

ets. Kepler demonstrated, that the harmonic values of any pair of planetary orbits—their minimum and maximum angular velocities as seen from the Sun—form *musical* intervals. However, those musical intervals do not constitute a simple harmonic series, like Rameau’s fundamental chords; nor do they fit together unambiguously into a single musical scale or tonality. The solar system does not work that way; it is genuinely polyphonic, and it generates *dissonances* in a lawful manner.

B: Did Kepler really say that?

A: Not only did he say it, but he called on the musicians of his day to assimilate his discovery:

“Follow me, you musicians of today, and judge for yourself. According to the principles of your art, which were still unknown to the ancients. . . . Through your polyphonic melodies, through your ears the human spirit—the beloved child of the divine Creator—Nature has revealed her inner Essence. . . . The planetary motions are thus nothing else than a continuing, polyphonic music (perceived by the mind, not the ear); a music, which progresses through dissonant tensions, as if by syncopations and cadences (as Man uses theses, in imitation of those natural dissonances), toward certain predetermined points of completion; and by doing so, sets its various marks onto the immeasurable expanse of time.”

The fact, that the orbital values do not fit into a single, simple harmonic series has two profound implications: First, from the standpoint of musical polyphony, we require a *well-tempered system*, because each pair of values must be “heard” not as an isolated interval, but in potential relation to all the *other* intervals in the system. Second, and more important: We live in a universe which cannot be reduced in a *deductive* manner to a single principle, as Newton claimed to do with his universal gravitation (itself actually a discovery lifted from Kepler). Rather, human knowledge develops as a growing family of physical principles, such that the discovery of each new principle modifies or tempers all the others. There is a higher characteristic or principle of discovery governing this process, but it is accessible only to the creative processes of the mind, and cannot be represented or communicated in any formal manner.

Finally, I should mention that at the end of his *Harmonices Mundi*, Kepler speaks of dissonances in the array of planetary intervals, as pointing to the possible existence of a “missing planet” between Mars and Jupiter—a possibility he had already discussed in his *Mysterium Cosmographicum* 20 years earlier. Less than a century later, the young Carl Friedrich Gauss, working on the basis of the overall *characteristics* of the solar system, demonstrated by Kepler, determined that the orbit of the asteroid Ceres—whose discovery Gauss himself had made possible—lay exactly in the orbital region Kepler had predicted!

In this way, the truthfulness of Kepler’s—and Bach’s—polyphony was established, to the glory of God and the delight of the human mind.

Dialogue

In the Footsteps of Bach, Kepler, Leibniz

The following are excerpts from the discussion following the panel on the afternoon of May 27.

Bach and the Principle of Organ Construction

Feride Istogu Gillesberg, ICLC, Stockholm: I have a question concerning organs, because I recently read a biography of Albert Schweitzer, who was very engaged in keeping the old organs alive. He says that the way Bach composed, and what was played on the old organs, is different than the new organs. Do you want to say something about that?

Tennenbaum: I happen to have had some personal experience with this. Bach himself, was very much involved with the principles of organ construction. I think that at that time, in Bach’s period and also earlier, from the Renaissance period on, and even before that, the construction of an organ was a masterpiece, a feat of the greatest, highest technology of that time. The organ builders like Trost, Schnitger, and Silbermann, and many others—in my conception, this would be like the aerospace industry, today, in terms of the profundity and the amount of knowledge, involved in constructing these remarkable instruments. But, of course, those were Renaissance principles. The Renaissance principles of the notion of sound were not the Helmholtzian—and, here again, we get to Kepler. What is sound? What is a musical tone? Is a musical tone just a vibration, just a sine wave, as we learn in a physics course? Or, is a musical tone something else? Maybe we can get to that, later, that a musical tone is a kind of soliton. It’s kind of a Keplerian process. It’s not just a vibration of a string. *A musical tone.*

So, the principles of organ-construction developed out of discoveries on the principles of the human voice, out of the *bel canto* conception. If you hear a Trost organ or a Silbermann organ, you see they *sing*, these instruments of Bach’s time. They were *vocal* instruments. The conception was a vocal conception.

