II. Toward a World Health Program

Operation Ibn Sina: Toward a World Health Program

by Helga Zepp-LaRouche

On Saturday January 15, 2022, an international youth conference was convened by the Schiller Institute. Anastasia Battle, the editor of the Schiller Institute's Leonore magazine, opened the conference, noting the creation of the third-generation of the international LaRouche youth movement, with the purpose of "taking the passion of our young people, to go on to campuses, to go out into the streets, to go on the internet, to fight with world leaders, to really make the changes for the good in the world right now."

She situated the context: "There are a lot of very stressful tensions going on in the world between NATO and Russia; what you're seeing with this massive starvation—45 million people are on the verge of starvation, 22 million of those people are on the verge of starvation in Afghanistan alone. So that's where this Operation Ibn Sina is coming from. We can not tolerate this. This is not something which people should turn a blind eye to and pretend that it's not happening. And all of you today, I'm sure, are aware that this is just not the way humanity should function."

The question is: "So, why isn't there action being taken now? Many people who are good people don't act in the moment when it's necessary, because they have all

these fears in their head—'Oh, I don't have power, I don't have the ability to say or do this.' But what about the power to change someone's mind? What about the power to spark an idea in someone else's mind, to educate them? And we really want to educate the youth of the world, get them to become more potent in their ability to fight for those ideas, to activate more people to change. And that's how we're going to be able to get something like Operation Ibn Sina to develop the region in Southwest Asia. That's how

we're going to be able to get the New Silk Road built all over the world."

A video of this presentation is available <u>here</u>.

I greet you all, wherever you may be on the planet. It is very good that we are coming here together for what I have called Operation Ibn Sina. Over the course of my presentation, you will see why invoking Ibn Sina—who is known in the West generally as Avicenna,



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A severely malnourished child in Afghanistan. Prosperous agriculture and a modern health care system are more than urgent.

and who is one of the absolute towering giants of universal history—why using his name is the most suitable way to address this unbelievable crisis of humanity that confronts us.

We have had for now, almost two years, a completely out of control pandemic. It would not have been out of control, if the rich countries had proven to be a little bit smarter, if those countries acted with the understanding that you can only solve a pandemic when every single country has a modern health system. It doesn't help at



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Look at these pictures. Take the suffering into your heart and into your mind, and not what most people do. They push it out of their minds, and say, "I don't go there. What do I have to do with Afghanistan?" We have a lot to do with Afghanistan. NATO was there for 20 years. The Afghan people have suffered from war for 40 years. We in the West have a moral obligation to help to solve this crisis.



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all if you collect vaccines and hoard them, and leave the developing countries without vaccines. The result is you have exactly what is happening now: You have mutations—Delta, Omicron, and who knows how many of such mutations will still come.

This is why Ibn Sina, a towering figure of the 11th Century, is the name for the fight to get a world health system. And the most obvious situation—I'm not saying other countries don't need it—but the most outrageous, biggest scandal is the fact that in Afghanistan, there is right now the greatest humanitarian crisis on the planet unfolding. It's not a natural catastrophe. When the Taliban took over, when the NATO troops left in August, everybody knew that 75% of the budget of Afghanistan came from international donor countries, and these monies were cut, because the NATO forces didn't like the Taliban. And they all knew that the Afghan economy would completely collapse.

It's now five months later, David Beasley from the World Food Program and other UN officials are warning that over 90% of the people are food insecure, which means they are starving, and they have no access to medicine—and that in the middle of a pandemic. I call this genocide. It is like what happened in Germany around 80 years ago, when later, when the Nuremberg Trials took place, the question was also, "Who knew what, when?" And now, because of the international media, TV, the internet, nobody can say that they could not know.

So what is the purpose of this conference? My urgent, urgent request to you, to young people, is that we have to create a force to establish justice on the planet. And the first place this has to start, is in changing public opinion in respect to Afghanistan. There are these people who say that the Taliban first has to give certain rights to women. Now that's the

most hypocritical argument I have ever heard: When you have women starving with their children, cannot give milk because they are starving themselves, freezing to death—look at some of these pictures from Afghanistan released by the World Food Program—you can forget about women's rights, because these women are, right now, dying of starvation, and their children as well.

Look at these pictures: You have to be able to take that suffering into your heart and into your mind, and not do what most people do. They push it out of their minds, and say, "I don't go there. What do I have to do with Afghanistan?" We have a lot to do with Afghanistan. NATO was there for 20 years. The Afghan people have suffered from war conditions for 40 years. And we in the West, in particular, have a moral obligation to help to solve this crisis, which would be very easy.

The United Nations has just said what is needed to immediately stop this dying of 8 million people, who are dying right now, as we are speaking; and about 23-24 million are in danger to not live out this winter. It would only require \$5 billion—five billion dollars. That is the proverbial peanuts. Think about the *trillions* of dollars which have been used to save the banking system in the last several years. Think about the \$760 billion military budget of the United States alone. So \$5 billion would be the proverbial peanuts. We have to create a movement worldwide to reverse this and create so much pressure on public opinion that an aid program can immediately start.

Let Us Turn to Ibn Sina

Ibn Sina—who, unlike in the West, where he was well known and greatly admired, even up to the 1800s—is still very much alive in the Islamic world. And not only because of his contributions in metaphysics, in all the different sciences, but especially in the history of medicine. He was one of the most outstandingly great physicians in world history, together with the Greek doctors Hippocrates and Galen. There may be a few more—you can count them on the fingers of one hand. He is one of the absolutely outstanding ones.

