

More than three hundred years ago, Europe's greatest philosopher, statesman, and scientific organizer, Gottfried Wilhelm Leibniz, first developed a plan for the economic and cultural development of Eurasia. In Russia, the

G. W. Leibniz and Alliance of

by Elisabeth


The battle against economic underdevelopment and cultural backwardness in many nations of the world ranks unquestionably among the great challenges for mankind in the next decade. As the American statesman Lyndon H. LaRouche, Jr., has shown, this will happen successfully only if the Western world concentrates on the greatest task of the Twenty-first century—the development of China and Russia, nations which, thanks to their wealth of population and raw materials, as well as culture, are the great reservoir of mankind. Central to this, must be a political economy based upon the concept of man as expressed in the Christian West as *imago viva Dei*, man *in the image of God*.

The strategic vision of LaRouche is, historically, a further development of the strategic plan which the great philosopher and statesman Gottfried Wilhelm Leibniz

proposed more than three hundred years ago. This brilliant thinker, who sparked the advancement of the sciences and laid the groundwork for a scientific physical economy after the Thirty Years War had ravaged Europe, saw the key for the development of a unified Europe in Eurasia in the development of Russia as the mediation between China and Europe.

It was Leibniz's vision that Europe, Russia, and China would form an alliance, based on the infrastructural exploration of these countries, in particular Russia's Siberia; on the founding of scientific academies; and on a common effort to engage in scientific, historical, and comparative language studies—which subjects were all to serve as the strategic and scientific guidelines for the work of Europe's scientific academies.

Leibniz so highly esteemed the strategic importance of



project was undertaken, at least in its rudiments, by Leibniz's correspondent Czar Peter the Great, while great strides were made in the initial transmission of the Renaissance sciences to China. Leibniz's vision must be our starting point today.

the Ecumenical All Eurasia

Hellenbroich

his Eurasian project, that in the general instruction of the Berlin Society of Science (1700) and other academy drafts, he cited the idea of the scientific mission in China and Russia as the essential aim of the academy's work. Especially propitious for Leibniz, was the fact that he kept up a close personal relationship with the Russian Czar Peter I (the Great), and was at his disposal as adviser on questions of infrastructure.

In a 1716 memorandum directed to the Czar, entitled "On the Arts and Sciences and Crafts in the Russian Empire," Leibniz provided an outline of how to create a scientific renaissance. The main points he emphasized were: (1) create the necessary instruments for education; (2) educate people in science; and (3) discover new knowledge.

In this outline, Leibniz proposed that print shops,

book shops, and libraries be established, "in which manuscripts would be found which are unknown in Europe, manuscripts from Greece, Turkey, Persia. . . . They should also collect books in many different languages, Slavonic, Dutch, Latin, Welsh, Spanish, also in Greek, in literary and vulgar Hebrew, Arabic, Syrian, Chaldean, Ethiopian, Coptic, Armenian, and Chinese. But the largest part must be in Latin. . . . Such a library should be established in such a way, that there would be pooled information from histories, countries, languages, sciences, food—in other words, that one would find there the whole treasury of human science, as much as there has been written about it."

For Leibniz, the key precondition for such a renaissance lay in the transmission, or rather, the replication of the method of *ars inveniendi*, the art of invention. And

therefore, he wrote in this memorandum, it was crucial to “rediscover” the best knowledge of mankind, starting with the earliest possible date of human civilization. “We should order this knowledge in such a way . . . that we can see *origines inventionum*—the ‘origins of invention’—how, by what method, did man come to specific discoveries in the past, and how can he make new ones; because, by rediscovering the discoveries, we would have a method at hand which would improve the sciences, and a pathway for making new discoveries.”

Hence, in addition to a library, he called in his memorandum for a cabinet displaying “all optical, nautical, mechanical, and other inventions. . . . This includes instruments which an architect and an engineer [*mechanicus astronomus*] needs.” There also should be a *theatris artis*, Leibniz says, including models, such as those of newly invented machines for waterworks, mining, etc.

Leibniz, who from very early on had investigated the question of a “grammar of thought”—an alphabet of human thinking, as it was called in his *characteristica universalis*, was addressing with the notion of *origines inventionum*, a question that is the underlying “metaphor” in many works of LaRouche, including his 1993 essay “History as Science.”*

It addresses the question of isochronicity in the history of mankind—namely, what is the connection between *idea* revolutions of the past, the present, and the future? And what is the underlying “continuity principle” in mankind’s history, which is the precondition for guaranteeing the durable survival of mankind?

The capacity for durable survival of our species is measured by what LaRouche terms “potential relative population-density,” which collapsed whenever mankind was at a standstill, and which grew during times of technological and cultural advancement. LaRouche connects this measurement with three other necessary axioms: natural law, the idea of the sovereign individual, and the idea of the sovereign nation-state. It is the same question with which Plato introduces his famous dialogue, *Timaeus*.