Similarly, also, the entrance of voices: I mentioned, in talking about the drama, the idea that a fugue is a drama, a drama in the sense that the entry of a voice, and a change in the voice, in a process that is already moving forward, is a moment just like when you’re on a stage, and something’s happening, and suddenly a messenger comes on stage and says, “Now, this has happened.” So, the notion of the entrance, particularly of the voice—the voices must be transparent, you must *hear* the voices, you must hear this dialogue. The organs

were constructed, from this kind of conception.

Now, the details I don't know, but, under the influence of the Romantic school, which entered particularly in the second half of the nineteenth century (I think it started earlier than that, perhaps), there was a great change in the mode of construction of organs, in the whole conception. This was not something secret; this was very explicit. If you take one of the old Bach instruments, for example, when a typical organ-pipe starts, it starts with a "tuh." It doesn't go "oooooo," it goes "tchuh"! "*Jetzt!*" "*Jetzt bin ich da!*" ["Now I am here!"] You have this kind of attack, like when a violinist starts a note. It's an assertion, it's a change.

In the construction, I know just one particular very interesting technical, but not really technical, aspect. Take the sound of an organ-pipe, say a principal pipe. Some organ pipes have tongues, like an oboe, but other organ-pipes have an opening, and a current of air that goes across them. At the beginning of a note, when it starts, the air makes a phase-change and goes into a kind of turbulence, a very well-organized turbulence. And that's what we hear, in the "tchuh" of the sound starting, in a good, Classical organ. In the Romantic period—and I have played such organs and was greatly disappointed—they took the opening and they filed it, put grooves in, which makes this turbulence start very gradually, so you get this "rrrwwoooooo." If you listen to some of these so-called Romantic organs, you'll hear this. There were other changes, also. The overall effect was, that instead of this drama, you had a little bit like the sense of Rameau—this, I would say, muddy, or dark, *confused* sound.

Fortunately, some very devoted people tried to maintain some knowledge. There are many things we don't know. Just as we've lost the knowledge of the *bel canto* principles, at least the scientific knowledge—I think we're behind Leonardo da Vinci, in many ways. But, there were some people who kept some of the original instruments alive. Then, there was a movement (Schweitzer was involved in this) to start to rebuild, and to build again, organs on these old principles.

Refuting Rameau, the Cartesian

Christine Pierre, ICLC, Paris: On this question of Rameau. First of all, I want you to know, as well, that Rameau did not invent hardly anything. He took everything from Descartes. For instance, this idea that a tone is composed of the fundamental bass and the series of overtones, comes directly from Descartes' "Treatise on Music," as well as the idea that music is nothing but agreeable sounds, which is also taken from Descartes. This is the basis for Rameau to reject the logarithmic division of the scale, because the logarithmic division of the scale means irrational numbers, and therefore something which is not "agreeable" to the ear. Therefore, he adopts instead the "natural" division of the scale, which then leads him to have major half-tones, and minor half-tones. This division of the scale would have made it completely impossible to compose *The Well-Tempered Clavier* or the majority of the works of Bach, simply because it reduces the

possibility of composition to about one single scale, in order that there not be distortion as you go through the major half-tones to the minor half-tones.

This question of Rameau is extremely destructive for the people who are being trained today, because today they are trained essentially in harmonic composition and not at all in contrapuntal composition. I had the experience, recently, of giving to a very competent musician a canon by Mozart, which was obviously inspired by Bach, and which is all built in terms of cross-voicing and counterpoint. The guy looked at it, and said, "This can only be built harmonically, like filling full chords." He could not see how it could be constructed in a different way. This shows how the culture has been destroyed, and this is very paralyzing.

Tennenbaum: I think that's very relevant, the Descartes connection. There was a promotion of Rameau, which I think would be interesting (perhaps you know more about it, or some people in France have studied more the way it was promoted). I think it was through salon-type networks.