That he was very famous, you can see in the 30 different postal stamps issued honoring him. Many of you may have either read the 1986 novel, *The Physician*, called *Medicus* in German, by the American



Ibn Sina, the great physician, on a 1980 postage stamp celebrating the millennium since his birth, from Mali, West Africa, showing surgical instruments and medicinal plants.

author Noah Gordon. There's also a movie based on it, a Hollywood movie and a musical in Germany and Spain.

We are not talking about some obscure person. Ibn Sina was without any question the central figure in Islamic philosophy in this period, which is known as the Golden Age of Islam. It started in Baghdad in the Abbasid dynasty, the Caliphate, after the collapse of the Roman Empire. Europe plunged rapidly into a dark age. All the great treasures of the Greek classics were essentially lost, because the Romans did not pay any attention to the absolutely outstanding contributions of the Greek classics. Rome quickly became an empire, not interested in the intellectual fruits of this period.

Therefore, after the collapse of the Roman Empire, because of an incredible effort by the Baghdad caliphs, al-Mansour, al-Ma'mun and others, they practically saved the knowledge which had been completely in danger of being forgotten in Europe, by sending emissaries to all the European countries and the countries around the Mediterranean, and basically weighed in gold all the crucial texts from the original thinkers and discoverers, so that basically they saved all existing knowledge of that time. And Baghdad, at that point—this was starting 750 A.D.—was the city worldwide with the most books, the most scientists, and it was just the capital of progress of the world.

Now, especially the texts of Greek classical

philosophy and science were translated, and were general knowledge in the entire Arab world, also in Persia. And at that time, the Islamic world was much, much, much more advanced than Europe, which was really in a terrible condition.

Therefore, Ibn Sina, who led all of this and was absorbing all the Greek texts, the translations: others say that he read Aristotle's Metaphysics forty times. And said that forty times he did not understand it-which understandable. because is it doesn't make much sense. frankly. (Anyway, that was just my comment.) But he also absorbed 2,000 years of Eurasian philosophy, and he nevertheless used all this knowledge to become

a completely independent thinker, an original thinker, who naturally commented on Aristotle, and other people like al-Kindi, al-Farabi, and many others. But to say that he was an Aristotelian, as some writings are saying, is completely false. You can also not call Schiller a Kantian, just because he wrote his *Letters on the Aesthetic Education of Man* and all of his aesthetic writings against Kant. That doesn't make him



Ibn Sina's father, born in in Balkh, near Mazar-i-Sharif (in today's Afghanistan), later moved to Afshana, near Bukhara (Buxoro in today's Uzbekistan), where Ibn Sina was born. The entire region was an important cultural center, where historians, poets, and scientists flourished.



Ibn Sina holding his Canon of Medicine on a 1980 postage stamp from Algeria.

a Kantian.

A Philosophical Advance

Ibn Sina used this knowledge, including the writings of the neo-Platonists of his time, such as Proclus, who tried to reconcile Plato and Aristotle. And so Ibn Sina knew almost the entire philosophical tradition up to his time.

He was an incredibly prolific writer. He wrote about 200 to 775 major works— many of them have not been saved—and he was evolving his ideas throughout his whole life, as all great thinkers do. You never start out as a young person with the same complete set of knowledge, that you accumulate over the length of your lifetime. And he was writing

certain absolute breakthroughs, such as what he's most famous for, his *Canon of Medicine*. These were five books, which was an unprecedented, never-before-collected encyclopedia of medical science, which had many components, which I'll mention in a second. But he was also writing on natural sciences, practically all faculties, mathematics, geometry, biology, geography.

He also was versed in poetry, music; and he was

sort of a wonder child, who, when he was only 10 years old, already knew the entire Koran by heart. And he had gotten some of the best teachers from his father, in jurisprudence—in law, in Islamic law. And he learned more quickly than all his teachers. So he quickly became an autodidact, somebody who is self-taught.

Look at the area he came from: His father was born in Balkh, near Mazari-Sharif, which today is in northern Afghanistan. Balkh had been made Alexander the Great's capital after he had conquered this entire region. (Alexander went all the way up to India with his conquest. He made the city Balkh the capital of his province Bactria.) Later his father moved to

Afshana, which is near Bukhara, which is today in Uzbekistan, where his mother came from. It was a very important cultural center, where many historians, poets, scientists of all categories were also gathered. His family was extremely educated, including his mother, and so he had an incredibly rich environment.

You can read all of that in his autobiography, which Ibn Sina dictated to his student, Abu 'Ubayd al-Juzjani. We have much more to do, to study this history. I want to invite all of you to engage yourself with us in these studies, because nowadays people look at Afghanistan and Central Asia as a region of terrible crisis. But this region, known as Bactria, was once known as the

"Land of the Thousand Cities." This was in the time of Classical Greece, and it has an incredibly rich history, about which people in the West know almost nothing.

That is one of the reasons why people have such a hard time to understand that you cannot go into Afghanistan and try to impose Western democracy—which is a whole farce by itself, but that's for another discussion—but that you cannot impose a culture on a culture which has its own very, very clear, cultural roots in poetry and science.

So, one of the aims of Operation Ibn Sina is to make known to the world the incredibly important contribution to universal history, to our own contemporaries and future generations. We want to

build a completely new paradigm, where a dialogue of cultures—among all the nations and all cultures—is an equal partnership, where each contributes the best tradition of their own history and relates to the best tradition of the other, because that is the only basis for a world living in peace and harmonious development.

On the Soul

Let me start with the most important works he wrote about metaphysics. He wrote about the healing of the soul. Ibn Sina had the idea that what philosophy does for the mind—namely, healing it—medicine does for the body. What he does in his metaphysical treatise is a discussion of the immortality of the soul.

