PAOLO SOLERI

What If?

Collected Writings 1986–2000

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Paolo Soleri's *What If? Collected Writings 1986–2000* is a meticulously crafted collection of essays, hypotheses and reflections by one of the most provocative and influential architects of the modern era. Encompassing the mature thought of a distinguished career, it is a major contribution to the fields of Urban Design, Architectural Theory, Ecology, Environmental Ethics and related disciplines. It includes thirty-five previously unpublished essays, ranging from observations on the nature of The American Dream to speculations about the ultimate purposes of evolution. Soleri writes as a builder, as a philosopher, as a journalist, as a historian, and, at times, as a prophet, but always with the intelligence, rigor, and originality that are his trademarks.

Accompanying the text is an extensive, four-color, marginal commentary by Soleri, which emphasizes, illuminates—and sometimes calls into question—the arguments presented in the body of the work.

Additional sections developed from personal journals, and a detailed glossary, further examine such essential Soleri ideas as Miniaturization, Frugality, "Esthequity," and The Urban Effect. The result is a profound tapestry of reports, analyses, discoveries and ruminations that will serve as stepping-stones to the architectural and social projects of future generations.

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Collected Writings 1986–2000

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For the many missteps in this book, the blame is on me. For the understanding, the selection, the editing, and the structural coherence, the merit goes to the intelligence and the patience and the dedication of Kathleen Ryan. With gratitude, the book is dedicated to her.

— *Paolo Soleri*

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Foreword

BY HARRY RAND

Let me begin with a lighthearted story that tells a lot. In 1950 the great photographer Robert Capa recalled:

> I was on the French Riviera and driving by the seashore of Golfe Juan. I recognized Picasso on the terrace of a bistro. It was a small café of sailors, and the Picasso family was sitting undisturbed in a corner . . . That summer I had many lunches at the table . . . Pablo was a painter, Francoise was also a painter and a mother. Claude was a baby and I was their photographer. One of the evenings when we stopped in the bistro of Vallauris . . . I asked the owner of the bistro between many rounds what he thought of Picasso. He said, "He's a Communist, but he brought a lot of business to Vallauris." Near to us one of the old pottery makers of Vallauris who was drinking his pastis butted in. "What difference does it make what Picasso says or thinks or thinks he is? If the sun says he is a Communist it is not going to be warmer in Moscow and colder on the Cote d'Azur." (In Cornell Capa, Robert Capa, New York: Paragraph Books, 1969)

Which leads to my point. What difference does it make to us what an artist *believes*? What an artist thinks is important because it conditions the forms and evolution of the art. But thinking is a lot different from believing. The thought process parallels the evolution of plastic images. For the best artists, thought runs on a track alongside art and does not touch it, does not converge, leaving for the art the nondiscursive, the ineffable part that cannot be treated adequately by thought, by ratiocination. But *belief* is a different matter. It is private. Like the founts of art—also nondiscursive and ineffable—belief is remotely personal, almost beyond confession. Confession, after all, though a passing fad in late Romantic art, which suggests authenticity (itself an aesthetic), also requires a form, language. So what difference does it make to us what an artist believes?

To an artist, belief is as important as to anybody else. But no more so. Belief stipulates the structure of the universe and aligns as surely as the ropes of gravity the stars, placing everything in an order dictated by significance, or even by lack of belief. (The book of confession of a despairing person should be very short, but often they are the longest ramblings.) Viewing the world constellated by belief, provided with things that would not exist but for belief, challenges us to act in relation to what we behold, to add value to perception. Then we are challenged to perform on these assertions or stalk off,

feeble, beaten, and paralyzed in inaction. The action that is meaningful for any man or woman, as a believer, as a world-maker, is our living choices. An artist is also a citizen.

If Picasso was a Communist, in his time and place that may have made sense as an antifascist sentiment at the crest of an unusual age for Europe. Heady times of progress also came at the end of a degrading, generations-long depersonalization of workers and an alienation that created involuntary consumers. But, centuries before, Matthias Grünewald also grappled with balancing his fealty to rich patrons—the Church and nobility—with his sympathy for the struggling peasantry. Ultimately, an artist's allegiance must be to art, a vexing dilemma that limits to the implement of their art any participation as a citizen. (Would that Jacques-Louis David had understood or succumbed to this burden. Too late Beethoven and Goya learned this bitter lesson. The artist is mute but for his art.) If the field of action is limited to a canvas or a poem, the artist's beliefs are different. Architects are artists who dream the built world into being.

We dwell in, walk among, wash our hands in, and stub our toes on the creations of architects in a way that no world of Herman Melville's contains us. Accordingly, we heed the beliefs of architects as the prerequisites of our world. The following pages hold the beliefs of Paolo Soleri.

The writings of Paolo Soleri are not a sauce to flavor his buildings. His essays—unlike those of *most* of the major practicing architects today—do not substitute for competent or soul-stirring buildings. Few of the significant (or at least famous) late-twentieth-century commissions (for museums or office towers or private homes) could be examined without laughing were it not for a "theory" the architect has supplied to deflect and befuddle, first patrons, then the press. Soleri's writings are nothing of the sort; they are not excuses for buildings. His writings must be examined with the hope of actual construction.

Like a few others (not Tatlin, that darling of the left whose imagined tower was long ago surpassed in height by the stacked pages written about it), Soleri is famous for what he has not built. He is not a "failed" architect either, not by the usual standards. He is not in the company of the dreamers or the disappointed. For example, a teacher at the royal academy of architecture, Etienne-Louis Boullee (1728–99), envisioned a vast megastructure for a cenotaph for Isaac Newton, ca. 1784; he also designed a huge metropolitan church for Paris, unbuildable because of its scale. The Russian architect Vasily Ivanovich Bazhenov (1738–99) designed a gigantic, sprawling Kremlin Palace, 1769–72, that fell prey to cost, changes of taste, and Catherine the Great's fickleness. Soleri is not in this company. The scarcity of his buildings is mainly his own doing, or undoing, or not doing.

This makes him a special kind of architect. In China centuries before the common era, the so-called Lao-tzu, author of the *Tao Te Ching*, wrote: "With a wall all around / The clay bowl is molded; / But the use of the bowl / Will depend on the part / Of the bowl that is void." There are different kinds of voids: the useful part of the empty bowl, the vacancy of inaction waiting, the moral failure of the loser, the well-meaning dreamer, and so forth. Soleri's unbuilt buildings are interesting lacunae because they are a legacy leading toward the "obvious," as every great invention is "obvious" after some genius has opened a door to its possibility. As the elegance of the Wright brothers, or Columbus, is strikingly plain in its assertion, so too is Soleri's culmination of architecture-as-the-city, a merging of the individual and species, cityscape with (a) building, and the evaporation of that crime of industrialization, commuting, which robs the country of its park-like quality and injects uncivility into the city. Someday this will be obvious, thanks to Soleri.

For now, we have more of his words than his buildings. His imaginings dot the landscape of our minds with promise while the actual landscape is presently almost devoid of his beliefs made manifest. Where belief as theory (stipulated values) meets belief as hope (wish and desire), this introductory statement must end and the master's own words begin.

—Harry Rand
Smithsonian Institution

Paolo Soleri's What If?

BY RON ANASTASIA

Paolo Soleri is best known for his concept of "arcology," which most people think of in terms of its surface meaning: "architecture plus ecology," the design of carless, ecologically sustainable cities. Many people have seen Soleri's beautiful renderings of arcologies—miniaturized three-dimensional habitats that require less ground area than conventional cities and can therefore utilize the surrounding land for farming, habitat preservation, and enjoyment by the city's inhabitants. Designed at various scales for different geographies and climates, Soleri's arcologies have taken on an almost mythic status; they are, for example, often explicitly referred to as part of the urban background in modern science-fiction writing about the future.

Less well known is the fact that Soleri's architectural designs are only a small part of an overarching comprehensive philosophy he has developed. He has said that the ecologically sustainable aspects of his arcologies stand in relation to his overall theory of arcology as the plumbing of a house stands to a home: ecological sustainability is a necessary but not sufficient precursor to the well-being of the family that lives in the home. For Soleri, true long-term well-being can only be realized in a cosmic end-state he calls the "Omega Seed," and he sees arcologies as "instruments for the acceleration of the evolution of human culture" toward the achievement of this state.

This was a profound idea for me, so I began reading everything I could find relating to it and talking about it with Paolo when I visited Arcosanti. During one of our talks, he asked me to write down some thoughts, placing his Omega Seed philosophy in the context of contemporary science.

This was not a straightforward task for me, because my own scientific background is modest: I studied some undergraduate physics at Berkeley and did graduate work in nonlinear systems modeling at MIT, but have not been professionally involved in either field since then. However, I do have a fascination with modern science, especially with its implications for questions about the meaning and purpose of life. So with some trepidation, I told Paolo I would do a first draft, and we scheduled a meeting to talk about it. It seemed obvious to me that Paolo actively kept up with developments in modern science, because his writing contained many references to scientific disciplines ranging from information theory to quantum physics, from astrophysics to modern cosmology. So I anticipated that he could help me fine-tune my initial thoughts and we could iterate collaboratively from there.