At the beginning of this dialogue, Critias tells the story of the wise man Solon, who once visited the priests of the Temple of Amon in Egypt. These people had told Solon: “You Greeks think you understand something about history, but you are like children. You have forgotten that once, many, many centuries ago, you had a civilization which collapsed because of natural catastrophes, and this happened to many cultures, without the question being

asked: why did this happen?” This story acts as a prelude to the dialogue, in which the astronomer Timaeus presents a series of hypotheses about the creation of the universe. Plato is saying here, that only when sovereign man explores the laws of nature, does he become not the victim of fate, but instead the willful director of the course of history.

Leibniz placed special importance on the exploration of the physical geography of the Eurasian lands; he spoke very often of the necessity of magnetic, i.e., cartographic surveying of Russia and China, especially Siberia. Only then could one think constructively about the promotion of agriculture, mining, and handicrafts, of the construction of canals, the draining of swampy areas, and, above all, of an opening up of Eurasia through industrial-transport technologies—wherein he understood the construction of roads from Russia to China and Persia, the dredging of streams and canals, and so forth. Only through the mediation of Russia, would it be possible in the future to tie Europe with China, which would bring both sides, not only political-economic but also spiritual-cultural, mutual benefits. As he wrote in the instruction drafting the Berlin Society of Science: “By this means, Chinese products and news from China would come to Europe, and on the other hand the Christian faith would spread to China and indeed spread through Moscow as the means of communication.”

In the general instruction, the importance of the czar, Peter the Great, was especially stressed, as architect of the new European peace and economic order conceived in Leibniz’s eyes: “Because now the selfsame, owing to his great power and most extensive lands, can contribute a greatness to the establishing of our generally beneficial goal aimed at through the society, thus we want to consider, how with this monarch on this occasion trade be made customary and useful preparation be made, that from the boundaries of our lands as far as China, useful observations—astronomical, geographic, as well as national, linguistic and cultural things unknown to us, artificial and natural, and such-like—be made and sent to the society.”

Leibniz and China

Leibniz was the first European scholar who, in a truly systematic way, transmitted to Europe a deeper knowledge about China’s Confucian tradition. The only thing known at that time in Europe about China—and then, only among a very small circle of people—were the reports written by the Franciscan monks Montecorvino and Rubruch at the beginning of the Thirteenth century. These reports were known to the Vatican, and perhaps to

* *Fidelio*, Vol. II, No. 3, Fall 1993, pp. 10-85. SEE “Leibniz From Riemann’s Standpoint,” p. 14, this issue, for LaRouche’s most recent presentation of this discussion.



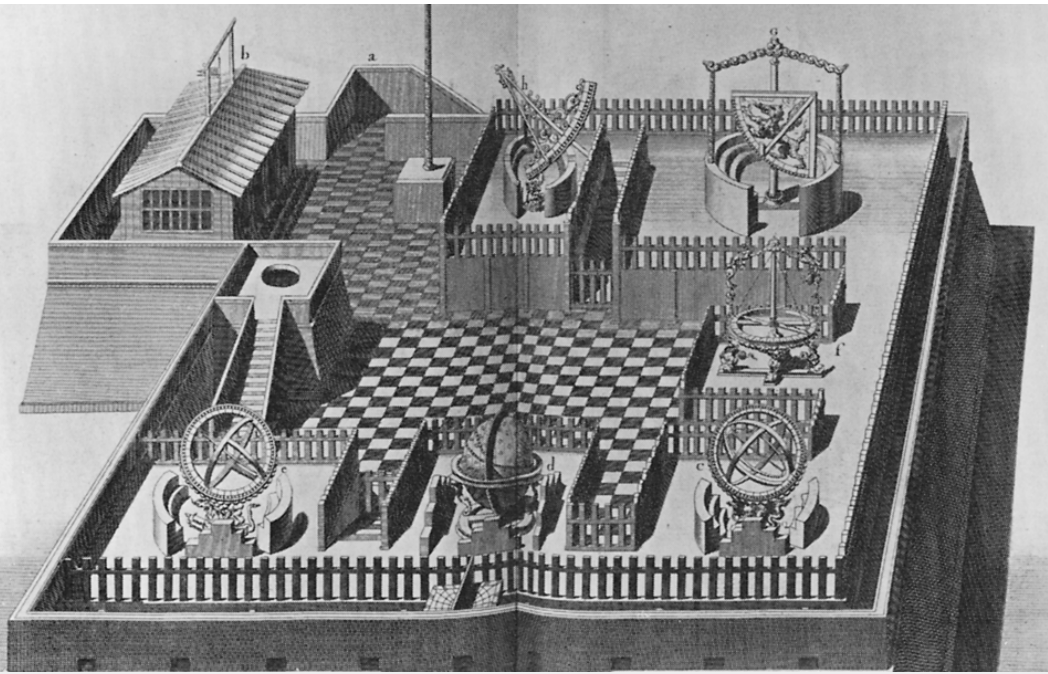
The Granger Collection

Father Matteo Ricci



The Granger Collection

Father Adam
Schaal von Bell



New York Public Library

Beijing observatory, designed and furnished by Father Ferdinand Verbiest.