That was a question which concerned practically all philosophers of ancient times. What is the soul? Do people have immortal souls? Does the soul die together with the body? Do people have individual souls? Do they partake in a world soul? And this was a very basic question, and it's quite amazing that nowadays, I have found very little concern among people, old and also young, to discuss about the soul and the beauty of the soul. Even so, I think that that is, actually, the most important, because the soul is where our identity is located.

Now, if you look at the discussion before Ibn Sina on that issue, Aristotle saw the soul as an entelechy,

which is basically that the aim of the soul is the perfection of something like an organic body, that has the potential to live, and therefore is becoming the most perfect of its possible being. But it's not separated from the body, and therefore, when the body dies, the soul also vanishes.

Now, Plato, on the other side, thought that you not only have the human soul; the world has a soul, the Earth, the animals, plants—all have souls. And [that] they have to fight their whole life between the intellect—that the soul strives to become more and more spiritual—and the senses, because the soul participates in both; the soul is in motion, that is, a self-moving process, and therefore, it is immortal and

indestructible. And it is the soul that breathes life into the body, and death is the separation of the soul from the body.

In the *Phaedo*, one of Plato's dialogues, he develops the idea that the soul exists before birth, and when a baby is born, in the birth the soul attaches itself to the body, and then it continues to exist after death. Now for Plotinus, who was a neo-Platonic philosopher who died 270 A.D., the birth is the moment where the soul separates itself from the universal pre-existing soul and is individuated in this particular person. During the entire lifetime, the soul has to struggle, to either fall into the indulgences of the sensuous pleasure, or rise to the level of philosophy and intellect and never be



Ibn Sina, the philosopher, on a postage stamp from Iran.

dragged down to the material world.

A Thought Experiment

Ibn Sina discusses the soul and the self-consciousness of the individual, and he uses a very fascinating thought experiment to come close to this idea. It's called the image of the "floating man," or the "flying man."

He says: You have to imagine a fully adult man, about 30 years old, who all of a sudden plunges from nowhere into full adulthood. He has no memory of his history, he doesn't remember his childhood or anything else, he's just all of a sudden there. He's suddenly in an empty room, floating, not touching the ground, and not touching the walls, just floating in the air. The room temperature is about the temperature of his body, so he doesn't have a sensuous experience through his skin. His legs and arms are stretched out, so he has no sense of touch, like the feet or the hands touching, they are all stretched out; he has no sensation of touching. His eyes are blindfolded, he has no sight. His ears are covered, he has no hearing. He doesn't smell anything nor taste. So he is floating there in mid-air, in total sensory deprivation.

And then Ibn Sina asks the question: Is this man aware of himself? Now, he basically comes to the conclusion that such an adult man, who has fully his intellectual faculty but is divorced from his senses, would absolutely have a sense of his self. And because it is opposite and is separated from the senses, it means the soul is not depending on material conditions.

Now, with this thought experiment, he tried to solve the century-old question, "What is the soul? And does the soul have an existence separate from the body?" And his answer is definitely, "yes." This man would have a sense of self. He would not be dependent on any sensory experience. His soul exists separate from the body, and naturally, such a soul, being immaterial, survives after his death.

He says in the *Metaphysics*: "Now, it is the cognitive power of the soul that it thinks, and further, that it reflects on its own thinking in a reflective way, and that it thinks again over this second order of thinking reflectively, and through this, accumulates relations to others. It builds so in one object, different conditions, namely proportions, which, according to their power, have no end. Thus, it is necessary that these mental forms of knowing, which follow upon each other, have no last link, literally no stand-still, with the necessary

result that one progresses continually without end."

That describes a self-consciousness about one's own self-conscious thought process. Operation Ibn Sina comes from an idea of an image of man, in which each human being has this idea of being a creative person and having an absolute value.

For All of Mankind

Therefore, when we say we want to solve this greatest humanitarian crisis in Afghanistan and start with a modern health system, what do we have to do? And why is Ibn Sina the absolute appropriate person to start this effort with?

As the Chinese have demonstrated in Wuhan two years ago, when they had the first cases of COVID-19 in Wuhan, they closed down the city of 15 million people and the entire province around it and put everybody in absolute quarantine. And then they did all the other things—contact tracing, isolation; and they, contrary to the governments in the West, which could not make up their mind, should they put people in isolation, should they not? And then because people didn't like it, because of their liberal values, they did not. And now you look at the situation where, in the United States, 900,000 people have died. In Germany alone, 115,000 people have died.

In China, not even 5,000 people have died in a population that is more than four times bigger than that of the United States and more than twelve times bigger than that of Germany. So, which policy was used and what was the most effective measure against pandemic? Quarantine.

Now, who first developed the concept of quarantine? It was introduced the first time by Ibn Sina. He realized that a 40-day period of isolation is the best method to stop the spread of infections.

Now, let's see the film clip of Ibn Sina and COVID-19. It's from a 1956 film, now being circulated from Uzbekistan, with English subtitles.

Ibn Sina Speaks to Us

The following is the transcript of the film clip presented to the conference audience. The film begins, in English:

COVID-19 represents one of the greatest challenges mankind has faced in the 21st century. Over 10 centuries ago, the father of modern medicine and polymath, Ibn Sina, unlocked the nature of epidemics. He discussed this in his seminal book, *The Canon of Medicine*. Once,

Ibn Sina, who was born in Bukhara, visited another polymath named al-Biruni at his Urganch academy in Khwarezm.

We then see scenes from the 1956 film, with English subtitles.

Ibn Sina: Assalamu Alaikum.

Guard: Wa Alaikum Salam.