But, one point I wanted to make: Firstly, Andreas Werckmeister, in this book, which (unfortunately, I did not have time to really study it carefully) is an amazing work, starts from the notion of refuting this idea of the so-called "natural" system. He says: Look, we have the solar system, Kepler's solar system proved that the harmonic principle in the solar system is *not* the Rameau principle, not the numbers, not the overtone series. Kepler actually states, in the *World Harmony*, very explicitly, that the reason for the effect of beauty in music is not the acoustic connection of tones and overtones, but it comes from a deeper principle, namely the geometry of the human mind. Kepler, in his *World Harmony*, in his works, *proves* that the so-called natural tuning of vibrating strings is not the tuning of the solar system. It's not the *principle* of the tuning of the solar system. It's not a question of frequencies, it's a question of the principle involved. When you get to the changing curvature, you're in universe which is developing ambiguities, it's developing new principles, you don't have this fixed, so-called natural tuning. So, the word "natural" is wrong. Basically, that was one of Andreas Werckmeister's main points. He said, "Since man is created in the image of God, we have to follow the harmonic principle of the solar system, which is *not* that of a vibrating string." Even though a vibrating string is in the solar system, too, as a little piece of it.

The other point I'd like to emphasize, for people looking at the music question: If one looks at *The Art of the Fugue*, which we'll hear more about tomorrow, I think it's an interesting point, that in many of the fugues, Bach does not use many different tonalities. Formally speaking, he doesn't modulate very much. Many of the fugues stay just in a couple of tonalities. In principle, you could play them in a *non*-well-tempered system. That, I just say to pose the higher thing: The well-tempered principle of composition is not. . . . You can't define it by saying, "Okay, now people could compose in all 12 keys." It's a notion of geometry. It's a notion of the way

musical composition is done, a method of musical composition. I think we'll have more about this tomorrow, but that's a very interesting point. How are you composing in a well-tempered way, even if you're playing only in one or two keys?

Where Fermi and Prigogine Failed

Q: My question is for Dino de Paoli. I studied some elements of thermodynamics from the book by Fermi. He leaves the reader with the impression that the third principle of thermodynamics is an answer to the problem of minimizing the entropy of systems. I would like to know, how do you criticize this particular principle, in our discussion? And, how do you think the work by Prigogine, on the structure of orders different from those we ordinarily know, can answer this old problem, left by Fermi?

De Paoli: Very briefly, because there is a written article on Prigogine, so you can read about it.¹ But, it's probably relevant that I say clearly, what maybe was not clear before: What is the *big* difference between Lyn and all this?

The first point, is that some of this work, including the work of Fermi, is very useful in terms of machine construction. That said, the point is precisely that this tendency—just “how do you reduce entropy?”—most of this work, applied to society, means what you would call today “recycling.” It's a zero-growth theory, which tries to maintain the equilibrium of society by recycling. The mistake is, when this becomes a sociological issue, a sociological theory, and you try to shape the society based on it. That's why cybernetics is so dangerous. Not because of the technical work, per se, but because it becomes a sociological project. That's why Lyn reacted.

Now, the point is—and that's what Lyn did—to identify where the mistake is. The mistake is, that the universe does not try just to *minimize* the entropy. Where do you have the proof? Well, you have to start from the top. The proof is the existence of human beings. You can't go from below. Start from yourself; start from the idea of the individual, the individual capability to go above time, the individual capability to change space. It is the existence of this individual, which defines any universal law—not any specific technological law, but any law which has the pretension of being universal. Once you start from there, you see precisely what Lyn did introduce. And, it's not an arbitrary introduction. It's not something just to make you happy, it's an introduction which responds to natural law.

Why? The second point, is life. Life could not exist, in that same form. So, the existence of human beings, the power of their individuality, what Jonathan tried to express in the music—the single note, as a function—the individual as a function, not arbitrary, but to change precisely the form of the universe. This is the main point of difference, between us and Fermi, and Prigogine, and everybody else, who just try to say

that the issue is to minimize entropy. This is just to say, “We don't want to solve AIDS; we just want to minimize the AIDS effect.” Do you want to do that, or do you want to solve it? There is a way to get out of this tragedy, which has been made out of putting some technological issue into a sociological policy, which is this idea that society cannot really increase, only control—and “to control” means to minimize thinking.