For Leibniz, the precondition of a scientific renaissance lay in the replication of the method of *ars inveniendi*, the art of invention. By studying the inventions of the past, he wrote, ‘we would have a method which would improve the sciences, and a pathway for making new discoveries.’

the small circle around Christopher Columbus. Except for a few books here and there, there was no comprehensive map of China. (And, certainly, no one in Europe knew that, at the beginning of the Fifteenth century, the great Chinese Admiral Cheng had made five major maritime expeditions to the east coast of Africa, utilizing ships far in advance of the best in Europe; expeditions which were, unfortunately, suddenly halted and never resumed.)

Leibniz got his first direct knowledge of China in 1689, when he met the Jesuit Father Filippo Grimaldi in Rome. This eyewitness told him about China, Russia, the first Chinese-Russian border treaty (the treaty of Nerchinsk), and about the work of the Jesuits in China, which had been initiated at the beginning of the Sixteenth century by the Italian Father Matteo Ricci. This priest, who had received his mathematical and astronomical training from the German Christopher Clavius, had brought a harpsichord and some of his own compositions to China. During the twenty-eight years that he was there, Ricci translated into Chinese the most modern European scientific books, and developed a systematic cartography, thus beginning a most fascinating collaboration with the Chinese imperial court.

Participating in this were the fathers Adam Schaal von Bell, the Flemish Ferdinand Verbiest, the Italian Grimaldi, the French fathers Joachim Bouvet, Jean François Gerbillon, and Antoine Verjus, to name a few—all of whom were either directly in charge of the emperor’s Astronomical Station and Mathematical Tribunal, or were consulted as engineers in the various hydraulic works being undertaken, or served as diplomats. In some of the letters Leibniz wrote to Father Grimaldi, as well as to the Polish Father Kochanski, he inquired, for example, “whether there are not some traces of geometry by proofs in the old writings of the Chinese, and some traces of metaphysics; and whether they knew the theorem of Pythagoras? . . . Whether there are some natural scientific works by the Chinese, translated into Latin. . . . Whether they have some interesting machines, which could be replicated in Europe; . . . what kind of artificial means they use in agriculture; . . . what about their iron production and mineral mines, how do they produce salt and sodium?”

Lastly, he wanted to be informed concerning a *Clavis Sinica*, that is, a grammar of the Chinese language. Again and again, Leibniz emphasized the importance of comparative language studies: he wanted studies using the

Lord's Prayer to be carried out, in particular for those languages in the region between Russia and China, as a means to discover something about the origin of mankind and of human thought. And, by comparing the basic principles of Confucian philosophy with the principles of Platonic-Christian philosophy, he came to the conclusion that, in the ancient Chinese culture, the same universal questions concerning a Supreme Being, the laws of the universe, and man, were asked, as they were asked by Plato and answered by the Christians.

That is, Leibniz found that the human mind, no matter in which part of the world, follows the same pathway of reasoning. This proves the universal quality of the creative mind. One example was Chinese astronomy, which was ancient, and which Leibniz studied. Lyndon LaRouche has noted that the oldest extant poetry, the Vedic hymns of India, tell the story of how human civilization began to develop on the basis of observing the planets and developing a solar astronomical calendar; and, thus, how the laws of the universe were explored and civilization born.

In one of the many letters written to Grimaldi, Leibniz refers to the correspondence between the famous astronomer Johannes Kepler and Father Terrentius, who in 1630 worked as astronomer at the court of the Chinese emperor. He reported that Kepler was very interested and helped to bring to China his Rudolphine Tables,* and also corrected a few mistakes that had crept into Chinese astronomy owing to poor handling of the texts.

The individual who played a central role in the spirited exchange between the Jesuit fathers and China, as brought out in the *Novissima Sinica*, was the Chinese Emperor K'ang Hsi, a descendant of the Manchu dynasty. His "thirst for knowledge was nearly unbelievable," reported Leibniz, "for he occupied himself together with Father Verbiest in the seclusion of an inner chamber three or four hours daily on mathematical instruments and books, as a student with his teacher. And he made such great progress, that he comprehended Euclidean proofs, understood trigonometric calculations, and, thus, was in a position to express astronomical phenomena numerically."

Under K'ang Hsi's reign, the first important Chinese-Russian border treaty was concluded, and great infra-

structure projects initiated: dam building, to master flooding, as well as the building of a very extensive network of canals.

K'ang Hsi corresponded to the Platonic-Leibnizian ideal of a "philosopher king," which was also a central concept of Confucian philosophy, found in the philosophical writings of Mencius and of the great Twelfth-century neo-Confucian, Chu Hsi. Unlike the viewpoint of the Chinese legalists, sophists, and Taoists, Confucian philosophy states that man is "by nature good," and that the highest goal in the life of man, is to be able to govern himself, to do *bona opera* (good works), and to contribute in the best possible way to the well-being of all. This principle says, that those who rule should do so according to the idea of the good, of justice, love, and reason. They should fulfill "the Mandate of Heaven"—and if they violate it, they should not rule.