Ibn Sina: Where is the Academy of the respected al-Biruni?

Guard: The great scholar al-Biruni lives over there.

Ibn Sina: Thank you.

Al-Biruni: Who is this?

Ibn Sina: I am Ibn Sina.

Al-Biruni: Ibn Sina! I've been wanting to meet you. Welcome!

Ibn Sina: Dear Biruni, first of all we need to wash our hands with vinegar and change our clothes.

Al-Biruni: Is that the new practice? From which country is that?

Ibn Sina: Where infectious diseases are spreading and killing people, we need to follow this practice.

Al-Biruni: Welcome. Let's do it then. Come in. Respected Ibn Sina, tell us. Can we fight the epidemic with the help of science?

Ibn Sina: Yes, we can. First of all, we have to calm the people down. They should not be afraid.

Academic: Panic is the worst reaction.

Ibn Sina: Exactly, the plague is a disease that spreads from human to human through small agents. It spreads when people touch each other. This disease can

also spread through the hair, clothes, and surfaces. That is why people should not gather in big numbers. You must also stay away from sick people. For some time we need to close bazaars and mosques. People can pray at home for a while.

Academic: Closing mosques? Stopping prayers? Some people will not like it.

The scene shifts to an outdoor bazaar.

Man on horseback: People! Practice physical distance from each other, the disease spreads from person to person. Leave the bazaar. Food sellers should send the food to the houses and not sell in the bazaar. This is the advice of Ibn Sina. Clean your coins with vinegar.

Town criers: People! Don't panic, stay home. Take



Film, The Physician

Pictured here is Ibn Sina teaching. In the 15th Century, Marsilio Ficino, leader of the Platonic Academy in Florence, was fascinated with Ibn Sina.

care of those who are sick, wash your hands with vinegar. Sick people should be kept in separate rooms.

People! Don't gather in one place. One sick person can infect 100 others. Gathering in the mosques should be avoided. Please pray at home. This is the advice of Ibn Sina. We can fight the infection.

The old film ends, and the message is displayed: Stay Inspired. Stay Safe. Stay Connected.

Let Us Know What Was Known

So that thought, the message of Ibn Sina, came to many people. It is worthwhile to reflect at this point. Today, we have all these demonstrations of anti-vaxxers, of people who refuse to be isolated, or quarantined, and have all kinds of conspiracy theories about the pandemic. And I think it is worthwhile at this point to reflect what an incredible breakthrough it





Tashkent Film Studio

Tashkent Film Studio

Clips from a 1956 Soviet Central Asian film, featuring Ibn Sina and his far-sighted advice on how to fight epidemics by, among other means, quarantine.

meant to have modern medicine. And Ibn Sina is the person who shows the difference between a scientific approach to medicine and the previous, completely superstitious ideas about medical treatments.

The five books of his *Canon of Medicine*, which was the standard work in Europe for medicine, discussed in detail the anatomy of the body, the functions of different organs, the connection between muscles, the nervous system and the psyche. He developed a whole categorization and list of different diseases and treatments; he listed medicines. The work incorporated the knowledge of Hippocrates and Galen, but Ibn Sina added to that several fundamental breakthroughs; quarantine is just one of them.

For example, he recognized that infections spread through tiny, invisible particles, among other things,

through contaminated water and soil. He for the first time treated life-threatening diseases with the help of anesthesia, and he had a knowledge about treating cancer in the early stages. He knew that it was important to remove all affected tissues. He developed a diagnostic method for diabetes, by measuring the sugar in the urine. He, in his treatments, emphasized the need to have attention in the patient to the age, the body type, the emotional state, eating habits, lifestyle, movement. He even discussed the effect of the seasons on the body—what is the impact if the air is cold and dry, or warm and wet.

In the *Canon of Medicine* he listed about 760 medicines. And he also emphasized to never use an unused drug, but to first test it on animals and individual human beings, before you put it into



Tashkent Film Studio



Tashkent Film Studio

To minimize disease transmission, Ibn Sina advised avoiding crowds, frequent hand-washing, and the sanitizing of coins, which circulate among many hands.

general use. He was absolutely aware of the relation of emotions and the physical condition of the person. He discussed how music has an effect on the physical and psychological condition of the patient. So, that was a very rich compendium, which never existed before in this form. And therefore it was quite correct that already in the Middle Ages, he was called the father of modern medicine. And he shaped the medical science both in the Orient and in the Occident.

But Ibn Sina said medicine is one of the easy sciences. So it was for him the easiest part and just one of the many sciences which he pursued.

To Metaphysics

Now, coming back to the most profound aspect, his development of metaphysics: Metaphysics goes back to the Greek origin of the word, *meta ta physica*, which literally means that which comes after physics, or what is above physics. Metaphysics as the first philosophy, or as it also is called, as an ontology, which discusses the question of being as such, *esse*, "being," "existence."

The issues which concerned all philosophers from the earliest time, especially the ancient Greeks, to the present time, were such fundamental questions: Why do we exist? Why does anything exist at all? When did existence start? Was it eternally there?

Well, obviously, the different philosophers and schools gave very different answers, and it was a continuous struggle of ideas about this question of, is the universe the only one? When did it start? And obviously all these metaphysical questions became extremely important for physics, beyond the metaphysics, to ask the right questions, to formulate adequate hypotheses leading to fundamental scientific breakthroughs, or not. One can actually trace progress in science to one specific philosophical tradition, because it lent itself to ask the adequate hypothesis, and that is a very important question. And, my late husband, Lyndon LaRouche, has done more than anybody in the history of philosophy and science to answer that question. Now that's a subject for another time.