This is why neither Prigogine, nor Fermi, nor anybody else has taken the step of saying that the existence of the human individual means something. It is sacred, because it means something. That existence is the starting point, to explain physics, and not the other way around.

Starting a Pedagogical Fight

Q: I have a proposal. The first time I really learned something about music, was in a study-circle with Ulf Sandmark in Stockholm. . . . We talked about the harmony of the spheres, Kepler, and so forth. It was very fascinating, because of the coherence of the solar system with the notes. This got me thinking such a crazy thing, as that there might be a God in the world. . . . My question is for you, Jonathan Tennenbaum, and maybe also Poul Rasmussen [who was chairing the panel]: Why don't you, as such polemical people, write maybe an article or a leaflet, describing this in a very pedagogical way, so young people, my age and younger, can understand that particular thing?

Tennenbaum: Well, I don't want to spare you, also, the interesting work of writing such a leaflet, because you may also know how to address the people of your generation better than such people of — [shout from the audience: “Baby Boomers!” Laughter from the podium]. Exactly—we Baby Boomers, we're already the has-beens, many of us. Maybe we can work together.

Actually, we did do an experiment. Many experiments, but one particularly I remember, when the Voyager spacecraft took these beautiful pictures of the rings of Saturn. If you look at any book on astronomy, before those pictures came out—how they present the rings of Saturn—and you compare with the Voyager pictures, you see that the astronomers, at least most of the astronomers, had *no idea* of what they then saw. A completely different conception! Because you saw that the rings have this beautiful geometry, which seems to be detailed, down to as far as you can see—the smallest, even just a few kilometers, it's already organized.

So, I wrote a leaflet called, “Newton Was Wrong, Kepler Was Right!” With this leaflet, we did a whole campaign on campuses, and it was probably one of the most successful campaigns in terms of getting a big discussion. There must have been about a dozen times, in different universities in Germany, that I went around and had full audiences, packed audiences, and *big* fights.

In one of them, I remember very well, I think it was in Mainz University, the whole auditorium was filled. There must have been 200 people, maybe more, students. And in the front row, was a whole row filled with professors. Just one

1. Dino de Paoli, “Does Time Really Precede Existence? A Reflection on Prigoginism,” *21st Century Science & Technology*, Spring 2000.

after the other, sitting, looking very mean. I made the point, that it is simply a lie, to say what is written in many of the books, that Newton discovered universal gravitation. I read a quote from Kepler's *Nova Astronomia*, where he says that any two bodies, anywhere in the universe attract each other, and if the Earth did not have its gravitation, then the water of the oceans would fly up to the Moon. This is completely clearly written. One of the professors stood up, sputtering, and said, "Bu . . . bu. . . It's imp-p-possible. G-g-give me that, give me that. It's impossible!" So, we had fun.

I think your call is an absolutely correct one. We should go after it. We should have fun with these issues, and really use them to open up the discussion. We'll work on this, and you'll work on this, too.

The Leibnizian Universal Characteristic

Michelle Rasmussen, ICLC, Copenhagen: . . . In the discussion about the systems analysis paper [Lyndon LaRouche, "On the Becoming Death of Systems Analysis," *EIR*, March 31, 2000], in the local in Copenhagen, we did not quite know what the Leibnizian concept of the characteristic, is. Could you explain that? . . .

De Paoli: . . . There is an unfortunate misunderstanding on Leibniz, which is due precisely to cybernetics and formal logic. I see that Lyn is coming to the podium, so he can answer even better. Theoretically, these people say that Leibniz would have been looking for a *characteristica universalis*, in the formal sense, and that he wrote these different books about the "universal characteristic" of the universe. They try to interpret all this in a formal way, to the effect that you can find basically a computer-model project, to make a model of the universe, to have the characteristic of the universe, and they say that's what, supposedly, Leibniz was looking for—the general rule of the universe. That is completely false.