Leibniz's *News from China*

In the year 1697, Leibniz synthesized his programmatic ideas for China in a kind of *leitmotif*, in the little book *Novissima Sinica*. "I consider it a singular plan of the Fates that human cultivation and refinement should today be concentrated, as it were, in the two extremes of our continent, in Europe and in China, which adorns the Orient as Europe does the opposite edge of the Earth. Perhaps Supreme Providence has ordained such an arrangement, so that, as the most cultivated and distant peoples stretch out their arms to each other, those in between may gradually be brought to a better way of life. And I think it is likewise not accidental for the Russians, who through their huge empire connect China with Europe, and who rule over the far north of the uncivilized area along the coasts of the Arctic Ocean, that with the help and the engagement of their present ruler, they will follow on the pathway of our discoveries."

Among the most important China plans expressed in the *Novissima Sinica*, were the founding of a world Academy of Science, which would be engaged jointly in Western and Chinese science; the future role of Russia as mediator between China and Europe; the exploration of Siberia; and not least, the founding of comparative philology, which would yield information about the assumed common origin of all peoples.

In the 1689 letter to Father Grimaldi cited above, which is reproduced in the *Novissima Sinica*, Leibniz inquires in detail about this, and other things:

(15) Whether there are traces of geometric proofs in the old writings of the Chinese, and any traces of metaphysics, and whether that one theorem was already known which seemed to be worth Pythagoras' hecatomb?

* The Rudolphine Tables were a systematic mapping of the motion of the planets, calculated by Kepler and named by him after Emperor Rudolph II. Kepler used the data that he and Tycho Brahe developed at Tycho's observatory, the best observatory in the world to that date, for this purpose. For the impact of Kepler's astronomy on China, see Michael O. Billington, "Kepler and Renaissance Science in China," *21st Century Science & Technology*, Vol. 9, No. 2, Summer 1996, pp. 51-64.

(16) About the age of heavenly observations by the Chinese, and whether one can not get them, in order to complete the history of the heavens; . . .

(21) Whether nothing is known of the sea between North Asia and North America, and about the outer location of land of Jesso beyond Japan, and about the correction of geographic maps of these regions;

(22) About the translation into Latin of any useful accounts from Chinese history, and above all also works of natural science . . . ; . . .

(24) Whether they have any special machines which would be worth the trouble to build in Europe, and their manner and method of propelling the greatest stones, for which they make use of many people;

(25) What is to be expected from a *Clavis* [grammar] of Chinese characters; . . .

(27) About any artificial economic devices of the Chinese for tilling the field and garden, which are of worth and useful to be described; . . .

(30) About the ore and mineral mines, and how they extract table salt, sodium bicarbonate, and similar things.

Comparing China to Europe, Leibniz was deeply touched by the ethical conduct of the Chinese, and their respect for the individual. He therefore suggested that, given the moral decay in Europe, the Chinese should send missionaries to Europe, in order to teach them their practical philosophy. On the other hand, while Leibniz saw Chinese manufacturing and machine building—i.e., the technological level, equal to Europe’s—he nonetheless emphasized that the Chinese lacked the “first eye” which the Europeans had developed: exact mathematics. And, in addition, “we also have a ‘second eye’ which they don’t know too well, which I call the ‘first philosophy,’” wrote Leibniz. “But the scientific study of the stars and the planets (as Father Verbiest said in his Latin and Chinese studies), the *Muse Urania* which seems to influence the Chinese emperor, has opened up a situation in which our sacred and truly heavenly teachings [Christian theology] are finding an open field.”

Leibniz, in full admiration for this great country of the Orient, was of the opinion that perhaps not since the Apostles, had a greater cultural endeavor been initiated, from the standpoint of Christian thought, than in China.

In the same year that *Novissima Sinica* appeared, Leibniz wrote a letter to Duke Rudolph August of Braunschweig-Lüneburg, entitled “The Secret of Creation.” Added to the letter was a coin which Leibniz had designed, in which he represented the binary number system, which he had been able to “rediscover,” as he says, on the basis of a study of the 3,000-year-old texts of the Chinese Fuh Hi. “*Imago creationis*” and “*ex nihil ducendis Sufficit Unum*” were the *leitmotifs* for the coin. Leibniz

explains why: The world has been created out of nothing, by the almightiness of God. And this could not be better represented, he says, than by the origin of number (which for Leibniz was a metaphysical idea, a Platonic thought-object), and the development of number out of One and Zero. The secret of Creation was that God “not only created all out of nothing, but that He created it well, and that all that He created was good.” Therefore, he said, He would have conceived of an image showing light and darkness, “because in the beginning the earth was without form, and void, and the Spirit of God moved upon the face of the waters. And God said, Let there be light: and there was light.” The empty void, the terrible darkness belongs to Zero and Nothing, but God’s spirit with His light is the One, Leibniz explained. And he printed underneath, on the coin, the binary number system, the predecessor to today’s digital computer systems.

