## Chaos and the Search for a New World Order

Dear friends, family members, synergists, we've been meeting together like this for seven years in secret outside the system, in bakeries, in warehouses... We meet to share recipes, to share embraces, to share hopes and fears, and to chronicle the various scenarios of apocalypse and salvation. Seven years is a long time. We are past the time for the apocalypse scenario and the strategy for salvation. We either have to do something different now, or we could just take a rest. First, I'd like to retitle my talk: Spelunking on the Rise, and then I would like to make a contract with you. I want you to consider a hypothesis, just for the sake of our discussion this evening - a little map defining the space or stage for our play.

To begin with, I'd like to show you this book. I have a wonderful library with thirteen million volumes belonging to the state of California. The book has a plain cover, and inside you find the real cover that says, The Survival of Civilization by John B.Hammaker, published in 1982. It is one of many apocalypse scenario survival strategy books, and it has a particularly clear and far-reaching synopsis of all the others.

We've heard from Hazel Henderson, it's in here. We know about the world economy crashing and the nuclear waste and the CO2 and the withdrawal of funding for the solar and alternate energies and so on. This book has a synthesis of all of these disasters. It is subtitled A Focus on Three Problems Threatening Our Existence. It shows the three phases, carbon dioxide, investment money, and population explosion, and these are layered in this graphic design. Here are the actual curves of exponential growth of these three problems. This man has worked hard. He did a good job of prediction in 1982. He said we must act, we have only ten years. Well, the ten years are up, and you can relate to this in two different ways. You can say, well, this is another one of those doomsday prophecies that were off by at least a few years or so, or you could say, well yes, it's over, it's too late to reclaim the earth.

What was supposed to happen in 1992? We're talking about a coming ice age. The global warming is the preliminary step to a traditional, oft-repeated process in the life breath of our planet, of glaciation. In fact, glaciation is the standard state of our planet. Occasionally glaciation is broken by what Jim Lovelock called a Gaian fever, a very brief episode of slightly warmer clime, during which the polar ice caps melt, making the oceans rise, which are otherwise four hundred feet lower.

For our first hypothesis this evening I'd like to assume that John D.Hammaker is correct, that the ice age is coming. We don't have enough power to hold back the ice. Some day somebody will find a way, but right now we haven't got it. So the ice age is coming, only when?

Let's assume that it is coming now, that what we are experiencing are all the traditional symptoms of the on-coming glaciation. It is already well known to polar scientists that the ice caps are growing at a fantastic rate, a rate

characteristic for glaciation. Somehow this news, similar to other recent news, is not really reaching us on the network news programs for some reason. I don't want to blame a conspiracy for this news blackout, because it is a conspiracy in which all of us participate. We are involved in the biggest cover-up of all time in failing to communicate about this disaster, and that is because no-one, not even the most active environmentalist, has fully imagined the magnitude of the coming catastrophe.

A glaciation makes nuclear winter look like a bad dream -- a one night dream that lasts a hundred thousand years. Hence my new title, Spelunking on the Rise. Spelunking is on the rise, and here in this area you have the best and biggest and most fabulous caves in the whole world. Unfortunately they are polluted with nuclear waste. We know that when the glaciers came before -- we've been through this before -- we retreated underground. There were wonderful condos in the Gorgonia valley for example. A hundred thousand people lived in a river valley with thirty foot cliffs on both sides and little holes all over. You could come out on the balcony, and while you were brushing your teeth you could look down -- Cro Magnon! Once a week on Sunday morning you would go to this really big cave which was set aside for rituals, and there were the paintings, and as you came in you saw the images in a sequence which was the script for the ritual of the merger of the spirit of the sky and the earth. We could be doing this here in a few years.

Glaciations come on in less than a century and they melt in twenty years. They are sudden catastrophic events in the nonlinear dynamics of the complex system which is Gaia, a really complicated system that loves to move suddenly, and there's nothing we can do about it.