In two words—and now we have Lyn himself, so I don't need to speak about him—the real issue of the characteristic of the universe, is precisely what Lyn raised, and, in that sense, I think Lyn is a very modest person. He always says that he is Leibnizian, that he is Riemannian; but in a certain sense, in my opinion, he has gone further than both Leibniz and Riemann, because the precise issue of what is the characteristic of the universe, has to be understood in terms of the individual mind: the individual, living in the universe. How does the individual know, how we reflect this necessity in the universe?

I tried to show, through Wiener, these two approaches. The simple idea that there is a necessity, is what Leibniz was saying. If you make a mistake, you pay. That's a characteristic of the universe. There is a necessary consequence to decision. The issue is, how do we realize this necessary characteristic of what we do? One theory is what I showed with Wiener, this simple determinism. You know the past—that's the future, that's the characteristic of the universe. That's *not*. The alternative to that, is now all this "informatics," all this chaos theory, all this "non-linearity," that *the* characteristic would

be time changes, without space. There is, actually, no more necessity, so there is not actually a *characteristic* any more. It's what Jonathan expressed with Rameau. Once you define freedom just as that which *negates* necessity, there is actually no more freedom, in reality.

So, how do we find this higher-order necessity? That was my point, with Breughel and art. How do you rediscover in yourself, the Absolute? The Absolute is nowhere else, except the way you rediscover it in yourself. How do you do it? And there, I think, I won't go ahead, because I think the best answer I have had until now, is precisely what Lyn developed. How do you discover this natural law in yourself? That's the real question. That's the role of art. There is no other way. This question of catastrophe, this question of tragedy, is a paradox. Do we really need tragedies? No! But, the tragedies are always looming. We can't stop thinking, otherwise the tragedy is always there. And the difference between tragedy and horror movies, is that the horror movie paralyzes you. The tragedy stimulates you, as I quoted from Lyn. That, I think, is the way we have to approach this issue of Leibniz on the characteristic of the universe.

The Crisis in Russia

Prof. Taras Muranivsky, president of the Moscow Schiller Institute for Science and Culture: It is very good, that my question was moved from yesterday to today, because today I have some news. I was informed, that Illarionov, the adviser of Russian President Putin, is removed from his post. But, don't be very glad. He was removed, and instead got the post of [Presidential Envoy to the G-7 Countries], replacing Livshits. You know, that Illarionov tried many times to "improve" the Russian economy with the help of advice from different Western economists, such as Domingo Cavallo, the author of the currency board, and other people, some people from Chile, who destroyed the pension system in Chile, whom Illarionov introduced as very good and experienced in the development of pension systems.

We had one more person, the Minister of Energy, Kalyuzhny. Kalyuzhny visited Turkmenistan, together with Putin, last week. When Kalyuzhny was asked about his prospects to retain his ministerial post, he replied, "You see, I am together with Putin." But Putin came back to Moscow and removed Kalyuzhny, in spite of that, and appointed one very important person, who lives in the middle of Lukoil [territory], in Siberia. He appointed this not well-known administrator, as Minister of Energy.

Now, when we try to analyze the situation around Putin, we see that one day he acts not bad, and another day, he acts very awfully. But, we try to *hope* that maybe he will be clever, and, in spite of his KGB origins, etc., he may do something not bad. Gorbachov, you remember, held a high post in the Communist Party, and eliminated the Communist Party. Maybe Putin will do something clever. We hope, and we try to see what he does now. Maybe he is very connected with the Family (I have in mind Yeltsin's Family). But, we hope



Prof. Taras
Muranivsky

that he will be freed from it, not abruptly, but slowly, slowly, step by step—we hope. We hope, and we believe, and don't believe. It is not clear.