I failed to remember that interacting with Paolo Soleri, whether in person or via his writings, is often an opportunity to have some of one's basic assumptions challenged. Thus it was when I talked with him about the first draft of this essay. In that meeting, Paolo told me that he had almost no understanding of contemporary science! He said that since coming to the United States nearly half a century ago he had been so absorbed in his work that he had almost stopped reading books. When I asked him about ideas in his writing that I thought were clearly related to modern physics and cosmology, he replied that his main sources for science news were *Time* magazine and an occasional *Nova* program on PBS. And he said that when he read the examples I outline in this essay, he barely understood what I was talking about, and certainly hadn't consciously drawn on these ideas in his writing.

I found this startling. As I believe I've demonstrated below, Paolo's philosophical writings, especially those that deal with his MCD hypothesis and Omega Seed eschatology, have a profound *coherence* with contemporary scientific thinking, one that I believe most of us could only achieve via a deep familiarity with the details of the relevant disciplines. I could imagine only two explanations. Either Paolo was being overly modest, perhaps even disingenuous, about his level of scientific knowledge, or he somehow intuits this information tacitly. Having seen countless examples of Paolo's rigorous commitment to authenticity, I seriously doubted the first explanation.

That left me with the second. I wondered if it were some mysterious attribute of creative genius that allows Paolo to somehow anticipate the deep contextual themes, what Buckminster Fuller called "the pattern integrity," of the modern scientific enterprise?[1] Perhaps he was accessing what Pierre Teilhard de Chardin called the "noosphere," an evolving quasi-cognitive layer surrounding the biosphere that Teilhard believed increasing numbers of people would be able to access?[2]

Whatever the explanation, when it became clear that I couldn't count on any explicit scientific knowledge on Paolo's part to assist me in showing that his work is consistent with some of the deepest ideas in modern science, I turned instead to a remarkable book, *The Physics of Immortality*, written in 1993 by the respected astrophysicist and cosmologist Frank Tipler, a professor at Tulane University. It presents a compelling synthesis of religion and science that *Science* magazine called "a masterpiece conferring much-craved scientific respectability on what we have always wanted to believe in."[3]

Reading Tipler's book has brought me to a new level of appreciation of Paolo's philosophy. I've been amazed by the coherence of his thinking with Tipler's scientific cosmology, especially given that Paolo had already developed and written

about most of these ideas several years *before* the publication of Tipler's book.

The Two Cultures

Before getting into the details of Paolo's thinking, I'd like to digress briefly to another subject that Tipler addresses in his book: the deep divide between the world views of the literary and scientific wings of the contemporary intellectual community. C.P. Snow pointed out that this fundamental split has shaped much of our modern and postmodern worlds.[4] Tipler focuses on a particular aspect of this split: the divergent philosophical stance of literary intellectuals and scientists toward the idea of "progress."

Paolo's ideas are radically "progressive" in that he claims there is a real possibility, however small, that life in our universe can achieve the ultimate long-term progress of the "Omega Seed." The Omega Seed is free from the suffering imposed by the physical constraints of the material universe. Paolo says it this way: "Being (Omega Seed) would be life (Becoming) transcended into knowing, total self-knowing of a reality that has consumed life." Paolo summarizes this philosophy in his own remarkable book *The Omega Seed: An Eschatological Hypothesis*.[5]

Although these words evoke traditional religious ideas, Paolo presents his thinking as a scientific hypothesis open to the rules of testing and falsifiability that the Oxford historian of science Karl Popper says distinguish the scientific method from philosophical speculation. Tipler also takes this approach in his book, and says that most modern scientists also have the progressivist belief that the steady advances in knowledge ferreted out by the scientific method can support a long-term increase in humanity's quality of life.

But Tipler points out that many of the literary intellectuals who guard the gates of modern mass media and culture refuse to take seriously any philosophical claims that assert the real possibility of long-term progress. Tipler traces the roots of these anti-progress belief systems. He says it started with an ancient concept called the "Eternal Return."

The Theory of the Eternal Return

The idea of the Eternal Return arose when early philosophers first began contemplating the concept of eternity. They deduced that because every process in physical reality consists of a finite number of components, it would have to periodically return to the state it had started from and then perfectly repeat its past behaviors. There seemed to be no way around this problem, for no matter how complex the process, when compared against the vastness of eternity, it would eventually

use up all possibility for novelty.

Two of the most influential modern philosophers, Friedrich Nietzsche and Martin Heidegger, fully accepted the reasoning behind the Eternal Return. Nietzsche spent years studying the physics of his time so he could understand its mathematical underpinnings and finally agreed that its logic was incontrovertible. He concluded that any possible culture or civilization would be destined to forever return to where it had started, and therefore long-term progress was inherently impossible. In the long run, there could be "nothing new under the sun."

Heidegger built on Nietzsche's conclusions in developing his philosophy. He was a member of the German Nazi party, and based partly on his influence, it adopted the ancient Anglo-Saxon icon of the Eternal Return as its symbol, then called "fylfot." The modern translation of this word is "swastika."

Nihilism

Based on their reasoning about the Eternal Return, Nietzsche and Heidegger developed what they called "nihilism," which is one of the main philosophical foundation stones of modernity. Some of nihilism's axioms are:

- There is and can be no ultimate purpose to life; existence is useless, senseless, and absurd.
- The idea of progress is a delusion. Therefore science and technology are no longer good things, because the progress they promise is illusionary.
- History, and the future, are seen as an inevitably Sisyphean tragedy where the rock always rolls back down the mountain.

Obviously, nihilism is the polar opposite of ideas that posit any possibility of long-term progress. As mentioned above, Tipler believes it is largely an acceptance of nihilism, perhaps often tacit and unacknowledged, that has caused many modernist literary intellectuals to harbor a deep suspicion, even cynicism, toward the progressive assumptions of science and technology.

If they feel this way toward science, these attitudes certainly extend toward progressive philosophies such as Paolo's Omega Seed eschatology. Perhaps this is why his ideas haven't yet been widely disseminated beyond a core of specialists.

But Tipler feels that all this may be due for a change, ironically because of some "progressive" revolutionary developments in computer science and information theory.

Infinite-State Turing Machines

It started when Alan Turing, the polymath who led Britain's

military encryption effort, developed a rigorous mathematical theory that was to have startling implications for the various philosophies based on the Eternal Return.

Turing distinguished two fundamentally different types of machines: finite state and infinite state machines.

A *finite state machine* has a fundamental characteristic: the number of different states available to it is inherently finite. Most computer scientists believe that human beings are finite state machines, given the limited information processing capacity of our brains.

Finite state machines have been mathematically shown to be fundamentally limited. Information theorists have proven that "any finite state machine, in the absence of an external stimulus, will eventually enter a state after which it will repeat endlessly a perfectly periodic sequence of states." This "perfectly periodic sequence of states" is the mathematical equivalent of the Eternal Return. So all finite state systems are in fact inherently limited; they can never achieve ongoing long-term progress.

Round one goes to nihilism. But here's where it gets interesting.

Turing also showed that another class of computing machines exists, which he called infinite state machines. And he constructed a mathematical proof that clearly demonstrated that *infinite state machines are not limited by the Eternal Return.*

In honor of his discovery, infinite state machines are now called "Turing machines." They have a number of other remarkable characteristics, such as the ability to perfectly simulate (called "emulation") any possible finite state machine, including other Turing machines. And there is a special class of Turing machines called "universal Turing machines," which, in addition to the capabilities shared by all Turing machines, can also perfectly simulate themselves. As we'll see below, the scientific basis of Paolo's Omega Seed eschatology depends fundamentally on the capabilities of the universal Turing machine.

Turing's work has the revolutionary implication that the idea of long-term progress has now become philosophically tenable.

In one stroke, these advances in computer science have overturned the philosophical basis of nihilism. Ironically, the possible existence of infinite state machines was literally unthinkable until the *progressive* development of science and technology resulted in the invention of the modern digital computer.

The Science and Sensibility of Soleri's Eschatology

Building on the above background, I'll now attempt to demonstrate some of the coherence with modern science

implicit in the following small sample of Paolo Soleri's writing. In the first three paragraphs he addresses two of his core metaphysical concepts[6]: MCD (Miniaturization, Complexification, and Duration) and his Omega Seed eschatology. In the fourth paragraph, Paolo critiques animism and the theologies it has spawned.

1. "In the universe we belong, a universe in which Spacetime is the agent 'manipulating' the media, Mass-Energy, into Being. . . . MC is the binary methodology by way of which reality is inching toward self-consciousness, the mind."
2. "D is Duration, the offspring of miniaturization and complexification. There could not be Duration in a reality not animated by the MC 'methodology.'— If the past is the whole of reality, full Duration is the exact and exacting recollection of it. The full recollection of the past is resurrection; in other words, it is total revelation of the past to itself."
3. "As the seed is functionally and emblematically the encapsulation of that which an organism will become, the (universal) Omega Seed is the ultimate encapsulation of all the 'information-learning' generated by the evolutionary development."
4. "By abandoning animism and unveiling the deceptive nature of theological simulations, which are the longing for a perfection mistakenly thought to exist, . . . reality is face to face with the awesome task of bringing itself into the nobility of love and grace . . . at all costs."[7]

Phrase #1. The Many-Worlds Interpretation of Quantum Mechanics

"In the universe we belong"

With this interesting and somehow poignant opening phrase, Paolo's words are evocative of the "Many-Worlds Interpretation" of nonrelativistic quantum mechanics (QM). MWI was first proposed in 1957 as an alternative to the then generally accepted "Copenhagen Interpretation," which said that quantum randomness is intrinsic throughout reality, including the macro reality of the entire universe. MWI instead posited that quantum randomness is merely an artifact of our limited way of observing the physical world.