So the first hypothesis is that the ice age is coming soon. This is not doomsday. We survived others in the past. It will be something like nuclear winter. There will be massive deaths, there will be massive extinction of species, but right now I'd like to introduce the second hypothesis for our play, and that is that some substantial portion of the biosphere and some substantial portion of the human species will survive. In caves, where necessary in northern climes, and in the desert with solar panels. When the plague, the Black Death came on the Silk Road from the Gobi Desert in the winter of the year 1349 and killed more than half of Europe's population, it only took a few years for the population to fully recover, because the stage was set: species breed like rabbits. Life will go on. All the problems we have now will continue, and so this is not a doomsday scenario but just a cycle in the life of the planet. Even in the worst time we must continue to struggle for our own evolution and participate in the creation of our own future.

We have three hypotheses to consider, and we are about done with the stage of consensus. For the sake of discussion, I would like us to perform an autopsy of the Holocene Interglacial. It is necessary for our understanding of this Gaian fever. According to hypothesis 1, this post-mortem must be done in order for us to have a future. We can't survive the environmental stress that is coming without a better understanding than we've had before. You could object that we survived previously without a better understanding, but frankly, I doubt that. I think that every interglacial has seen a fantastic flowering of civilization, of culture, agriculture, electronics, space travel, who knows what. There is no record. You can fantasize anything you please.

Why believe the presence-centered archaeological scenario given to us by academic prehistorians? Let us use our imagination. All that we could do in the 10.000 years of this interglacial, they could have done in the 10.000 years of a previous interglacial, and in the one before that.

I think that if the species survived these catastrophes in the warmth of the caves, it is because they succeeded in analyzing their errors. I don't want to talk you into this because I don't believe it myself. I'm just trying to get you into the mood for this hypothesis. We can simply agree for the sake of discussion to take it for granted that the Holocene Interglacial is over, that we and the biosphere survived to some extent. Our continued evolution after that, however, will depend on our understanding the post-mortem of this interglacial.

So what I want to talk about now is the fact that mathematics has given us an enlargement of our capabilities to understand the complex scenario which is the history, the post-mortem of the Holocene Interglacial. I would like to talk about this in two stages. First I will present a simple two-dimensional model for the all and everything, a cosmography, not my own, but coming from ancient times, most likely from a previous interglacial. I don't believe the theory of progress, nor that we are in a perpetual decline from a higher civilization in the past. But there has been knowledge in the past which we've lost, and we probably have knowledge now which is forever new in the history of the planet.

I want to describe an antique two-dimensional model of cosmography which will give us a context in which we can place the new discoveries of mathematics, namely chaos theory, bifurcations and nonlinear dynamics. That's first; second, I'd like to discuss a theory of social transformation, because I think that we need a social transformation.

It appears that social transformations occurred under certain conditions, some of which are known historically and many of which actually exist now. For example, extreme environmental stress, such as the coming of this Gaian fever. We'll have a two-dimensional cosmography and a certain model for social transformation, and hopefully at the end we can put these together and have a discussion about our chances in the future that might give us some idea of what we could do today in order to have a future.

I'll start the two-dimensional model with one of the many dichotomies underlying the European mind. There is the dialectic between the Platonic and the Aristotelean view. Aristotle was a student in Plato's academy which existed \_\_\_\_\_ in Athens. He took exception to some things he was taught there, so he went out and started his own school, \_\_\_\_ the Lyceum. These two schools had completely different agendas, which could be understood as a dichotomy. On the one hand you have the platonic tradition with a superstructure of spirit and soul and a monotheistic god at the top, none of which can be experienced by the five senses. Aristotle, on the other hand, was a total physicist, a bottom-up measurer. The platonic model is for all and everything, while Aristotle looks at one thing at a time and only admits the data that comes through the five doors of the senses. That does seem like a dichotomy.