One more thing. The question that I wanted to ask you yesterday, was connected with this division of Russia into seven big districts. . . . Nobody makes this comparison, but I compare this action with Franklin Delano Roosevelt's action, when he divided the United States into 17 districts, because of the crisis. But, when I think about it, I see that Roosevelt had another purpose for this division. He appointed, as I know from history, generals as the heads of these regions, too, but it was done in order to strengthen the state and the influence of the state and the administration, through the Presidency, on the development of the country, and to abolish unemployment—this is known very well—he was not a free-trade advocate.

But Putin, from one side, appointed five generals among the seven leaders of these regions, and he removed former Prime Minister Kiriyenko from the Duma, to one of these regions, which is a good step. I think that Moscow is not the place for Kiriyenko; it is better for him to be some 100 km from Moscow, [this head of] the so-called Union of Right Forces, that were organized as an electoral party, and got some seats in the Duma. From the other side, Putin appointed Gref—you read Tennenbaum's article in *EIR* #14, and issue #15 had my article about Illarionov, where we described these persons as super-liberals. These persons have now been appointed to these posts. I don't understand—what do you think, Lyn, about this division, and about these moves by Putin? . . .

Lyndon LaRouche: Since Dino has spoken (I didn't hear him speak, but I've heard him think—and you can know what he knows in a shorter time, if you hear him think, than if you hear him speak, so I have a great advantage that way),

let me speak from that standpoint, on this question of Putin.

How do we know anything? Russia under Putin, has been a gigantic, cheaply constructed village, a Potemkin Village, covered with a Venetian mask, also cheaply constructed. How do you know, what's going on behind the front of the Potemkin Village, which you're not allowed to look behind, and behind the mask, which you have to look through, to get to the village?

This is a problem, which was addressed by Kepler, in respect to the planets. This is a problem, which I'm sure that Dino has elaborated on somewhat today; I didn't hear, but, as I said, I could hear him thinking, so therefore, I make certain adductions from that. Then you had, at a later point, out of the work of Kepler—and, remember, Kepler's fundamental contribution to astronomy, the *fundamental* one, apart from being the first modern astrophysicist, was that he ridiculed the work of Tycho Brahe, as well as Claudius Ptolemy, and also Copernicus, as being irrelevant, because they were merely mathematicians and statisticians, who had made and discovered nothing, whereas he discovered something. What was it he discovered? Well, he discovered the implications of an elliptic orbit of Mars, which coincided with something else, which he had learned from Plato earlier, and said, "If you want to find out how the solar system functions, or any part of it functions, you must define what we would call today the characteristic of the system as a whole." You do not try to explain the solar system, by explaining each planetary orbit, and then trying to find the general law, which governs the generation of each orbit. No! What you do, is you define the number of orbits, and their characteristics, which can exist in the solar system, which is what Kepler did. This left some unresolved questions, which he left to future mathematicians.

Among the first responses to this, were by Leibniz, and Leibniz not only developed a calculus—a real calculus, not the phony one, developed by Newton; or, not the phony astrophysics, developed by Galileo. But, in developing the calculus, he developed something else, which is called *analysis situs*. You will find reference to this, specifically, in two papers of Leibniz, one of which was published, I believe, in his *Acta Eruditorum*, and another paper. Then, you find a further explication of this in a logical place to find it, in the work of Riemann—on the question of *analysis situs*, and its treatment by Riemann.

What does all this mean, as it comes to Putin? The way people use the term "non-linear" in the world today, they're a bunch of idiots, and the more degrees they have, the more idiotic they are. You have people who can explain non-linearity. They can tell you now to calculate it, which means they don't understand it; because non-linearity is not a number. Non-linearity is a question mark, which enables you to identify something, like Putin. Putin is a question mark, he's not a number. He may have a number, secretly, but it's not his number. He's a *question mark*. He lives in a universe, which is called the Russian universe in the world today.



Russian President Vladimir Putin (right), with German Foreign Minister Joschka Fischer.