Leibniz’s Philosophical Method

Leibniz was a devout Platonist. Contrary to the empiricists, naturalists, and Taoists, Leibniz showed with his scientific method that man, on the basis of a “universal” quality of his mind, a “natural light,” can, out of himself, create new ideas. And man does it in such a way that, in a sense, everything that he thinks, exists “virtually” in his mind from the beginning, because the mind always expresses his future thoughts. And, Leibniz says, what man thinks in a somewhat confused way today, he will one day think out as a clear thought-object: “Nothing could be taught to us (as Plato’s dialogue *Meno*, on the discovery of irrational numbers, shows), if the idea were not ‘inborn’ in our mind—which is like the matter out of which new thought-objects are formed.”

Leibniz saw the excellence of the Platonic method of thinking, demonstrated by the fact “that he [Plato] defines the mind as a self-moving substance, which out of its own, freely determines its actions, and therefore Plato correctly conceives the mind as the ‘principle of action’ contrary to matter . . . [and] that all real knowledge is concerned with ‘eternal’ truth, and that ‘universal, eternal ideas have more reality than ephemeral ideas, which come and go and participate in matter.’”

This means that, for Leibniz:

1. Mind is not matter, but nature has its origin in metaphysical principles, which supersede the material.
2. The capacity to create universal ideas is an “inborn” faculty of man, in the sense that St. Paul understood it, that the “laws of the universe are inscribed in the hearts of people,” “even if they can’t grasp all, one must admit that the idea of God, the idea to think of

God, is within man's nature," as St. Paul said.

3. Behind the phenomena of nature, there lies an eternal, invariant principle, which Leibniz calls "sufficient reason," which, since it does not need any cause, lies outside the chain of causes. "It is therefore a necessary Being, a necessary existent, which is its own cause; this ultimate cause is called God."
4. The universe was not created by blind caprice, but rather follows a creative necessity, and in his infinite goodness and wisdom, God created "the best of all worlds," i.e., "from God's highest perfection follows, that He has chosen the best possible plan, in bringing forth the universe, according to the greatest multiplicity united with the greatest order: in the place, since the location and time are used in the best way and the greatest effect is brought forth in the simplest way: shortly, by which Creation is given the greatest power, the greatest knowledge, the greatest luck and the greatest good, which the universe can take up in itself."
5. Without the love of God there will be no foundation for a just society. One only obtains this from the true demonstration of the existence of God, i.e., from the discovery of new laws of nature, the improvement of man's living conditions, i.e., through *bona opera* (good works), which man creates in imitation and likeness of God's love and wisdom.

Natural Philosophy

In the course of his intensive studies of Chinese language and astronomy, as well as of Confucian philosophy, Leibniz came to the conclusion, that there existed in the old Chinese culture a methodical mental stance, which came to the same representations concerning the Most High, Absolute, God, the laws of the universe, and humanity, as had Plato and the Christian philosophers.

Shortly before his death in 1716, Leibniz wrote a philosophical essay, which he unfortunately could not complete, called *The Natural Theology of the Chinese*. This essay contains a harsh criticism of a reductionist approach in the interpretation of Confucian philosophy. Leibniz's criticism was prompted by the work of the two Jesuits, the Italian Niccolo Longobardi and the Frenchman St. Marie, who in Leibniz's opinion had reduced Confucianism to a materialistic, naturalistic, or pantheistic philosophy. "China is a great empire, no less in area than cultivated Europe," Leibniz wrote, "and indeed surpasses it in population and orderly government. Moreover, there is in China in certain regards, an admirable public morality

conjoined to a philosophical doctrine, or rather doctrine of natural theology, venerable by its antiquity, established and authorized for about three thousand years, long before the philosophy of the Greeks, whose works nevertheless are the earliest which the rest of the world possesses, except for our sacred writings. For both of these reasons, it would be highly foolish and presumptuous on our part, having newly arrived, compared to them, and scarcely out of barbarism, to want to condemn such an ancient doctrine because it does not appear to agree at first glance with our ordinary scholastic notions. Furthermore, it is highly unlikely that one could destroy this doctrine without great upheaval. Thus, it is reasonable to inquire whether we could give it a proper meaning. I only wish that we had more complete accounts and greater quantities of extracts of Chinese classics, more accurately translated."