The Platonic tradition ended and the Aristotelean system survived by what seems to be an accident of history that I never understood. The Platonic system infused the whole of Greece and was most especially collected in Alexandria and taught by the great teachers at the museum. In 643 AD, after the death of his advisor Mohammed, Omar the First took the reins of the whole Islamic enterprise and turned it into something else. He started the Arabic conquests, and one of the places that were conquered was Alexandria. The Muslims kept marching across North Africa, and after sixty years they came to the Rock of Gibraltar. They invaded Spain, then they got past the Pyrenees in that little stretch \_\_\_\_\_\_, and then they were successfully stopped by the French military might.

Alexandria, the greatest seat of learning in the history of the planet, had a very enlightened general at the head of the occupation forces, and one of the chief librarians seduced him into really respecting the books. The library was locked, and the librarian asked the general to open it so that it could be used. The general said he didn't have the authority, he would have to appeal to his chief. So he wrote a letter to Omar the First in Medina, and Omar the First responded in a letter that has survived: "If the books in the Alexandria library support the Koran, we don't need them. If they don't support the Koran, we don't need them. Burn them all." The books were burned in the ovens of the Alexandrian hot tubs, of which there were 4,000. It took six months to burn the 700,000 papyrus rolls. When the burning was done, all the Platonic books were gone. A few survivors were discovered and made their way to Europe where they created the Renaissance, but basically they all vanished. The Aristotelean books, however, survived. Omar's general decided to spare the Aristotelean books, so up to this very time we have this weird bias, the Aristotelean bias in the history of science and European civilization.

This peculiar accident of history upset the balance between the polar opposites of Platonic and Aristotelean tendencies. From time to time there was a resurgence of the Platonic tradition. Apparently out of nowhere, somebody would get a book, decide it was very important and start up a new Platonic Academy. There was one in Cordoba in 960, another one was started in Byzantium in 1050, the George \_\_\_\_\_ Plethon arrived in Florence 1432. Each time a Platonic Academy teaching was revived from Euclid and Platonic texts, somebody or other translated the Greek into Latin or a local vernacular. For example, in 1780 Thomas Taylor styled himself after George Jumistus Plethon, the key person of the Renaissance. He translated the work, became totally immersed in Platonic thought, and taught the people who later became the romantic poets. Platonic revivals always take kind of the same form before they are submerged again by the Aristotelean patriarchal overlords.

What I would like to do is to deconstruct the binary model of the polar opposites of the Platonic and the Aristotelean tendencies by spreading it out into a two-dimensional tableau. We can put the Platonic on the vertical axis and the Aristotelean on the horizontal axis. That is fitting because the Platonic system has a map which suggests a vertical axis. I'll make an unnecessary excursion into the Platonic system, actually it's the neo-Platonic system because Plato's model is very hard to divine from his writing since he never wrote what he thought. He always had a dialogue between two other

people, so there were really three people, Plato and these other two people, but Plato's contribution to the dialogue was never mentioned.

A couple of hundred years later, people began to decode Plato into a plainly written ABC kind of system which is called neo-Platonism. The first person to figure it all out was Amonius Sacus. He wrote nothing, but one among his students, whose name was Potina, had a tremendous intellect and had direct experience of the metaphysical realm. He spoke of theories and of his own experience. He also wrote nothing, but he had a student, Porphyry from Anatolia. Porphyry was a great author and he wrote down all this material which became the neo-Platonic corpus. So that is the vertical model.

Basically, there are three realms. At the top is a sort of metaphysical realm in three layers called the three hypotheses of Potina. First there is The One, also called the good, Tohand. Tohand is something like the monotheistic god of the Israelites. He is The One, but he is not an anthropomorphic god. He is all and everything without structure, like an uncarved block of down[?]. Below that is a face called muse, the intellect, the intellectual fear. This is where the ideal forms of Plato live, it is like a museum of forms including dynamical forms, models for processes and universal architects of the all and everything, plus it is alive and it thinks, and that is the intellectual spirit. Below that is the psyche, the soul, the plane of the soul which the neo-Platonists identified with mathematics.