According to the Copenhagen Interpretation, the wave function of that paradoxical cat in Schrödinger's famous thought experiment is somehow "reduced" when the experimenter opens the cage, so half the time we will find a dead cat and half the time we will get clawed by a very alive and angry

cat. Which it will be is intrinsically random. This seems to make some sense.

But the more recent MWI interpretation of quantum mechanics says something radically new. The Many-Worlds Interpretation claims there is no reduction of the Schrödinger wave function at all. It insists that the radioactive decay of the atom that triggers the poison gas forces the cat, and all the other pieces of equipment in the experiment, including the experimenters themselves, to split into two different worlds, each ontologically real. So two different worlds of experimenters open the door, and in one world the cat is alive, and in the other the cat is dead! Both worlds continue to exist, each unaware of the other.

The key premise here is that the universe at all scales behaves according to the equations of quantum mechanics, and indeed there is nothing in the math of QM that requires it to operate only at the tiny subatomic scale to which it is normally applied. If QM in fact works at all scales, then its mathematics strongly implies a Many-Worlds Interpretation. This implies that there are many branching parallel universes, and we happen to live in one of them, one whose basic fundamental parameters can support our form of life. This idea is sometimes called the "Anthropic Cosmological Principle," and Frank Tipler is one of its leading scientific proponents.

A majority of quantum field theorists now believe that MWI is correct, including luminaries such as Stephen Hawking, Richard Feynman, Murray Gell-Mann, and Steven Weinberg. David Deutsch, a leading theoretical physicist at Oxford, has recently extended the mathematics of MWI to found the new field of quantum computing. Deutsch believes that the recent successful prototyping of simple quantum computers empirically proves that parallel worlds really do exist!

This is an example of how Paolo's poetic phrases such as "in the universe we belong" can contain profound levels of implicit scientific meaning. I've discussed this with Paolo and he says that he definitely wasn't thinking of MWI when he wrote these words.

Phrase #2. Einstein's General Theory of Relativity

> "a universe in which Spacetime is the agent 'manipulating' the media, Mass-Energy"

Paolo's phrasing here is evocative of Einstein's general theory of relativity. In physical theories prior to General Relativity, it was assumed that the particles and fields described by physics evolved within an unchanging background spacetime. This background spacetime existed whether or not there were any physical entities, and was not influenced in any way by any physical entities that happened to be in it. However, one of the

revolutionary breakthroughs Einstein made in General Relativity was to utterly eliminate the requirement for an eternally existing spacetime. Instead, spacetime is itself generated by the initial data and the evolution of the Einstein field equations.

In General Relativity spacetime is represented as a "four-dimensional manifold." (A manifold is anything that locally resembles our familiar Euclidean flat three-dimensional space, though its overall shape may be anything but flat.) It is the local topology of this manifold that gives rise to the behavior we call gravity; think of Carl Sagan's famous demo in his *Cosmos* TV series in which he places spheres of various weights onto a stretched rubber sheet inscribed with a Euclidean grid. The spheres sink into the sheet, distorting its topology, and the paths of objects or light near each sphere are a function of the local spacetime displacement.

Paolo's term "mass-energy" is of course evocative of Einstein's famous equation, $E = MC^2$, and refers to the material objects and energies of our universe.

Thus Paolo's phrase "Space-time is the agent manipulating the media, mass-energy" is a wonderfully poetic statement of a core principle of modern physics.

Phrase #3. Teilhard de Chardin's Omega Point Theory

> "into Being. . . . MC is the binary methodology by way of which reality is inching toward self-consciousness, the mind."

Paolo posits a triad of processes that drives evolution toward what he calls the Omega Seed, the cosmic Mind at the end of time. He calls this triad "MCD," short for "Miniaturization, Complexification, and Duration." Its terms are synergistic: that is, the behavior of the whole MCD triad is unpredictable from any analysis of its separate parts because of their nonlinear interactions.

Paolo credits the Jesuit philosopher Pierre Teilhard de Chardin as inspiration for the first two terms of this triad, "M" and "C." Trained as a paleontologist, Teilhard noted the increasing complexity of the fossils he studied, where single-cell organisms evolved into metazoans, some phyla in turn developed complex nervous systems, and finally Homo sapiens acquired intelligence. In his best-known book, *The Phenomenon of Man,* Teilhard said that this increasing complexification can only arise in a finite and bounded geometry like the surface of the Earth, because "only in such environments is mankind forced to coalesce into the Omega Point."[8] Teilhard calls this process "compression." Paolo has evolved this idea to another level with his concept of "Miniaturization," which goes beyond the mere increase in density

implied by the term "compression." By Miniaturization, Paolo implies a process of increasing complexity in ever smaller spaces, whose ultimate outcome is the integration of all possibilities, from all parallel universes in the entire history of the cosmos into a tiny volume at the Big Crunch.

It is important to note that Paolo's use of the term "complexification" is not synonymous with mere complication. Instead he uses the term to refer to that mysterious edge between chaos and order that many system theorists believe is where novelty emerges. "Complexity Theory" is rapidly evolving into a fruitful scientific discipline spearheaded by high-powered research institutes such as the Santa Fe Institute for Complexity Studies. Physics Nobelist Murray Gell-Mann, one of SFI's founders, invited Paolo to give a presentation there a few years ago, which was attended by a record number of complexity researchers.

Phrase #4. The Hyper-Computer at the Omega Point

> "Duration is the offspring of miniaturization (M) and complexification (C). There could not be duration in a reality not animated by the M.C. "methodology."— If the past is the whole of reality, full Duration (D) is the exact and exacting recollection of it."

Paolo's concept of Duration is also coherent with some of the most recent thinking in modern cosmology. Tipler summarizes this thinking in *The Physics of Immortality*. Tipler's thesis is that life in this universe will eventually develop cosmic-scale engineering that will allow it to build a "hyper-computer" capable of surviving at the Big Crunch of the universe during the final moments of its recollapse phase. Crediting Teilhard, Tipler calls this the "Omega Point Theory."

Life will upload itself into this hyper-computer and will henceforth live as emulated virtual entities inside the virtual worlds generated by it. By steering the dynamics of the Big Crunch in certain precise ways, these entities will be able to run the hyper-computer at continuously increasing processing speeds. Because their perception of time will be a function of these processing speeds, they will be able to achieve subjective immortality as long as they are able to increase their processing speed faster than the collapse rate of the universe.

Phrase #5. The Indistinguishability Theorem

> "The full recollection of the past is resurrection; in other words, it is total revelation of the past to itself."

Tipler believes that once they have ensured their own immortality one of the first projects of these godlike entities will be to find a way to perfectly emulate all the beings who have

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lived in the entire history of the universe, thus achieving for those beings "resurrection into eternal life." In spite of its religious references, Tipler claims that this is a rigorously scientific hypothesis grounded in the latest advances in mathematics, physics, cosmology, and information theory.

Emulation is a term from information theory that implies a perfect simulation, one that meets the requirements of the Indistinguishability Theorem. Basically this says that if a perfect copy can be made that is indistinguishable from the original by any conceivable test, *then it is the same thing*. So if a sufficiently powerful computer can simulate a person to the point of emulation, the emulation is the same as the original person!

Tipler calculates that the processing power of the vast hyper-computer at the Omega Point will be easily sufficient to emulate every person who has ever lived in all possible parallel universes, along with the total circumstances of their cultural and social context. It is in this sense that Tipler is using the term "resurrection." It is important to note that the only type of device capable of accomplishing this amazing feat is the universal Turing machine referred to above.

It is Turing's virtuoso mathematical proof that allows this, and only this, type of device to defeat the Eternal Return and open the possibility of unlimited progress.

Paolo's ideas are fully coherent with Tipler's. Thus there is substantial scientific grounding for Paolo's evocative phrase "the full recollection of the past is resurrection . . . total revelation of the past to itself."

Phrase #6. David Deutsch's "Fabric of Reality"

> "MC is the binary methodology by way of which reality is inching toward self-consciousness, the mind."