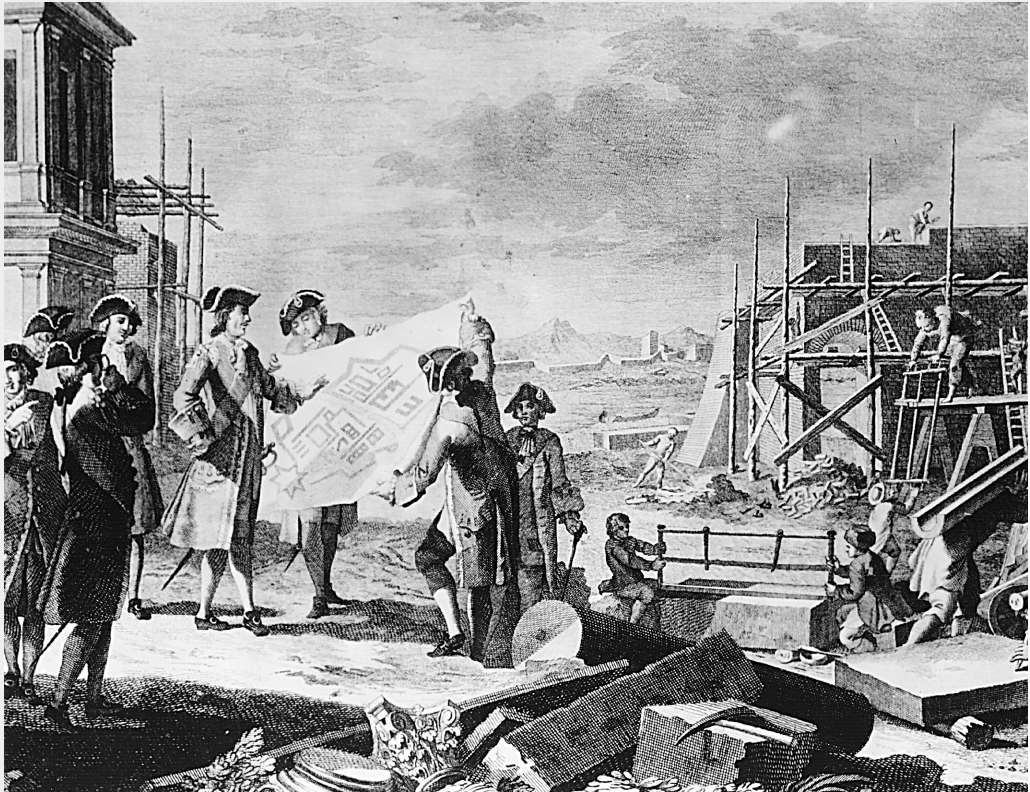
Leibniz, studying the original texts of Confucius and Chu Hsi, made out of this dialogue a fascinating synthesis between the basic principles of Confucianism, and Christian philosophy. With the kind of love that we know from Lyndon LaRouche's approach to people, always taking the best from everyone, and from the standpoint of reason, Leibniz concluded that the three main principles of Confucianism all come very near to what the Christians conceive as God.

"One should above all consider their *Li*, which is the prime mover and ground of all things," Leibniz says, and he quotes: "The first principle of the Chinese is called *Li*, that is, reason, or the foundation of all nature, the most universal reason and substance; there is nothing greater nor better than *Li*. From *Li qua Li* emanate five virtues: piety, justice, religion, prudence, and faith. For the Chinese, just as *Li* is Being *par excellence*, so it also possesses truth and Goodness *par excellence*. . . . Should one after all not say that the Chinese came very close to that absolute substance which we pray to under the name of God?"

Li is not the material cause of things, as Father Longobardi had assumed, nor a world soul in the sense of Spinoza or Averroes. (Spinoza reduced everything to a single substance, of which all things were only modifications.) But *Jovis omnia plena*—God fills all, that is, He is in all things and all things are in Him. The second principle, *Ch'i*, corresponds to matter, just as it corresponds to the instrument of the first principle which moves matter. "In consequence of this production of prime matter by the primary principle, or primitive form, by pure activity, by the operation of God, Chinese philosophy more closely approaches Christian theology than the philosophy of the ancient Greeks. . . . Admittedly, it appears that the Chinese believed that the *Li* first and always produced its *Ch'i*, and therefore one is as eternal as the other. But there

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For the true treasures of humanity are the arts and sciences. That is what most distinguishes humans from animals, and the civilized from the barbarians.'



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Czar Peter the Great supervises the building of St. Petersburg.

should be nothing surprising about this, since they were apparently ignorant of the one 'Revelation' which can explain to us the beginning of the universe. St. Thomas Aquinas and other great doctors have claimed that the dogma could not be demonstrated by reason alone. . . . And there are those who believe that because the beginning of the Chinese empire occurred during the time of the Patriarchs, they could have learned about the creation of the world from the Patriarchs."

The third principle, *Shangdi*, and *Li* are the same thing, Leibniz says. One has every reason to give to God the name of *Shangdi*. What we call the light of reason in man, Confucius calls the commandment and law of Heaven: "To offend Heaven is to act against reason, to ask pardon of Heaven is to reform oneself and to make a sincere return in word and deed in the submission one owes to this very law of reason. For me, I find this quite excellent and quite in accord with natural theology. Far from finding any distorted understanding here, I believe that it is only by wrong interpretations and by interpolations that one could find anything to criticize on this point. It is pure Christianity, insofar as it renews the natural law inscribed in our hearts—except for what revelation and grace add to it to improve our nature."