What is the question mark, and how do you identify it? What Kepler identified, actually, as *analysis situs*, was that the solar system as a whole has a coherent, central principle, which defines it as a whole. That's not the end of the matter, because the solar system exists in the universe, and the existence of the solar system is determined by the universe as a whole—which means that in physics, as Gauss showed this for his work, and as Riemann brought this to a conclusion, there is a unique determination of the existence of anything, in any part of the universe. This is called, by Riemann, its *characteristic*, the characteristic curvature of a physical space-time—its characteristic; just as a planet, in a Keplerian system, or a Gauss-Kepler system, each planet, has a pre-determined available orbit. For example, the case of the Ceres orbit. Kepler determined the Ceres orbit's harmonic characteristics, and its necessary existence, before anybody discovered this planet, Ceres, which is in the asteroid belt. How? Because he understood from the harmonic characteristics of the solar system as a whole, that there had to be a planet there, to be consistent with the characteristic of the solar system. He gave the harmonic characteristics for it. And then Gauss, almost two centuries later, determined the fact that Ceres was an asteroid, that had exactly the characteristics of the missing planet between Mars and Jupiter. That's the meaning of a characteristic; that a whole process has certain characteristics in it, and you can identify the object, by the characteristic within the system, in which that characteristic is expressed.

Now, you can understand Putin. Why? Because you have a kind of politician which is rather commonplace today, so it

should be rather easy to recognize and identify them. Their purpose and motive, and governing principle in power, is to gain, hold, and increase power. For what purpose? *For the purpose of gaining and holding power.*

Now you have a government in Russia, and you say: Well, how can you determine what Putin's policy is? Well, I can't determine what Putin's policy is. Maybe *Putin* doesn't know what his policy is. I *can* determine what is missing. I can determine what, if he *understood* the situation, he would have to be committed to. And he's not committed to it. I see a man, who is committed to many different, conflicting options, as options. I don't see a man, who has a clear conception.

Russia is about six months to eighteen months away from total destruction. And all the policies

in process are leading toward that. All the conciliations, made with the British government and others, are leading toward that. The Russian people have no clear sense of direction, of where they're going. There's an attempt to bring back Russia as a sense of national power, a sense of patriotism, to bring the Church back in, to bring other constituencies back in, into a consolidation of power. But, where's the action?

What is *missing*, is the key. What you're seeing, is a situation, where they were determined to get rid of Primakov. It was an Anglo-American job: "Get rid of Primakov!" And they got rid of him, with the help of Al Gore, by pulling a swindle, and because Clinton was busy with other matters, they got the Balkan War they wanted, they got rid of Primakov. They created a vacuum. They were faced with the Europeans, from continental Europe; from within the United States, from the International Republican Institute in the United States (the Bush crowd), from Britain, the policy was to establish a Pinochet option in Russia. This Pinochet option would permit Russia to have a strong dictator, to consolidate political power over the country, on condition that Russia continue, in a more refined way, the policies which we had earlier, in terms of the use, the *sale* of the natural resources of Russia on the foreign market, at the expense of the development of Russia's industry and agriculture, and so forth.

What do I see? Exactly that. What you see is a man, Putin, who came to power because the Anglo-Americans allowed him to come to power. The Anglo-Americans, under my nose and with my watching eyes, orchestrated the situation to get

Primakov out, and to create an opportunity to select a man to fill the position, which had been labelled “the Pinochet option for Russia.” Putin took the job. What’s he going to do with the job? If he’s going to do the job, he’s going to try to consolidate support, consolidate power, increase power, and exert power. For what purpose? For the purpose of gaining, consolidating, and increasing power!

What difference is the government of Germany? Putin has got a clearer head than [German Chancellor Gerhard] Schröder, but the motive is the same. You have the Foreign Minister of Germany, who has no head at all, just a sort of a shrunken prune.

What do you have in France? France is a police-state. It’s been a police state for a long time. It has more policemen than citizens. That’s the nature of the French government. It’s called democracy. What are they concerned about in France? To hold and maintain power! And to keep from being thrown out, and thrown into jail, or thrown into prison on some scandal or something. To cover up for Crédit Lyonnais — that’s the only national purpose of France’s existence, right now.