The Oxford theoretical physicist David Deutsch, whom I referred to above, examines Tipler's Omega Point Theory in his acclaimed book *The Fabric of Reality: The Science of Parallel Universes—and Its Implications*.[9] Deutsch begins with the assertion that when we inquire into profound questions such as the ultimate fate of life in the universe, philosophical argument alone is insufficient: we must also take our deepest scientific theories seriously. So Deutsch examines the implications of weaving together the four deepest theories so far constructed by humanity: quantum mechanics, our deepest theory of physical reality; updated Darwinian-Dawkins evolution, our deepest theory of progressive change in living organisms; Karl Popper's work on the scientific method, our deepest epistemological theory (how we acquire knowledge); and Alan Turing's theory of universal computation, our deepest theory of information processing. Deutsch points out that these four

theories have withstood years of the most rigorous tests the scientific method can apply to them. However, because of the extreme specialization required to become trained in any one of these fields, there are very few people who deeply understand more than one or two of them.

Deutsch is a rare exception. His interdisciplinary brilliance has allowed him to master the arcane mathematics of all four theories and weave them together as an interactive "fabric of reality." His conclusion is that Tipler's analysis is essentially correct—our universe is indeed evolving into a computationally based Omega Point populated by a virtual community of Godlike intelligences. He puts it this way: "It seems to me that at the current state of our scientific knowledge, this is the 'natural' view to hold. It is the conservative view, the one that does not propose any startling change in our best fundamental explanations. Therefore it ought to be the prevailing view, the one against which proposed innovations are judged. That is the role I am advocating for it. I am not hoping to create a new orthodoxy; far from it. As I have said, I think it is time to move on. But we can move to better theories only if we take our best existing theories seriously, as explanations of the world."[10]

However, Deutsch differs with Tipler's assertion that this community of Omega Beings will necessarily resurrect all the other beings who have ever lived, on the grounds that there is no way we can possibly anticipate their values and priorities.

Phrase #7. The Omega Point Theory of Eschatological Cosmology

> "As the seed is functionally and emblematically the encapsulation of that which an organism will become, the (universal) Omega Seed is the ultimate encapsulation of all the "information-learning" ['D'] generated by the evolutionary development."

In this segment, Paolo's ideas are consistent with both Teilhard's and Tipler's ideas. As pointed out above, Teilhard believed that the Earth's next level of what he called "planetization" will be a "noosphere," or cognitive layer. Teilhard believed that in the far future the noosphere will at last become independent of the physical universe and will coalesce into a "supersapient being," the Omega Point. Paolo's Omega Seed idea is a similar but much more comprehensive concept, because it includes the entire cosmos and is fully consistent with the computational cosmology developed by Tipler.

According to the "Big Bang" theory, our universe originated in a titanic explosion from a point called a "singularity." Since then, it has been expanding outward for an estimated 10

to 15 billion years to its present state. By assuming a constraint he calls "the Omega Point Boundary Condition," Tipler shows mathematically that the universe will eventually begin collapsing back into another singularity, which he calls the Omega Point. This recollapse is popularly known as the "Big Crunch." It's important to note that Tipler believes that the Big Crunch will still occur, in spite of recent astronomical evidence that a cosmic-scale repulsive force is accelerating the expansion rate of some parts of the cosmos.[11]

Tipler draws on the work of Oxford biologist Richard Dawkins to reach a working definition of life as "information preserved by natural selection." He posits that "the essential nature—at the physics level—of all human activities can be shown to be information processing." He concludes that "life goes on forever if machines of some sort can continue to exist forever. The pattern is what is important, not the substrate." He then uses the work of John von Neumann in information theory to show that the First and Second Laws of Thermodynamics "permit an infinite amount of information processing in the future, provided there is sufficient available energy at all future times."

Tipler claims that human beings are simply complicated biological machines that the laws of physics will eventually be able to fully describe. If this is so, each unique human being can be thought of as a specific computer program being run on a biocomputer we call the brain. If life in the universe can build a sufficiently powerful computer by the time of the Big Crunch, then the beings alive at that time could upload themselves into that computer and enjoy immortality as a set of virtual personas inhabiting infinitely evolving virtual worlds. Again, only the special class of computer referred to above as a universal Turing machine has the capability to accomplish this task.

After the Omega Seed has resurrected via emulation all the entities and their total contexts who have existed in the prior history of the universe, it will have achieved the hyper-miniaturization that Paolo describes as "the ultimate encapsulation of all the information-learning generated by the evolutionary development."

In a sense, it is the purpose of life in the universe to accomplish all this during the time left to it before the Big Crunch. According to Tipler's Omega Point Boundary Condition, intelligent life not only has the potential to do this, but will in fact do so.[12]

Paolo, on the other hand, believes that the achievement of the Omega Seed is only one outcome among many different possible futures for our universe. Nevertheless, he asserts that if it is even possible at all, sufficiently advanced intelligent species will do all they can to achieve it. And if they succeed,

the Omega Seed possibility is so magnificent, literally the achievement of eternal bliss for all beings who have ever lived in the history of the universe, that the Omega Beings, if they do come to exist, will be ethically compelled to resurrect all the beings from the past.

Why? Because Paolo believes that these advanced beings will understand that until they do so they will not have achieved full equity. He calls this the "onion skin problem," referring to the successive generations of intelligent beings whose eons of effort and suffering have allowed the final layer of Omega Beings to achieve their transcendence into self-revelation. Paolo uses the term "desirability" for the core ethical principle that will motivate the Omega Beings to do whatever is necessary to achieve full equity through both space and time. I hope he's right!

Phrase #8. I Will Be What I Will Be

> "By abandoning animism and unveiling the deceptive nature of theological simulations, which are the longing for a perfection mistakenly thought to exist, . . . reality is face to face with the awesome task of bringing itself into the nobility of love and grace . . . at all costs."

Paolo is horrified by the inequity and suffering he sees in the world, not only man's inhumanity to man, but also on the level of the cosmos. I experienced a similar feeling a few years ago while viewing a Hubble telescope image of two distant galaxies colliding. The caption explained that the immense gravitational tidal forces associated with the collision would rip to shreds the nearby stars (and any planets circling them) in both galaxies. I found myself imagining a super-advanced scientific civilization in one (or both!) of those galaxies that had evolved through perhaps millions of years to finally achieve a state of peace, plenty, and equity across the myriad of planets in their home galaxy. And I imagined the feelings of the members of that vast culture as their scientists informed them that all they had worked and struggled for was inevitably going to be reduced to cosmic dust by the approaching titanic collision. As I contemplated the otherwise beautiful Hubble image, I realized that the forces of nature themselves seem to be mocking the best efforts of life to at last be free from the suffering inherent in physicality. What had that advanced civilization (or we ourselves) really achieved that was all that different from primitive animals cowering in terror before more prosaic planet-bound natural disasters?

Paolo has concluded that it would be a malicious God indeed who would condemn His creatures to such eternally Sisyphean suffering. For Paolo the inequity he sees in the

physical universe is a major reason to reject the present existence of God. He instead blames animistic theologies for much of the historical evil perpetrated by man upon his fellow man. He reasons that when we accept the idea of the present existence of a God, then some humans inevitably will claim privileged access to that God, thereby elevating their merely human prejudices to the status of Divine inspiration. From this follows the sordid history of authoritarian theologies led by human despots who commit horrifying evil in the name of their Gods.

But in rejecting the existence of God as present reality, Paolo does not succumb to the nihilism referred to earlier, whose philosophical roots lie in the philosophy of the Eternal Return. Instead, Paolo builds his philosophy upon the premise that life in the universe has the possibility of evolving to become Godlike itself, as he puts it, "Not God at the beginning but God at the end." So Paolo's is an eschatological God, whose future existence depends on the stupendous cosmic-level science and technologies required to call it into being. And his is also a contingent God, whose manifestation ultimately depends on the will and commitment of countless generations of future beings throughout the cosmos to do whatever it takes to achieve the Omega Seed near the end of time.

Tipler points out that some major theologians have also posited a God whose primary mode of being is in the future, such as the German theologian Wolfhart Pannenberg, who has said:

> Jesus proclaimed the rule of God as a reality belonging to the future. This is the coming Kingdom. . . . In a restricted but important sense, God does not yet exist. Since his rule and being are inseparable, God's being is still in the process of coming to be.

Interestingly, some biblical scholars have also argued that this view of God as primarily a future being was present in the earliest texts of ancient Judaism. They point out a significant translation error in the core dialogue between Moses and God in Exodus 3:14. When Moses asks God for His name, God is said to have replied out of the burning bush, "I AM THAT I AM. . . . say unto the children of Israel that I AM hath sent me [Moses] unto you." But God's reply in the original Hebrew text was "Ehyeh Asher Ehyeh," which Pannenberg and others say is more properly translated as: "I WILL BE WHAT I WILL BE. . . . Tell the children of Israel that I WILL BE sent me to you."

Tipler points out that both the Jewish German philosopher Ernst Bloch and the Catholic German theologian Hans Kung agree with this future tense translation, and that both

emphasize that the God of Moses is therefore an "End- and Omega-God."

Kaddish

During the four years that I've been working with Paolo, I've often asked myself why I'm so attracted to his work.