These philosophical questions were there before natural science was developed, and Ibn Sina developed a new conception, which did not exist in Aristotle and the followers of Aristotle, which are quite the Peripatetics, nor in Plato and the neo-Platonists after him. This conception is what he calls the necessary

existent. He maintains that there is only one unique being, that all which exists is in a necessary way, that this unique being is the only one which exists out of itself. Everything else is also necessary, but it does not exist out of itself, but it is caused in a necessary way by this first principle. He calls these other non-self-subsisting existences contingent. It is the creative principle, the necessary existent, that is above all creation, that can never create a second existence that belongs to the same level of existence as itself. It is the ultimate cause which precedes all which is only contingently possible.

Now to make that concrete, you and I, we are obviously not a necessary existent, but we are contingent, because we need a cause. And that cause was essentially our parents who got married and had love, and then finally, we were caused by this, but we are not without a cause.

So he says since everything has a cause, what is behind this cause? Another cause. And behind that cause, still another cause, and so forth and so on. Behind this seemingly endless cycle of cause and effect, there must be one final cause, which must define the rational order in the universe. And if there is one cause which effectuates all others, then that cause must be of a higher reality than all of its effects.

On Creation

Ibn Sina comes through his philosophical reflection to the conclusion, that the creation never "began," because the world exists in eternity; because if there is such a necessary existent, that which exists only through the power of its nature, then it does not exist either by accident or in a contingent form. Rather the unique characteristic of the necessary existent, is that it is perfect. It is unlimited goodness. It is selfless benevolence. By bringing the world into existence, it emanates its goodness and love. Therefore, this highest form of being does not start to create at a particular point in time, because it is the infinite goodness. It does not hold back until a certain point in time, where it starts to create. It is unchangeable. It is not a potentiality, which then decides to start to create the process of creation.

Ibn Sina says it does not make sense that this highest being is first inactive, and then decides suddenly to start its creative activity. For such a possibility, there is no reason, because the necessary existent is the only existent and is also unchangeable. So what would be the reason for it all of a sudden to start its creative activity? It also does not make sense to assume that the necessary existent was there before the Creation, because that would assume that it is only temporary, while it is outside of all time. Therefore, in his view, the world is there in eternity, a continuous revelation of the goodness and charity of the Creator, of Allah.

The necessary existent, as the first existing, cannot be a multitude. It is simple and it is not material. It is entirely mental, intellectual, spiritual, as the movement principle. And Allah does not create all the lower forms of existence. He creates the higher forms of intelligences, who then create other intelligence, who in turn create further intelligence, describing a progression to lower levels of completeness, the further they become distant from the first course. Nevertheless, God is present in all forms of creation, either directly, as in the creation of the first intelligence, or indirectly as in all other creations.

Evil does exist, but it is not in the intention of the Creator. Evil is a lack of something, and the individual has the free will to act in a responsible way to shape his own destiny and future.

This creation theory is what is fundamentally new in the metaphysics of Ibn Sina, and it is very different from Aristotle, and also the neo-Platonics, because it implies that God has transferred His power of Creation to his creatures, namely mankind. And this is the main reason why Ibn Sina, an Islamic philosopher, was accepted so widely in the thinking of many European medieval thinkers, while he was fought by some of the Islamic philosophers, such as al-Ghazali and Averroes (ibn Rushd). But in Europe, where his works were immediately translated in the 12th Century into Spanish, into Latin, such important philosophers as Thomas of Aquinas, who quoted Avicenna, as he was called now in Europe, 400 times in his works, and also Albertus Magnus, and in the translation schools of Toledo in Spain, as well as in the era of Frederick II Hohenstaufen in Sicily, and the Church fathers found his philosophy in great affinity with Augustine.

And in Europe

The French philosopher and historian Etienne Gilson, who lived from 1884 to 1978, even coined the notion of *l'augustinisme avicennisant*. Now this is very fascinating, because Augustine, who lived

from 354 to 430 A.D., who is one of the founders of a specific Christian tradition in Europe, had insisted that there is no contradiction between faith and knowledge, as compared to those people who say that only the Revelation, faith, is what counts, and it's completely separate from knowledge. And what Augustine cited as the proof that there is no such contradiction between faith and knowledge, he pointed to Plato, who lived from 428 to 384 B.C., that he already found—almost four centuries before Christ came on Earth with the Revelation and Christianity—came to the same conclusions about the creation of the universe, the nature of man, and therefore, one could arrive both through revelation, as well as through philosophy and knowledge, to the same conclusion.

This is a very important tradition, because it is that which makes reason possible, and that is what many great philosophers and scientists found, like Kepler, who was an absolutely religious person; Nicolaus of Cusa being another obvious one, and many others, as compared to those people who insisted you have to be an absolute materialist to come to these conclusions.

Now, William of Auxerre, who lived in the 13th Century, who was a magister of theology in Paris, was a typical representative of this Augustinian Avicennism. He was very much focused on this idea of God's revelations expressed through Avicenna's speculations about the active intellect through which the process of creation continues. In other words, not a god who creates the world and then becomes passive, but that it is the continuous intervention of the active intellect, which keeps driving the process of Creation forward.

Now it's very fascinating that Dante Alighieri (1265-1321), the founder of the Italian language, who's 700th birthday we celebrated last year, in one of his beautiful writings, the *Convivio* (the *Banquet*), lets Avicenna speak extensively. And in his *Commedia*, according to the Dante expert Rudolf Palgen, Dante has given the cosmos of Avicenna a poetical existence. And according to this expert, the whole conception of the *Commedia* is a completely extraordinary poetic composition, which reflects the fascination with the idea of a heavenly active intelligence. The damned in the Inferno, in Hell, are those who have lost *il ben del intelletto*, the asset of intellect, which is higher than the understanding, the separation of senses, understanding, reason. It is this higher asset of intellect

which is what the people in Hell lost. They may still have understanding, because evil people can still have understanding, but they are in Hell, because they lost exactly that highest quality of the creative mentation, as you would call it nowadays.