What about the United States? In the United States, you have no conception of policy. You have some people, who think they’re going to have an Anglo-American world empire. But the people who are running as top candidates in parties — they have no conception of anything. They have one conception: Grab, hold, consolidate, and exert power! For what purpose? For the purpose of grabbing, holding, and consolidating power!

We have a characteristic. We have a *world*, which is governed like a Ship of Fools, and every fool is trying to get the best stateroom, on the sinking ship.

Yes, there is a lawful aspect to the Putin option. There’s someone in power. There’s a vacuum. All of Russia is in agony, wanting to become Russia again, wanting to survive. But there’s no *policy* for Russian survival. Just a man, who says Russia will survive, for the sake of his acquiring and holding power. So, why should we mystify ourselves with unnecessary questions, when the question has answered the question? There *is* no leadership of Russia, right now. There are many people in Russia, who, if assembled in the proper way, as we saw earlier with the Primakov option, you could bring together people, who could make a difference and knew what to do, at least in approximation, and would go in a certain direction. They’re no longer going in that direction.

My policy is this: How do you *change* the characteristic of the Russian situation? Russia is not an independent entity. It’s living in an Anglo-American-dominated New World Order. It is something, put under the category by the British, of “Pinochet Option for Russia — Russia Division of the Anglo-American World Empire.” And Putin is trying to get the best bed in the Empire Train. Yes, it’s good to have a government of Russia, it’s good to have a solid government of Russia, rather than chaos. But, there’s no solution in sight. *We* have

to provide the solution. There are people in Russia, who are capable of doing what has to be done, if they are given the opportunity, if they are given a clear vision, of what needs to be done. *We must supply that clear perspective and vision*, and let the Russians choose it.

What is going to happen with Putin’s options, on the day when what he believes will not happen, will happen? When, in the weeks ahead, this system disintegrates — the system, to which he’s adapted. The Cavallos, all these other strange fellows, these cast-off sons of the former *nomenklatura*, the useless sons of the old *nomenklatura*, who are now called liberals, because they *steal* liberally. They say, “Ah! You want us to join the capitalist system? Now we’ll become thieves. Bob Strauss told us how to do that, when he was Ambassador.”

So, I think the answer is, that *we* have to provide an intellectual conception of both the nature of the crisis, of the imbecility of the existing governments and political institutions. We have to provide a clear picture of what the world is, and what it might become. We have to hope, that others will study that, and adapt to it. We would hope that the present government of Russia will reform itself, in conformity with the reality, which we know exists. And, therefore, that would change the characteristic of Russia.

This is always the case, in history. History is made by a special kind of missionary, who goes in and finds a baboon, and says to the baboon: “Baboon, stop being a baboon. I’ll teach you how to become human. Actually, you were human; you just thought you were a baboon.” And the baboon says, “Oh! I thought I was a baboon.” “You’re not a baboon, you weren’t a baboon; somebody told you, and you believed it. So, become human.” And the missionary is someone, who, essentially, does not dictate to people what to do, but seeks and helps them to find in themselves, what it is they must do. To find out who they are, and what their fundamental interest is.

I think it’s very clear, this Putin thing, in that respect. If he *understood* the situation, he could not act the way he’s acting, in the main. It’s what he’s *not* doing, which reveals — because there’s only one consistent feature to this whole regime. It’s the same thing, in the regime in Germany. It’s more pitiful in Germany. Or in Italy, they don’t have a government; they keep electing a new one, but they never get a government, in the process. In France, you have the same thing. So, the world is a mess. The United States government is disgusting. There are no competent governments, anywhere in the world, for dealing with the global situation. Therefore, you have to present the ideas which are needed, and you have to act like a missionary, to try to convey these necessary ideas to people, who should respond to them, and hope that you can convince some people, who think they’re baboons, to stop being baboons, and be human beings, instead. And then we shall get together, and we shall fix this world. I think it’s the only answer.