It began to come together for me recently at UCLA's Royce Hall as my wife and I listened to a performance of Leonard Bernstein's Symphony No. 3, "Kaddish." Bernstein described Kaddish as an embodiment of "the struggle that is born of the crisis of our century, a crisis of faith." In its original use in ancient Aramaic, Kaddish meant "sanctification." In the Jewish tradition, it has evolved into a prayer consisting of praise and glorification of God, plus expression of hope for the establishment of God's kingdom on earth. Kaddish is recited at the conclusion of each principal section of every Jewish service as a reaffirmation of life and a call for peace. At the same time, it has also become included as a mourner's recitation in traditional Jewish funeral services—and is thus sometime called "the Jewish requiem."

Bernstein's Symphony No. 3 personifies this in a Speaker who, horrified by Man's inhumanity to man, experiences a deep crisis of Faith. He screams his outrage at a Creator God who would allow such evil to exist, and accuses Him of a breach of faith with man. In despair, he implores God to give him a reason to go on living in such an inequitable world. Finally, exhausted from his struggle, the Speaker falls asleep and dreams that he and God have become partners in creating an ideal Heaven on Earth. Upon awakening the next morning, the Speaker is at first dismayed to discover that alas, it was only a dream, as he now finds himself back in the real world from which he yearns deliverance.

Suddenly the Speaker experiences a profound flash of insight. He realizes that the only way he can heal the separation he has created between himself and God is by accepting himself as a divine agent with the moment-by-moment choice to create or destroy. The orchestral music and the voices of the 100-person choir combine in a rising crescendo toward catharsis as the Speaker, overcome with awe and love, proclaims his revelation:

> To Magnify and Sanctify Is the Great Aim of Man. . . .
> Suffer and Recreate Each Other!

As the orchestra, soprano soloist, and choir joined together in a dramatic fugue that built toward a joyous "Amen," I experienced a deeply moving inner resolution arising from the double meaning of the Kaddish ritual. It was a requiem for the letting go of both our outmoded paternalistic relationship

with an authoritarian God and our nihilistic postmodern rejection of scientific progress. Our ambivalence results in an adolescent co-dependency in which we tend to alternate between subservient worship and rebellious rejection. And it was also a joyous celebration of a more mature new Divine partnership, in which we accept and then embrace humanity's responsibility to bring the sacred into manifestation.

I realized at that moment that a major reason for my attraction to Paolo's work is that he also is searching for answers to deep questions like those raised by Kaddish.

Like the Speaker in Kaddish, Paolo Soleri is horrified by the inequity and suffering he sees in the world, not only in man's inhumanity to man, but also on the level of the cosmos.

Unlike the Speaker, Paolo does not blame God. Instead he rejects the idea that any God worthy of the name would allow the horrific suffering evident on Earth and in the cosmos. Once having done so, Paolo realizes that there are only two philosophical choices:

1. Succumb to the nihilism promoted by much of modernist philosophy; or
2. Take a personal stand for another, more optimistic world view, one that is compatible with the theories of contemporary science.

Paolo has chosen the latter and dedicated his life to manifesting it. It is a magnificent and inspiring stand, and I respect, honor, and appreciate him for it.

—Ron Anastasia
Cosanti Foundation, June 2001

NOTES

1. R. Buckminster Fuller, *Critical Path* (New York: St. Martin's Press, 1981).
2. Pierre Teilhard de Chardin, *The Future of Man* (New York: Harper Torchbooks, 1969) (first published as *L'Avenir de L'Homme* by Editions du Seuil in 1959).
3. Frank J. Tipler, 1995, *The Physics of Immortality* (New York: Anchor Books, 1995) (originally published in hardcover by Doubleday in 1994.)
4. C.P. Snow, *The Two Cultures and the Scientific Revolution* (Cambridge, England: Cambridge University Press, 1961).
5. Paolo Soleri, *The Omega Seed: An Eschatological Hypothesis* (San Francisco: Harper and Row, 1981).
6. Ibid. Reality, the dance of space, is all "physical."
7. Ibid.
8. Pierre Teilhard de Chardin, *The Phenomenon of Man* (New York: Harper and Row, 1975).
9. David Deutsch, *The Fabric of Reality: The Science of Parallel Universes—and Its Implications* (New York: Penguin Press, 1997).
10. Ibid., p. 366.
11. In a personal correspondence with the editor of *Skeptic* magazine, Tipler challenges the recent astronomical observations that seem to imply that the expansion of our universe is speeding up, perhaps under the influence of a cosmic-scale repulsive force similar to an idea that Einstein called the "cosmological constant." Here's an excerpt from Tipler's comments:

    "The Omega Point Theory [OPT] requires the universe to be not only closed (spatially a three-sphere), but also collapse in the future to the Omega Point. If Lambda (the so-called cosmological repulsive force) were as large as claimed above, then the universe would expand forever even if it were a three-sphere. Therefore the OPT asserts the above claims are incorrect.

    "I've been worried about the above measurements ever since the preliminary results were announced in December of 1996. One possibility of where the error might lie is that the measurements simply do not go out far enough. I have a paper forthcoming in *The Astrophysical Journal* (February 1999) in which I show that to eliminate local effects, to be really sure that you are seeing the true cosmological expansion rather than a local expansion (which could be much higher than the true global rate) you have to go out to a redshift of at least 3. The above measurements went out only to a redshift of 0.8.

    "There is some indication that the local and global expansion rates are different. Charley Lineweaver (Ph.D. from Berkeley; the Silk-Smoot group) published an article in *The Astrophysical Journal* early last year in which he pointed out that the preliminary value of Hubble's constant obtained from the CBR (cosmic background radiation) was 40 km/sec-Mpc, whereas the local values (i.e., using the data mentioned above) give 70 km/sec-Mpc. The CBR measurements are out at a redshift of 1,100—which would definitely give a global rate.

    "In other words, independent of my OPT, there are reasons to take the observations you mention with a great grain of salt."
12. Frank J. Tipler, "From 2100 to the End of Time" (www.math.tulane.edu/~tipler/wired.html).

Editor's Note

BY KATHLEEN RYAN

This collection covers a lot of ground. As the most comprehensive and most recent presentation of Soleri's writings, it is meant to be both an introduction-reference guide to Soleri's thinking, and a continuation of his over-thirty-year publication history, which began with *Arcology: The City in the Image of Man* (1969) and left off with *Technology and Cosmogenesis* (1985). The ensemble is comprised of five diagrams, four major essays, thirty-five shorter pieces, and selected notebook entries, which have been transformed into colored subtext, "hoppers," and "bubble statements."

Book One emphasizes Soleri's physical model of reality. Two major essays anchor the section: "Space as Reality, a Hypothesis" and "The Lean Hypothesis and the Lean Alternative." In Book Two, the major essays "Esthequity: A Transecological Project" and "Religion" present his metaphysical hypotheses.

The reader is advised to pay special attention to the four diagrams presented at the beginning of the volume. In addition to introducing the work's major hypotheses and themes, the diagrams guide the reader through the color-coding scheme of its subtext annotations. Consulting the glossary early on is also a good idea.

Each Book contains two major themes-hypotheses in essay form, which, in turn, are each followed by variations. For example, the first major theme-essay of Book Two is "Esthequity," an eschatological hypothesis based on the pursuit of esthetics and equity. "Esthequity" is succeeded by several shorter pieces, such as "Venice Biennale: Toward the World Governing the Environment," and "Hyper Building." These short-piece variations further Soleri's notion of Esthequity, and, at the same time, present concrete applications of the theory.

The short-piece variations are flanked by color-coded subtext: selected notebook entries that reinforce, revisit, and occasionally refute the topics under discussion. This theme-variation-reinforcement pattern is then repeated with a complementary hypothesis.

The "Hoppers" section follows. The hoppers consist of additional selections from Soleri's notebooks, this time categorized into six subject headings: Animism, Better Kind of Wrongness, The Feminine, Frugality, Howness, and MCD. The subject headings are the same in both Books, but the notes for each reflect the particular Book's themes. For example, the hopper material gathered under the heading of "The Feminine" in Book One tends toward the architectural. Here

we see Soleri comparing the virtues of his chosen form, the womblike apse, to the sterility and vulnerability of the lingam-skyscraper. The material for The Feminine hopper in Book Two, on the other hand, emphasizes Soleri's thoughts on The Feminine's genetic and cultural realities, contributions, and potentials.

The Hopper section also offers an opportunity to see some of the earlier annotations, presented as color-coded subtext, in their entirety.

The final section in each Book is the "Bubbles" section, composed of the bubble diagram and bubble statements that further reinforce and solidify the themes of the particular volume. A mere glance at the bubble diagram with its expanding bubbles within bubbles—from political correctness to historical fitness to evolutionary coherence to cosmic relevance—reveals the section's intent as the ultimate in perspective enhancers. Upon reaching this section, the reader will appreciate the significance of the following statements:

> The bubbles, expedient as they are, come in useful on a daily basis for the balancing act. Where am I within the sphere of reality, and what can my presence be able to nudge? Within the sphere, in these tumultuous times, and times are perennially tumultuous, how can I be of some constructive relevance? —*Soleri*

> He who is *great* recognizes himself in all and thus in the whole; he does not live, like others, only in the microcosm, but still more in the macrocosm. For him it is not strange; he feels that it concerns him, and he tries to grasp it, in order to present it, or explain it, or act on it in practice. On account of this extension of his sphere, he is *great*. —*Schopenhauer*

With much gratitude and reverence to the great mind behind all this, I present this collection, one of the many fruits of his lifetime's doing and thinking.