Leibniz, the 'Solon of Russia'

From the beginning, Leibniz was clear that a rapprochement between China and Europe were only possible, if at the same time Russia, which he viewed as a country with immense, though unexploited possibilities, were developed. In October 1711, the first personal discussion occurred between Leibniz and the czar, Peter I (the Great), in Torgau.

Leibniz was from then on appointed, with an annual income of 1,000 Thalers, as an official adviser to the Czar. "I am in a certain way the Solon of Russia," commented Leibniz about this appointment to the Princess Sophie Charlotte, "even if from a distance. The Czar has let it be said to me, through his Lord High Chancellor Count Golovkin, that I should renew the laws and establish new administrative and legal norms . . ."

Other than the written documents of engagement which Leibniz himself later wrote, there exist no notes on record of this historic meeting. However, it is clear from the various memoranda and letters, which Leibniz directed to the Czar or to ambassadors and ministers of his, such as War Minister von Huyssen, the ambassador von Urbich, and Lord High Chancellor Golovkin, which

projects he placed in the center of his Russian plan. Thus, the establishment of a magnetic observatory, with whose help the vast land might be cartographically surveyed and infrastructurally developed, appeared very essential to him. At the same time, Leibniz submitted to Peter the Great a project for the investigation of the languages of Asian peoples and the origin of languages, and stressed the importance of these philological inquiries to the Christianization of Asia and Russia.

Among additional projects which he proposed, were the exploration of Siberia, the dredging of Russian river systems, the draining of swampy areas, the exploitation of undeveloped Russian mineral resources, the building of Russian road networks to China and Persia, the establishment of observatories and, not last, his greatest concern, the establishment of scientific academies and schools for the spread of the best and most progressive knowledge.

In his essay "The Education of a Prince," he raised the aim of the Russian education plans to a concept. Learning is a question of "the necessary, the useful, and the agreeable." It is decisive, "that one be a good man, a man of heart, a man of judgment and generally a cultured man. The good person strongly and actively cherishes feelings of piety, righteousness, and love of man, and makes every effort to do his duty. The man of heart cannot easily be shaken and proves, in all of life's circumstances, his freedom and presence of mind. The man of judgment thinks and judges rightly overall, without letting himself be dazzled by the light. And the cultured man knows at all times to maintain decency and to avoid all that is improper"

Leibniz's vision, to bring about a union between China and Europe by way of Russia, runs like a thread through his memoranda and letters. It was like his earlier legal proposal to France's Louis XIV, a "Consilium Aegyptiacum," a strategic flanking maneuver against the power politics of France, Holland, and Sweden, which at that time threatened to split Europe into many opposing interests and powers.

In a letter of Jan. 16, 1712, Leibniz wrote to Czar Peter: "Have moreover also wanted to enclose an extract from Chinese or Cathay letters, from which to see, how also there one considers scientific advancement and how therein Your Majesty could attach China and Europe with one another P.S. It appears, it is God's Providence that science should transform the circle of the Earth and henceforth also come to Scythia, and that Your Majesty could be the instrument thereof, since he could take the best, on the one side from Europe, on the other side from China, and could improve what both did through good institutions." Leibniz was deeply saddened over the small resonance his projects found with the Ger-

man territorial princes, and also in the rest of Europe. In a letter to Chancellor Golovkin of Jan. 16, 1712, he wrote that he would rather that his vision win a ruler like the czar of Russia or the emperor of China, whose decisions could contribute to the well-being of millions of men, than to suffocate in the mediocrity and smallness of territorial princes:

"Since my youth, it has been my goal, to work for the glory of God for the growth of the sciences . . . , in which I have in part succeeded through Godly grace, in that I made new discoveries in the Republic of Sciences . . . , I am constantly ready, to direct my thoughts to the great goal. And I have only sought a prince who has the same goal. And therein I make no differentiation, neither in regard to the nation nor the party. . . . I would rather see if these sciences bloom strongly with Russians, than work only in a mediocre fashion in Germany.

"The land where this will flourish best, will be the most beloved to me, since the whole of humanity will ever profit from it, and its true treasures will have been increased. For, the true treasures of humanity are the arts and sciences. That is what most distinguishes humans from animals, and the civilized from barbarians."

The 'Memorandum to Czar Peter'

In his first "Memorandum for the Czar Peter on a Society of Sciences in Russia," Leibniz summarized his conceptions thus:

It appears to be God's providence, that the two most powerful rulers of the earth, the czar and the emperor of China, take pains with great eagerness to introduce in their lands the knowledge of European sciences and their applications. The czar has personally familiarized himself with this knowledge with us, and it would be most unfortunate if such an opportunity, which was given to us by God, remained unused and the utmost were not put in place to make use of this for the benefit of Christendom. If there is something which should hinder the completion of these plans, then it is the unhappy condition in which Europe finds itself at this time. Fear prevails with the Protestants concerning the oppression of their religion.

