bit about the last 5,000 years, a little bit more through archeology, but only, really, a very short period of time. Now, do we want mankind to be the immortal species, or do we want mankind just to be like one of the many other species which come and go, and whenever you have large extinctions they disappear. It doesn't matter, evolution then creates other species with a higher metabolism, so it doesn't really matter if mankind disappears in the process. Well, I don't think so. Because I think mankind, whatever we find in the universe at large, if there is other intelligent life somewhere, mankind is absolutely unique. We are so far the only discovered, creative species.

In a few billion years, the Sun will no longer function well enough for us to be able to live on Earth. Therefore, the need to colonize space, to make other planets habitable for the human species is a question of the survival of our species. I think this is eminently possible if we move away from our present condition of too many people behaving like infants, like little boys kicking each other in the shins, and develop our full potential, cooperating with other human beings, cooperating with other cultures, and fulfill the long-term destiny of mankind of being the species consciously instigating change in the universe, and that way, fulfill our true destiny as a human species.

It is up to us to make that transformation, and in that way to create the ability to get out of this crisis alive and with happiness.