—*Kathleen Ryan*
Cosanti Foundation

Preface

BY PAOLO SOLERI

Reality is "to know how." The whole of it is Howness. *What If?* is a compilation of the methods and procedures used to follow that tidbit of Becoming to find an identifiable context.

Adopting the hypothesis that at the origin of reality is a presence and that such presence is space and nothing other than space, I went the minimalist (not reductionist) way for what would follow. What follows in my hypothesis is that such a presence is instantaneously transforming itself. This process is ongoing and constitutes the Becoming, and this Becoming is no more and no less than the metamorphosis of space. Since subtracting space from any and all metamorphoses nullifies the ongoing Becoming, space is not only the container of all Becoming, but the Becoming itself. The duality container-content is dismissed.

In similar terms are dismissed the dualities of brain-mind, body-soul, matter-mind, and others. There are only bivalences and multivalences: Dualism is the offspring of animism. Since to come to the Lean Hypothesis, the just-mentioned minimalist landscape, it took me some years, the semantic in the two manuals reflects this transaction: Wherever the words spell "body-mind," "brain-mind," "brain-d," please read "body-brain." For similar reasons, when you read "space-time," please read "space-change." ("Time" is a human invention.)

Where you see "Complexity-Miniaturization-Duration" (CMD), please read "Miniaturization-Complexity-Duration" (MCD), because as virtual as it can be, in the distinction of content and form (function and form) the form (Miniaturization) precedes the function (Complexity), which is at the origin of the concept of Howness, the cosmic bricolage responsible for the Becoming. This is the vast but only potential field of feasibility with its dressing of probabilism, that very immense virtuality that intellection might want to address: the interrogative of desirability with, in its fold, the anthropogenetic thirst for the equitable and the esthetic (see "Esthequity").

On many (early) occasions, I wrote "religion" where I meant "theology." There is only one *religio* (to bind). There are as many theologies as there are gods, tens of thousands and counting. Religion is an imperative. Theology is a delusion, the delusion I put in the cloud of animism, the invention constructed by body-brain, and the delusion that has captivated man from the day he-she began to speak to herself, mistakenly taking it as a dialogue with an Other (the gods and others). The monologue fills human history and will do so for a long "time" to come. It is all a simulative exercise and the captivity

has been and will be immensely pernicious.

That is part of the Lean Hypothesis, the ontological frame of the Lean Alternative proposing the Urban Effect that I indicated from the 1960s on as arcology.

To "make sense" of reality, the ontological quest, might demand the refusal of an original teleology (nature designed for specific ends). Ontology (the science of reality) might disenfranchise teleology if the causa prima, deprived of credibility, turns out to be part of the animistic delusion.

Perhaps these writings find a focus in the observation, expressed by me in variations on a theme, that in our cranial box is a fantasy machine of unlimited versatility. Among the multitudinous housekeeping functions the machine is so well adapted to, see the automatic instant upon instant maintenance of its own body, this fantasy machine has been after a world of its own that has presence only for "internal uses" and does not necessarily have correspondence with the near and far surroundings.

I think that in this fantasizing is found the best and the worst of our persona. The best because single-handedly, that is, in the solitude of the species, we have been creating a uniqueness that reality might have to deal with. The worst because by way of our fantasizing we get lost in "worlds" that are confined to our brains without any mooring in the vast reality to which we belong. I call it the world of magic and simulation, the world of self-deception, taken in its totality of about 3 million years, that is, from the moment we become self-aware. I label this lasting manmade fantasy the animistic epoch.

Recently I found what I think is a very believable explanation of this side (the worse side) of our fantasizing. I call it monologuing misconstrued as dialoguing, the foundation of all theologies. The past documents in all detail this animistic monologuing of the species, and automatically it shows it as not having "reference" in any of the cosmos going on. It is a nonpresence within reality.

I amuse myself by dumping the whole simulation affliction into the bag of Nirvana, the naught well-fitting animism. To confirm the justness (that is, usefulness) of my interpretation I turn to Howness, the cosmotechnology that from the "first moment" has been the making of something into something else—that is, the Becoming. That which has no say in Howness is a cranial monologuing and nothing more. All the theological castles of the world haven't moved a stone, the How sweating of man as a reminder that the power of fantasy does not automatically equate with the power of Howness. We all know of the placebo effect, as we know of the power of drugs: make believe.

Storytelling does not entail the automatic dismissal of the values that the story might want to convey or its exclusion

from the normative and the esthetic. But storytelling becomes a dangerous activity as soon as it becomes a vehicle into the domain of animism, as I call it. For instance, a narrator for the sake of the telling can outfit an apple with, say, a thousand legs, while in reality apples *always* come legless.

My minimalism finds explanation in the distinction I make between the complicated and the complex. Animism acts in a complicated milieu of "things" that are there but are not there, the spiritual(s) of all (anthropos) times. The minimalist seeks to find a progression from the simple into the complex. I call it the interiorization way, the way toward self-transfiguration (of the whole) up to the improbable singularity of self-revelation (of the whole). And I see the trigger of such process in the emerging self-awareness of reality in the Howness of our brains (body-brains).

At the base of these books is the hypothesis that space is what the Becoming reality is, a metamorphosing of space, and that reality itself is made of its own Becoming and of its own Being. Being is the past, the repository of all Becoming. Becoming is space; Being is nonspace, it is duration, the full memory of Being.

The step from the Minimalist Hypothesis to the Space Hypothesis is short and coherent. So is the step from this to the Lean Alternative.

The minimalist bias promotes the notion that the Becoming of reality is a journey toward doing more with less. A poem comes about via an intellection sustained by 100–200 pounds of flesh. The moon comes about itself via 10 to the power of 10 tons of (hydrogen) primary stuff.

The Lean Hypothesis might be true for all spots scattered in the universe where the carbon cycle or similia takes hold and in it there is the emergence of intellection. On this planet, for instance, a tiny fraction of its inanimate bulk metamorphoses (space) into living stuff (courtesy of the sun) and eventually into intellection. One can say minimalism, authoring the leanness of intellection.

The step into the Lean Alternative implies an assessment of values originating from the Becoming of the living stuff that is not inclined toward the sclerosis of unbounded domain upon the inventiveness and productivity of Homo faber but rather toward an escalating into newer and newer levels of intellection sustained but not ordered around by Homo faber and enticed by Homo sapiens; that is, an ephemeralization of space (MC of it): the "exasperation" of doing more and more with less and less.