Fear reigns in Europe before the power of France, just as fear of a change, which would be put in place as the consequence of the downfall of the Spanish monarchy and an increase in the power of the French crown, after the death of the Spanish king.

Not last, Europe also finds itself in a condition of exhaustion, because of the long war with France and the unhappy conclusion of peace. These, therefore, are the factors which hinder Europe from putting in place the things which would present the best to all and honor to God. This does not mean, however, that one should let one's hands sink on

one's lap on this account, and relinquish everything to God.

Thus have I, for my part, discussed these questions with the most varied people, who come from the immediate environs of the czar, and proposed to them that one should better use the role of the czar. . . . And thus I would much like to know, to what extent I can position myself, on my side, on behalf of this worthy goal. . . . Your Majesty appears to have interest in two things: in a fortunate resumption of war with the Turks, and in an improvement of position of his lands and the lives of his people. . . .

The interest which Your Majesty has in this, to make your land flourish and to bring the civilian and military matters into good condition, signifies the translation into reality that in your great land an increase in living standards, commerce, and money turnover will be provided for.

As a consequence thereof, the people would turn more to the sciences and arts, and become hard-working. The consequences of that would be, that Your Majesty could place his immense power, which God has granted you and your land and people, towards the glory of God and to the use and benefit of all Christendom. And this is so much the more important, because thus China and Europe—as the two most extreme ends of this world—would be brought together through the mediation of the czar.

By this means, Chinese products and news from China would come to Europe, and on the other hand the Christian faith would spread to China, indeed through Moscow as mediator. The prerequisite for this would be, that we bring to Moscow all the institutions which we have in Europe. Moreover, the czar must be able to get capable people from the most diverse occupations. He must teach his subjects.

(1) In order to have good reports or information, as the case may be, transmitted from Europe to Russia, it were necessary that Your Majesty direct that the complete descriptions of arts and sciences which are to be found in books be collected, and the best of these be translated into Russian.

It were further beneficial if the innovations made in the most diverse occupations were to be written down for the use of the subjects.

(2) In order to attract good people, the land should be open to the world and a "*sanctionem pragmaticam*" should be put forward, according to which, each, in accord with his liking, can leave the land. One should let societies, academies, and organizations organize all kinds of people from Europe and offer them estates instead of cash payment. The question were also still to be put, whether it would not be good, to establish European colonies in many places, and to grant appropriate privileges therefor.

(3) To ask the question, how one makes the people in Muscovite lands familiar with shipping, military science, the arts, sciences, and moderation and good customs, is to consider that one cannot begin much with such people, who are already grown up and enjoy the idle life and excess; for this reason, the highest hope rests on the youth who are growing up. These should be brought up in a way that redounds to the pleasure and use of God and man.

(4) In respect to the execution of the plans, thus were it

necessary, if Your Majesty established a higher collegium, which would depend exclusively on the guidance of the czar and whose proper goal would consist therein, to improve the aforementioned plans and the economic development of the czarist lands . . . in the sense, that all sciences and manufactures, and the domains which are connected to them, would from here out be managed. . . . Now, how these things are brought to realization in the most profitable way, without too much expense and yet with great advantage, one must still speak about in detail in another place. But above all, one should think over, how the land utilization were improved, to accomplish a better development of mines as well as a better use of rivers and of inland navigation

In Conclusion

The idea of Europe, China, and Russia working together, led Leibniz, in the disastrous period after the Thirty Years War, to create the foundation of modern Europe. He saw the key to this in the infrastructural opening and development of Eurasia—above all of Russia and China, based upon a scientific renaissance. However, Leibniz knew that such a renaissance were only possible, if the "art of invention," *ars inveniendi*, were to be replicated in the thought of every individual.

If we transfer Leibniz's design to our current time, and hold it before our eyes, we see clearly the enhanced vision of Lyndon LaRouche for the Twenty-first century.

Leibniz conceived his idea of an ecumenical alliance between Confucian and Christian thinking, from the standpoint of *bona opera*, that is, a method to generate, transmit, and assimilate new discoveries through good works. It is not conceivable to develop the gigantic potentials of Asia, and to guarantee the provision of all humanity with vital necessities, unless we apply ourselves to the development of these most populated lands of the earth. Just as for Leibniz, so for us, there must be no distinction between any nation or party, and "that country in which the sciences will best flourish, will be the most loved . . . because all mankind will profit from it."

This is Leibniz's legacy, as we today confront the greatest crisis human civilization has ever seen.

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FOR FURTHER READING

Previous issues of Fidelio have featured the following in-depth studies of China and the West by Michael O. Billington: "Toward the Ecumenical Unity of East and West: The Renaissance of Confucian China and Christian Europe," Summer 1993 (Vol. II, No. 2), pp. 4-35; "The Taoist Perversion of Twentieth-Century Science," Fall 1994 (Vol. III, No. 3), pp. 76-96; and "The Enlightenment and the Middle Kingdom," Summer 1995 (Vol. IV, No. 2), pp. 34-62.