The Golden Renaissance

Another one who was absolutely fascinated with Avicenna was Marsilio Ficino, who was one of the Platonic teachers at the Platonic Academy in Florence. which obviously played a decisive role in the Italian Renaissance. And this was what revived Plato, who was lost for 1700 years in Europe, and which was brought back to Italy by Nicholas of Cusa and his friends from the Greek Orthodox Church when they came to the Council of Florence. So this Ficino called Avicenna "the divine." Now, before that, Nicholas of Cusa himself quotes Avicenna throughout his works. In one of his earliest sermons, the sermon number two, he quotes Avicenna. Then in the Docta Ignorantia in the second book, and also in Apologia Doctae Ignorantiae, which is the Defense of the Learned Ignorance, he quoted Avicenna in a very, very positive way all the time

And if you ever go to Bernkastel-Kues, which I can only advise you to do, and when you are lucky, I will take you there for a tour, then you will see that he had in his library a lot of Avicenna's writings in his possession, and he admired Avicenna very, very much.

Now, Nicholas agreed with Thomas of Aquinas and his reflections on Avicenna, that the human mind comprehends the transcendental notion of being before the concretization of individual things as such. In other words, that the mind has a sense of grasping the essence, the being, before grasping concrete matters as such.

Now, Nicholas, in *De Pace Fidei*, about peace in religion, one of his beautiful Platonic dialogues, about how to have a dialogue among the different religions to arrive at peace, he made a reference to Avicenna, which is very important, namely that Avicenna, when he talked about the happiness people will experience in Paradise is spirituality. The happiness one finds in the knowledge of God and truth, and not the Earthly joys—some commentators, also of the Koran, had emphasized—obviously is a much higher conception about what happiness represents.

Now, Cusa's conception of man is as an instrument of God, being the instrument of God by continuously carrying on the process of creation through the creativity of man. This is expressed in Cusa's notions of *imago viva Dei*, "the living image of God," and the *vis creativa*, "the creative power," which is inherent in every human being. These ideas are clearly in affinity with Avicenna's necessary existent, as the first eternal cause, and the continuous effecting of that principle through the active intellect.

God Continues His Creation

Well, what a fantastic idea is this, that God continues his creation through man! And what a tremendous responsibility that puts on everybody's shoulders.

Ibn Sina had a clear conception about the eternity of the world, and the eternity of the principle of creation. And it is not the often-misunderstood idea of the Christian fundamentalist creationists, who completely oppose modern science, because it seems to contradict Revelation. For Ibn Sina, the process of creation did not start at one point, because that would have meant a sudden change in God's nature. But since the character of the highest being is pure goodness, it is part of the essence of continuously creating other beings, *Seiende* in German. If it, this highest being, would have all of a sudden started to create, there would have been a change in its nature and that is excluded by definition, because then it would not be the highest being.

Interestingly, Thomas of Aquinas did think that the eternity of creation was compatible with the divine freedom. God could have decided to create the world from eternity, and that basically would solve the problem of being in contradiction to the revelation that God created the world in seven days and that it had a beginning, because if God decides to create the world from eternity, then that resolves the supposed conflict that there was a beginning of creation.

Before Ibn Sina there was a Christian philosopher in the 9th Century, with the name of John Scotus Eriugena, who in his writings, who unfortunately became very little known during his lifetime, basically had a similar approach, and when later philosophers tried to refer to him, he was condemned by Pope Honorius III, as a heretic. So, there was no significant influence on the thinkers who followed.

So that, in a certain sense, was a development in





NASA

The James Webb Space Telescope (JWST) will allow us to see the Universe before our world came into being. Here it is at the Northrop Grumman facility in California, with its mirror array fully extended (left); and being folded up to fit into the launch rocket (right).

the same direction, but it didn't have an influence, so it is all the more amazing that Avicenna was absorbed practically without ever having been condemned by the Church. There were counter-arguments against aspects of his philosophy, yes, but he was never really condemned as a heretic or anything like that. So one can definitely say that Avicenna not only revolutionized medical science for Europe for many centuries, but he also laid the foundation for a new metaphysics in the West.

But in the evolution of human knowledge, especially in light of modern science, what did metaphysics contribute to the advancement of man's conception of the universe? What does all of this talk about the necessary existent have as relevance for us today?

On Christmas last year, on December 25th which just passed, there was the successful launch of the James Webb Space Telescope, which will be fully operational in June of this year, and on January 8th, just a week ago, it swung the last three of 18 hexagonal mirror segments into position, locking them together into a 6.5-meter-wide "cosmic eye." It is supposed to reach its final location, a gravitationally stable point in space known as the L-2 point, on January 23rd, eight days from now. The telescope will look back in time as much as 13.5 billion years. It will study astronomical phenomena, such as the most distant galaxies in our universe. *And what will it find out?*

And now please show the <u>clip</u> of "29 Days on the Edge" by NASA/JWST.

The James Webb Space Telescope

The following is an edited transcript of excerpts from that NASA program.

Narrator: This is a science mission on par with the Apollo missions, Space Shuttle, International Space Station and Hubble missions. For nearly two decades, thousands of people around the world, many spending their entire careers, built the James Webb Space Telescope. It all comes down to this.