Mathematics at that time had four branches: geometry, arithmetic, harmonics, and dynamics. They spoke of the soul as having compartments that contain geometrical figures - the soul of the triangle, the soul of the rock, the soul of the tree, the soul of the entire planet, the soul of all the other planets, the soul of all the stars. All this was knitted together into a single integral substance. It's the model for the oversoul of the transcendental American poets. We will visualize the three hypotethes as three parallel lines or planes. That's the upper story. Down in the basement we have two levels, kind of the body level. There is the body of formed matter, and then there is unformed matter. Two levels down, there is the soul with all this enormous structure for which they studied geometry dynamics \_ order to understand it. They were studying that through their own experience. Then down here is the terrestrial plane, the body of ordinary reality, the world of energy. They also had a theory of the in between, and that was spirit. Spirit was seen as an elastic medium, like an electromagnetic field. It had form, but \_\_\_\_ waves, and yet it had particles. When a wave was viewed as a particle, it would be like an angel, and when it was viewed as a wave, it was called consciousness. It is not the all and everything, it's just somebody's model. This is the platonic, the simplified picture of the phenomic cosmography.

In order for a piece of soul to incarnate in a piece of meat, it would have to travel down - they used the metaphors of up and down - it would travel down in a vehicle. Every incarnation was accommodated by a vehicle, and as the vehicle descended, it kind of got encrusted in denser and denser condensations but was not yet material until it got all the way to the basement floor where it got out of the elevator, and then it was material. Once you were incarnated, the vehicle was always there, and if you wanted to communicate with God, with the One, or if you wished to be enlightened by the psyche or the muse, you had to go up, to take the elevator back up again.

They accomplished this by meditation. They had a marvelous meditational technique which was taught in the \_\_\_\_\_ academy. Of course it was lost with the sacking of Alexandria and the closing of the Platonic Academy in 529 AD. A lot of Platonic theology actually became Christian dogma. This particular part became a vertical scheme with the soul, the spirit, and the body, one of the many trinities of Christianity. The spirit was eventually thrown out in an ecumenical council of the Byzantium in 829. Making the spirit illegal resulted, I believe, in the confusion we now have between spirit and soul. We talk about spirituality, we say that what we're doing needs to be more spiritual. We're not clear, nobody is clear, though some people have traveled and saw that there is a rich structure that is hard to remember. But there is a tradition of travel and sacred knowledge about this, the so-called metaphysical lore. Our scientists and most of us when we have our official suits on don't believe in it. We've heard of it, but many people are sure it doesn't exist. That's why it is easy to accept the whole of the Aristotelean system. The dichotomy of Plato and Aristotle can be reconstructed into this \_\_ system where the Aristotelean scientist can depend exclusively on the evidence of the five senses, but over each and every part of that world we can have an elevator available for those who want to check it out and explore the possibility that there may be, that there is, an elastic medium containing angels and so on. Above it is the over-soul, which is home base for our own soul, where a lot of stuff goes on that is not incarnate according to a kind of morphic resonance with a morphogenetic field, one step up.

\_\_\_\_ in this picture and for those who have the monotheistic tendency whether it is the goddess or whatever \_\_\_\_ there. That's step one, there are only two steps, ok. This may never come together. In this elevator - you know what I mean. Another independent component here was called cosmography. This is called historiography, kind of like geography, you know, biogeography, like---[This paragraph is hard to figure out-NINA]