—Paolo Soleri
May 2001

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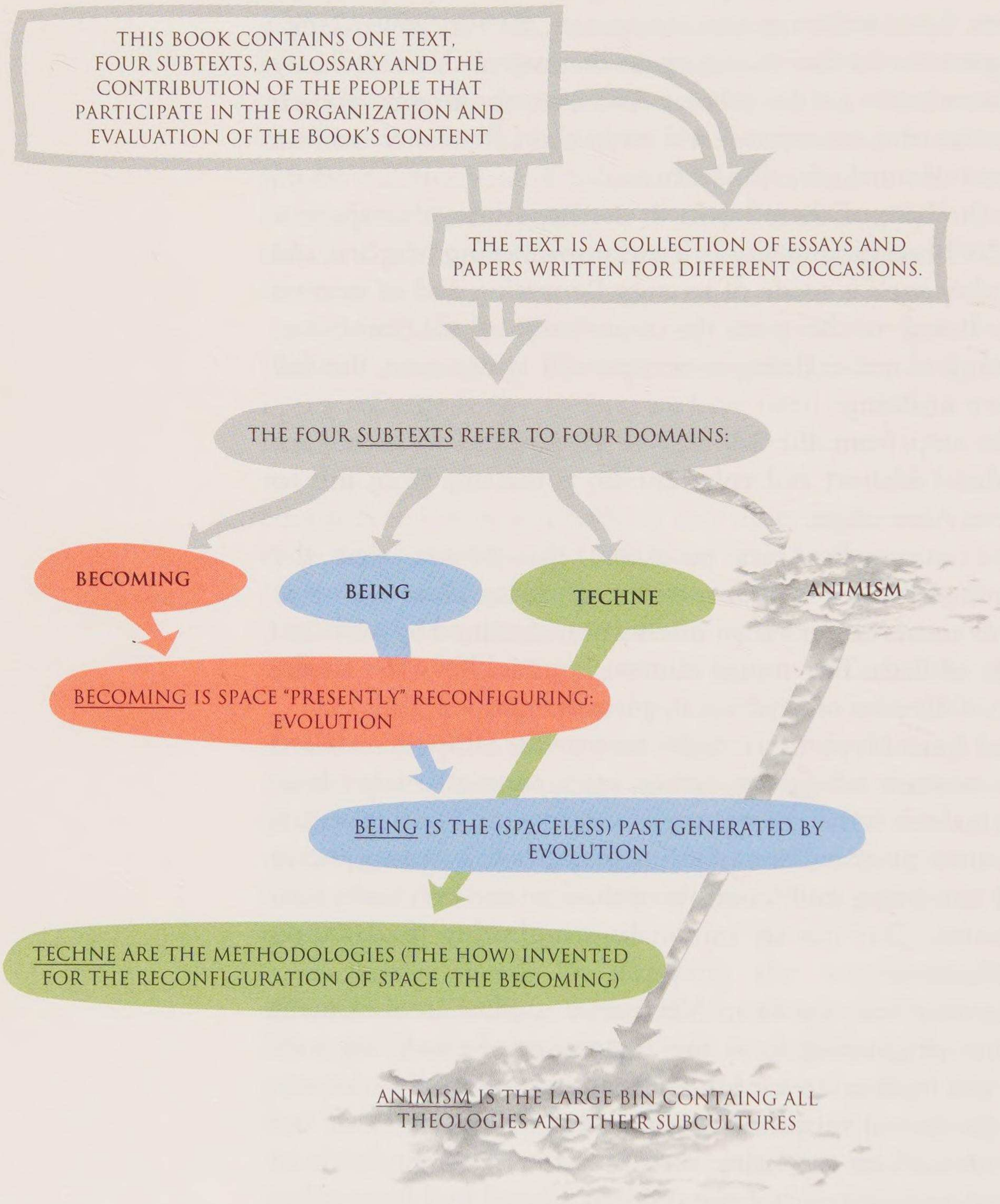
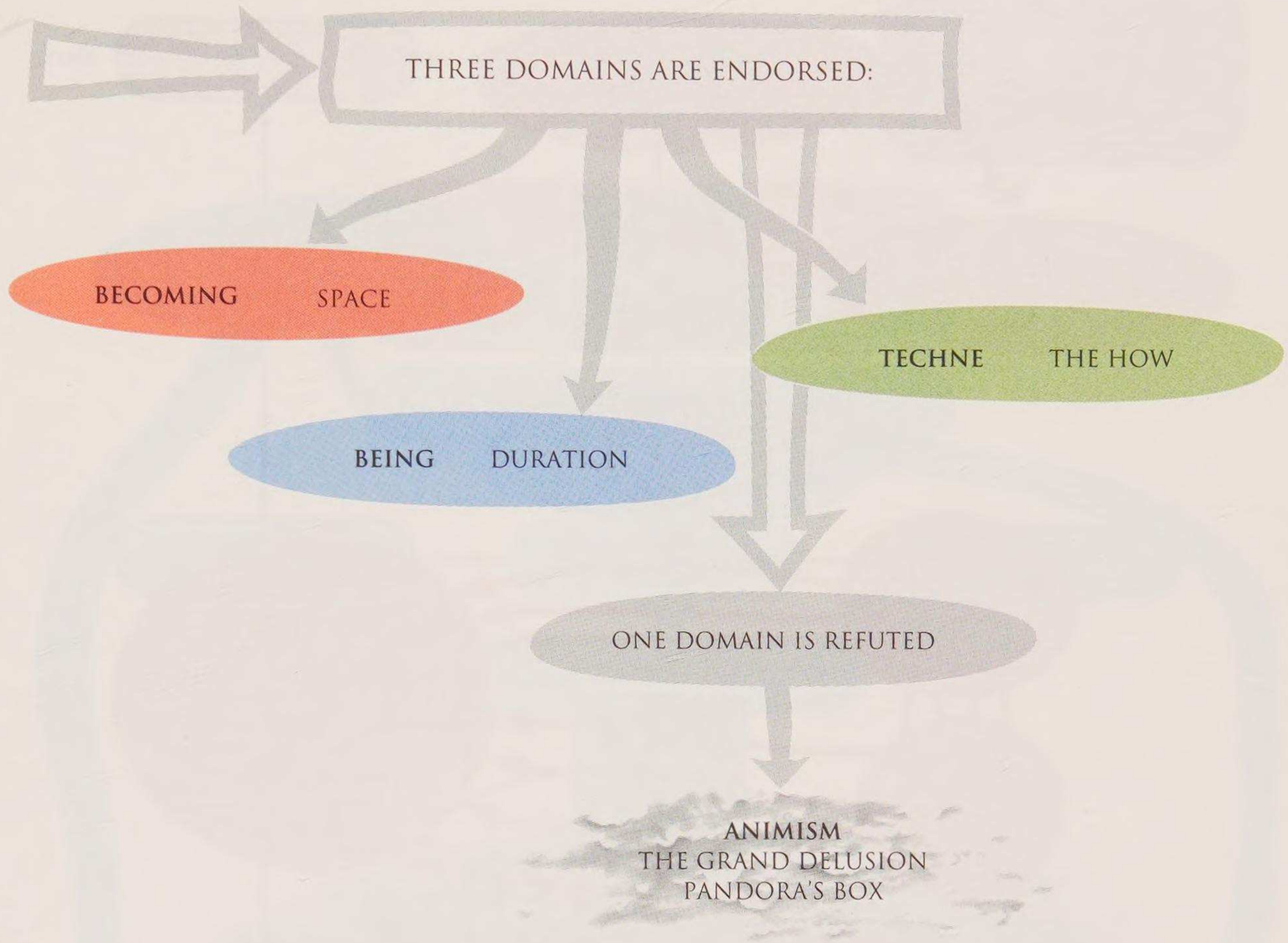
OVERVIEW


THIS BOOK CONTAINS ONE TEXT, FOUR SUBTEXTS, A GLOSSARY AND THE CONTRIBUTION OF THE PEOPLE THAT PARTICIPATE IN THE ORGANIZATION AND EVALUATION OF THE BOOK'S CONTENT
THE TEXT IS A COLLECTION OF ESSAYS AND PAPERS WRITTEN FOR DIFFERENT OCCASIONS.
THE FOUR SUBTEXTS REFER TO FOUR DOMAINS:
BECOMING
BEING
TECHNE
ANIMISM
BECOMING IS SPACE "PRESENTLY" RECONFIGURING: EVOLUTION
BEING IS THE (SPACELESS) PAST GENERATED BY EVOLUTION
TECHNE ARE THE METHODOLOGIES (THE HOW) INVENTED FOR THE RECONFIGURATION OF SPACE (THE BECOMING)
ANIMISM IS THE LARGE BIN CONTAING ALL THEOLOGIES AND THEIR SUBCULTURES

FOUR DOMAINS



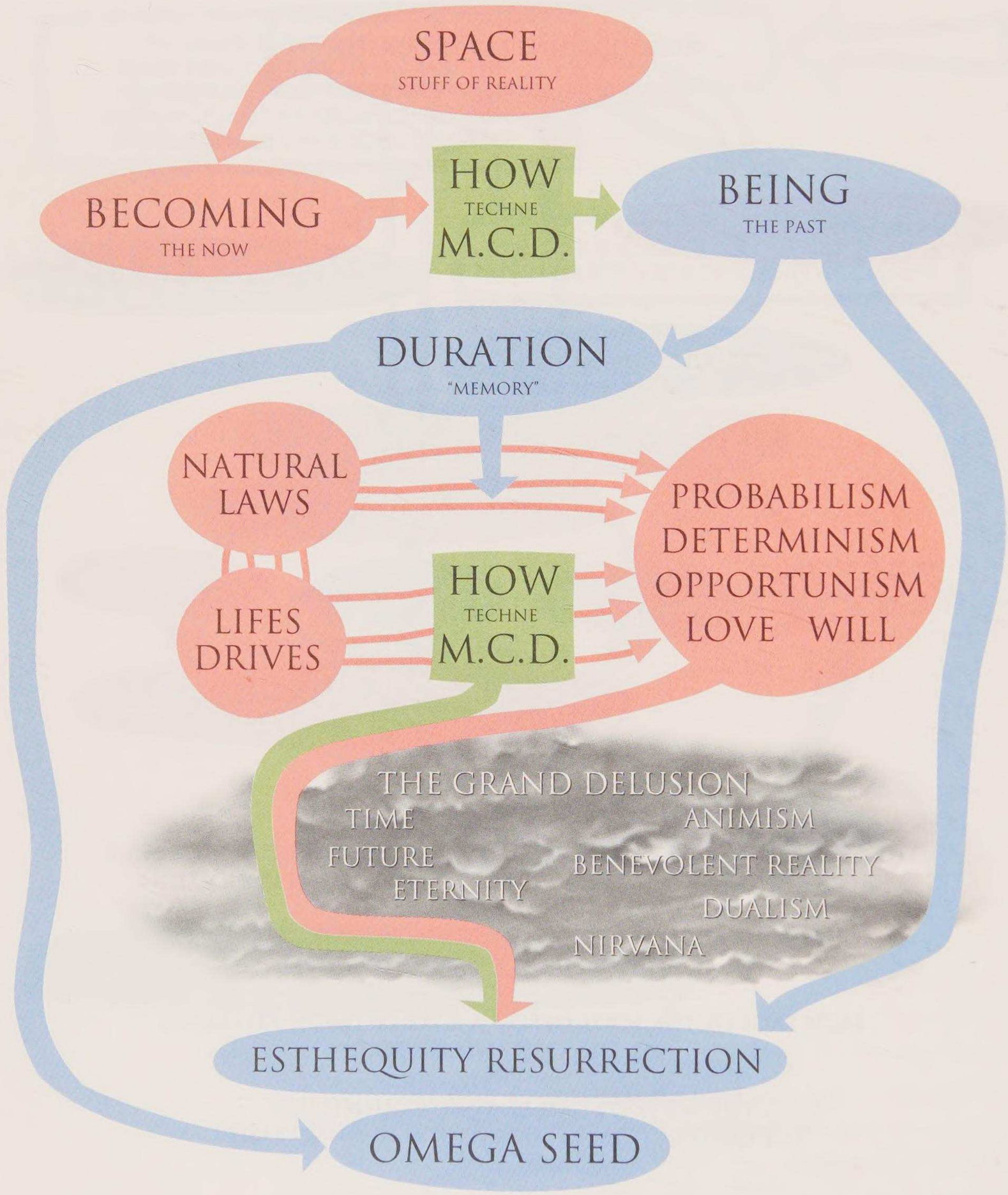
THE TEXT IS THE APPLICATION OF THE CONCEPTS PRESENT IN THE FOUR SUBTEXTS. TO PROBLEMS INTRINSIC TO THE HUMAN CONDITION.