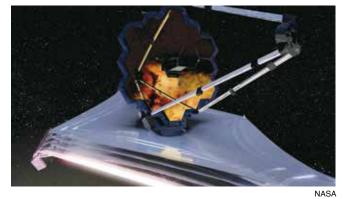
From the Scientists and Engineers

Once we launch the James Webb Space Telescope, there are no second chances. We have 300 single-point-failure items, and they all have to work right. When you're a million miles away from the Earth, you can't send someone to fix it. We've never put a telescope this large in space. We want to see distant parts of the universe humans have never seen before, looking back in time, almost 14 billion years to see the first galaxies that formed after the Big Bang. And we want to search for the building blocks of life in the atmospheres of planets orbiting distant stars. To unfold the history of the universe, we must first unfold this telescope.

This the largest primary mirror, the largest sunshield and the most powerful space telescope ever built, and yet this large telescope needs to fit inside a 5.4-meter-diameter rocket fairing. That's the largest fairing size available on any rocket, and it's the fairing size on our ride to space. The Ariane 5 provided by the European Space Agency is one of the world's most powerful rockets. To cheat the fairing size limit, we build Webb to fold, like origami, to fit inside the rocket fairing. And this brings us to our most challenging part of this mission, unfolding it in space.

Think of what you're doing. You're taking this extraordinarily delicate, precise, state-of-the-art scientific instrument, you're slapping it on a rocket.





The JWST may get us closer to understanding the Necessary Existent of Ibn Sina. Artist's drawings show at Day 7 (left), the two pink arms have been lowered that hold the five heat shield membranes to keep the mirror cool; and at Day 11 (right), the heat shielding is deployed. The mirror's hexagons are assembled when the telescope reaches its destination.

For the next eight minutes, the explosion from that rocket is following you into outer space, vibrating, shaking you. Everything that goes into outer space has to live through this environment and work once it gets there—without having someone come to fix it.

This mission is squarely in new spacecraft territory. Webb is the perfect example of science desire driving engineering capability to new frontiers. Webb's unique design was born from recent engineering to accomplish its science goals. Shortly after launch, we unfold Webb's solar panel for power and our high-gain antenna for communication. About 12 hours later, we have an important engine firing that sends Webb on the proper course towards its orbital destination about a million miles away.

That's where Webb will do its science. Webb will be moving so fast it passes the Moon's orbit in one and a half days, half the time it took Apollo astronauts to reach lunar orbit. We have these huge iconic gold segmented mirrors that will help us deliver amazing new images from the cosmos. But in some ways, the sunshield is a lot more complicated, and it's just as essential. Without it, nothing works.

The sunshield shades the telescope from the heat of the Sun, Earth and Moon. The concept is simple, but there is nothing simple about the design or operation, especially when you get to space. One sunshield assembly includes 140 release mechanisms, approximately 70 hinge assemblies, 8 deployment motors, bearings, springs, gears, about 400 pulleys, and 90 cables, totaling 1312 feet—all this just to keep the sunshield under control as it unfolds.

With the sunshield fully deployed, we start setting

up the optics. First, the secondary mirror is extended and locked into place, and a special radiator behind Webb is extended, which helps further lower the temperature of the science instruments. Finally, we open the primary mirror's wings and lock them in place. With that done, Webb is in its final configuration. But we're not done yet. After 47 deployments and accomplishing the hardest spacecraft unfolding NASA has ever done, Webb still won't be ready for science. While the instruments cool, we'll control motors behind each of Webb's 18 mirror segments, secondary mirror and in the fine steering mirror located inside the center of the primary mirror, we'll precisely align the mirror segments to form a perfect mirror. Then, Webb will be ready to explore the cosmos.

After the conclusion of the NASA film, Helga Zepp-LaRouche resumes.

Seeing What Man Has Never Seen Before

This space telescope will be in place by June, and then we will find out what happened in the last almost 14 billion years. And we will find out, is the theory of the Big Bang going to be confirmed? Was that the moment that the universe sprang out of nothingness, or was there something before?

It is clear that the universe is expanding. So if you go back in time, and that will be possible with this telescope, it will become smaller and smaller, and maybe shrink to a point, as the theory of the Big Bang says, which supposedly happened 13.8 billion years ago. Maybe it existed before that. Maybe the universe contracted before the Big Bang, until it reached this point, until matter was unimaginably

densely compressed, and then the Big Bang happened, and then started to expand again. All the different theories, how the universe could have looked before our world, before our world came into being, will be greatly boosted by the finding of the Webb Telescope. We will find answers to questions we cannot even ask yet, and you know, it will be a fantastic opening up of the window into the real function of our universe.

So maybe we get closer to understanding the necessary existent of Ibn Sina, according to which the sudden beginning of the universe does not make any sense, because it is not compatible with the goodness of this highest principle of creation. Maybe our mind will have to think in completely different dimensions—for sure, not the Euclidean space and time. Maybe one has to invent a completely new relativity theory, one which fits the idea of what Lyndon LaRouche has called the "simultaneity of eternity."

Now, this is now a quote I'm reading: "The extraterrestrial imperative is a driving force in the natural growth of the terrestrial life beyond its planet's limits. As such, it is an integral part of the obviously expansionistic and growth-oriented pattern of life's evolution. This drive caused life to go from infinitesimal beginning, into a force that encompasses and transforms the entire planet through its biosphere. More basically, the extraterrestrial imperative expresses a first message, a primordial imperative bred into the very essence of the universe, driving the evolution of matter from the simplest form, the elementary particles, to highly complex structures, namely the intelligent brain. The vast amount of cosmic energy is released by stellar matter in the initial phase of this process, the transformation of hydrogen to helium and heavier elements and bound up in the later phases involving the formation and the evolution of living matter. By these roots, it is possible to identify the extraterrestrial imperative as the basic principle that can be derived from a consistent interpretation and generalization of recurring phenomena common to the evolutionary process."