Is there a model for understanding or a theory for social transformation? We know that we can't go on like this forever. Some people, like Marilyn Ferguson, say, "Don't worry, it's happening, it's happening now. I've been traveling around and you have no idea how many people there are who have already made the transition into the Aquarian Age. It's happening, you just don't know." That was a few years ago, and I have been holding my breath and hoping -- I'm a very optimistic person, but I don't think that keeping up our meditations and our yoga and saying our prayers at night is an adequate model for social transformation. Our individual transformation is not necessarily going to add up to a social transformation. But we have history, and historians, and a kind of metahistorians, and among them are certain specialists who have looked exclusively at major social transformations such as the discovery of agriculture, which was not a moment, but a wave across space and time. Or the Renaissance; that is the first social transformation that was extensively studied. First there was the theory of Jacob Burkhart who said it was a rapid transformation, then others came along and said no, it was really very gradual, because three hundred years earlier there was this one which gradually built up to that one. There are many theories of social transformation, and I want to tell you about just one of them, the historiography theory of social transformation by Flinders Petrie.

Sir Flinders Petrie was a low-born person who did very well on the basis of his tremendous chutzpah and attention to detail. A century ago he was walking past the \_\_\_\_\_ bookstore and got one of the many books on the secrets of the great pyramids. He wanted to find out if there really was an astronomical alignment to Chiops pyramid and he went to Egypt to check it out. He stayed there his whole life and dug up Egypt, and he became the founder of the method of archaeology. He just happened to be the first person who dug up layers of eight totally independent civilizations, divided by major social transformations. This made Burkhart's theory of Renaissance look like nothing, because we now had a lot of data. \_\_\_\_\_, pottery, analysis of the styles, painting, literature, architecture, costumes, everything. Somehow the \_\_\_\_\_, what does it mean, this data, the Egyptian \_\_\_\_, what is it all really? But as far as the Aristotelean, \_\_\_\_ he had it all. Eight social transformations. He saw the same pattern in each of them, \_\_\_\_ seeing that. Later in his career, about twenty years before his death, he wrote a skinny little book called "The Revolution of Civilization", and in it he set out the model for social transformation which fits the eight strata of his data. He discovered that there was always the same sequence. The transformation hits a certain aspect of life first, and then another, and another. First come the arts. First comes sculpture, in fact; then paintings, then architecture, then literature. There is always this sequence. Then later on comes mechanics; that means technology, the wheel, swords, weapons. Then the sciences, or abstract sciences, the capability to manipulate the \_\_\_\_ with that wealth, and from that point on the society always dies. Then the cycle begins again. So when he grasped this cycle from these eight exempli, he tried to apply it to Europe, with some very interesting results. For our purposes I want to extend this model by adding layers that were invisible to Sir Flinders Petrie, because the data wasn't present in the dirt. I'm talking about religion, philosophy, and mathematics. [From here on, I cannot make any sense of the transcript, so I'll stop. Sorry. Nina.] I will put them first because in our historical, like the Renaissance and so on, there is no doubt about it, the arrival of the book, \_\_\_\_\_ Plethon, spelled P-L-E-T-H-O-N, spelled differently but pronounced Platon, he just \_ he was the leader, headmaster of the Platonic academy in Byzantium, and he left it and never went back, because the book and to export the Platonic system to Italy where he knew there was a lot of money, and that it would be possible feed, nucleate, intentionally intervene, create, a social transformation which he tried and succeeded to do. So we know from these more recent examples where to add religion, philosophy and mathematics to the Petrie sequence. Now I am not saying this is true or anything, \_ you've got a model for social transformation, this is from other people's, more details and so on. Now, I'm about finished. I want to put together, \_ out of these few pieces the two-dimensional model of the cosmographical model and the serious historical transformation which is kind of adding time, a third dimension, here's the two-dimensional cosmographical model, is the time going out this way, and we are wherever we are. We are stuck, compressed, flat, squashed like an aluminum can in this Aristotelean level, and we are trying to get to a civilization in the caves and ice age which has a future, a sustainable future. Let's say we wanted that, which a lot of people would say who cares about them? So there's the data, I think if we want to do something,

we want vote, call a congressmen, canvass the voters or whatever, you might as

well aim at the top, there's more leverage there. If we could make a change in the cognitive mass, in the mythological structure, in the fundamental of the religion--is there any religion? Well I think [END OF TAPE]