These words were written in 1971 by Krafft Ehricke, the German-American visionary and rocket scientist, who happened to have been a close friend of ours, and was a board member of the Schiller Institute. And he coined this notion of the "extraterrestrial imperative" to signify the task of humanity to explore space, since that brings man beyond the idea of the Earth as a closed system, and opens the entire universe to humanity.

Now, the James Webb Space Telescope, a project which involved the work of over 10,000 people from over 14 countries, over 25 years, and they put this telescope into space, 1 million miles away from Earth: I think this is fantastic! If mankind can do this, can we mobilize, with the same determination, to save the Afghan people with Operation Ibn Sina? The Islamic world must reconnect to its golden age and have a renaissance of all those beautiful philosophers, artists, scientists, of the period between 750 until the beginning of the 11th Century, of which Ibn Sina was the high point.

So I call on you to all work together on Operation Ibn Sina. And, if we can put a telescope like that into space to find out the origins of the universe, we can save Afghanistan.

Let us close with a clip from a speech by my late husband, Lyndon LaRouche, who was absolutely in line with that thinking.

Lyndon LaRouche

If we were to take the attitude, which the United States had under the Kennedy Space Program, or it was actually the Eisenhower-Kennedy Space Program, from about 1958, the so-called Sputnik, both Sputnik programs, to about 1965—if we maintain that, combined with policies of investment tax credits for investments of a suitable kind, with a science enrichment program in our schools and similar kinds of things, that we did then—nothing more than that—I can assure you, that knowing what we know is important to work upon in science, in technology, knowing the kinds of projects which are the best way to express these technological improvements—I assure you, that if mankind on this planet had the political will to do that, we would increase the potential population density of this planet, at a higher standard living, by a factor as much as 40 over today's; the next three generations, a factor of 10. We can sustain by the end of two generations, we could be sustaining a potential population in the order of magnitude of 100 billion people, more comfortably, much better fed, much more secure, much freer, much less crowded, than today, because we'd use land more intelligently.

There are two kinds of natural law, or two aspects of natural law. One is the laws of the universe, and the man who,— or say, if Congress were to repeal the law of gravity, just for illustration, would that repeal the law of gravity? It would not.



The moral responsibility for the fate of hundreds of billions of souls not yet born lies upon us. We have the responsibility of looking back to those martyrs who gave us institutions in which truth was given social standing, and thus, freedom.

So that whenever men, because they have great political power, say that they are defying what is, in effect, a law of the physical universe, a law of nature, natural law, and they cause others by their power to support that defiance of nature, what happens to the nations which defy nature? They are crushed! They're destroyed! Their defiance of natural law becomes the instrument of their destruction.

If you support politicians who engage in that defiance of natural law, what do you bring upon yourself and your nation? You become an accomplice. You enforce that destruction. You bring about the destruction of your nation, your family, of everything. That in order to deal with the kind of crisis which confronts us, we must look within ourselves, and find a value within us, so precious, that if we spent our lives to defend that value, we would have thereby gained our lives, because we have gained the purpose of our mortal existence

Now that's what a soldier ought to carry into the battle as courage, not patriotism, but that! Not patriotism as the abstraction of a flag, not patriotism as a racist concept, not patriotism as in any other of these symbolic senses. But patriotism in the sense which we ought to have in the United States, but we're pretty much estranged from: To know what Ben Franklin and the others represent, a system of representative self-government, under natural law and under law, governed by natural law. That to imagine the horror, of having once known such a form of self-government, to imagine living under slavery, which is not only a material

oppression, but a destruction of the very soul of one's children, and their lives upon us, then.

And how we respond to that challenge, the moral responsibility for the fate of hundreds of billions of souls, who in all propriety, should be born in the time to come. There lies upon us the responsibility of looking back to those martyrs, who gave us institutions, in which truth was given social standing, and thus, freedom. There is no freedom without truth! And there is no truth without freedom. The right of an individual, informed by right principles, to come to an opinion based on reason, not arbitrary opinion, but based on careful employment of reason, and the right of that individual to stand up and say, "This is what I believe, unless I am persuaded to the contrary by reason," that is freedom! If the entirety of society disagrees with you, so what?

You have the right, as long as you're guided by reason and as long as you will submit yourself to correction of your opinion *by reason*—that is, the right to assert an opinion, contrary to the majority of society around you, that is freedom.

A democratic society, as Project Democracy and the Congress define it today, is the most horrible abomination imaginable. Against which the founders of the United States warned. Democracy is the worst of all evils, the worst of all tyrants! Because there is no worse tyrant than the irrational mob, the lynch mob! Democracy, as they define it, is lynch mob democracy. Just don't have the wrong color of skin or the wrong color of opinion. Under which the individual has no right, but the right to *agree* with what appears to be majority or ruling opinion. And if the mob changes its opinion, you tear off your clothes and put on the clothes it puts on, and so forth and so on. A society of fads and insanity, with no moral purpose, no character and no ability to reason.

The defense of the individual who wishes to reason, who wishes to be governed by natural law and reason: that is the most sacred duty of society, the defense and nurture of such individuals. And a society which does not fulfill that mission is unfit to exist! A form of government which does not serve that purpose is not fit to exist! Because it does not protect the most precious part of human society, the development of the powers of reason in the individual: The thing that makes us truly human, the thing that makes our individual lives each sacred, and that's what is at stake.