THE FOUR SUBTEXTS COVER THE FOUR DOMAINS FORMING THE OMEGA SEED AND ITS SPACE HYPOTHESIS.

EACH PAGE OF THE BOOK OFFERS A SORT OF CROSS REFERENCE FOR THE TEXT AND SUBTEXTS.

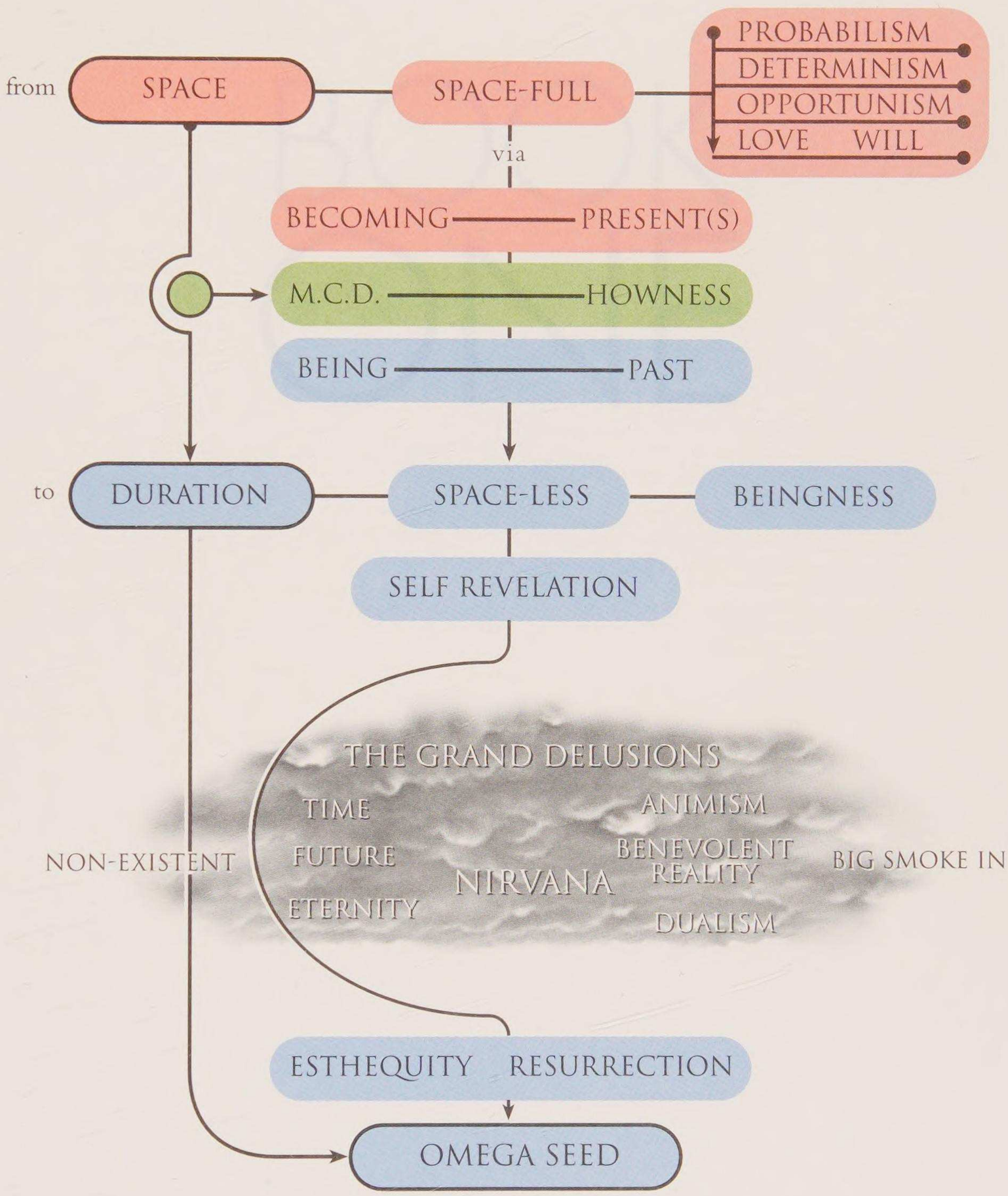
THE SUBTEXTS CAN BE READ SEQUENTIALLY.
THE COLOR CODE IS TO MAKESUCH READING EASIER.

SPACE HYPOTHESIS



M.C.D. Miniaturization Complexification Duration

SPACE AS REALITY



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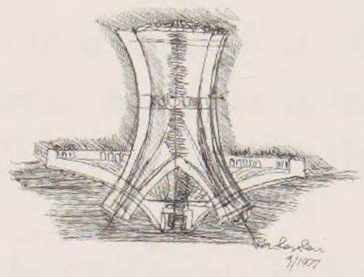
M.C.D. Miniaturization Complexification Duration

BOOK ONE

PART 1

Space as Reality, a Hypothesis



OCTOBER 1997

As long as OBJECTIVITY is the pedestal of science, my hypotheses are unscientific because their pedestal is DESIRABILITY.

Desirability is in two domains. Both are the inventions of reflection (human consciousness). The ethical domain: the justness of reality made into equity. The esthetic domain: the beauty of reality filtered by reflection.

For both domains, knowledge is the energizer. Miniaturization and Complexification (MC) are the "methodologies" by which space becomes self-aware. Duration (D) is the memory of this awareness (MCD).

In a totally self-aware reality, its own self-revelation would be the conclusive, singular point of the evolutionary cycle, the Becoming. That point of pure duration is the Omega Seed.

Reality is made up of "Hows." There isn't the thing and the How the thing is made by. The How is the thing, just as the medium is the message.

The permanent revolution of reality in a nutshell is "the How turning out to be the What." At this point, evolution is resolution. "Howness" is the "Techne" that via MCD creates itself in the process of space Becoming.

The Space-as-Reality Hypothesis is the total rejection of animism. The Space-as-Reality Hypothesis is the total rejection of dualism.

The Space Hypothesis connects with a number of ideas or notions: In a possible, multiverse reality, "our" universe is "closed." It has a beginning; it will have an end.

- *Duality is a human invention.*
- *Time is a human invention.*
- *The future is a human invention.*
- *Animism is a human invention.*
- *Love is a human creation.*
- *Reality is made of Becoming and of Being.*
- *The now is the singularity where the Becoming converts into Being.*
- *The Becoming is the domain of space reconfiguration.*
- *The Being is the spaceless domain of the past.*
- *The past is the faithful and complete documentation of all Becomings.*
- *"Howness" (Techne) is "Whatness" and it covers all of reality. It is it.*
- *Reality is unknowing at the beginning. It has begun to know with the phenomenon of life.*
- *For a singular conclusion, reality would come to know itself: a self-revelation in the making via the Becoming.*

The probabilistic reality of the beginning could, via determinism, opportunism, and love, chronologically and vaguely in that order, conclude in the total self-knowing grace of the Omega Seed, a symbol of

stored knowledge in its ultimate form.

The Omega Seed singularity, spaceless and all-embracing, is the "instant" recall of the cosmic evolution. It is the self-revelatory point at which content (and grace) is totally self-knowing.

Theologies are rivalries of "genetic" patterns aiming at prevailing upon each other. They are geometries (space) of great similitude, but also rabid, xenophobic, idiosyncratic "traditions," and "gene-induced," Pythagoras and Darwin hand in hand.

For millennia the anguish of Homo sapiens has projected crudely and parochially a similar scenario of total knowing and loving: God. Now it seems more wise to see God not as the creator but as the desirable creature. If I were to define evil, I would without hesitation name animism as the most persuasive and pervasive candidate.

The Partial Content of the Animism Cornucopia: The Grand Delusion

The planetary-stellar God's courts
Witchcraft
The Cult of the Dead
The Cult of just about anything as opportunism dictates
Shamanism, voodooism
Angels, archangels, seraphim
Black magic
The gods multitude and their paraphernalia
Astrology
Nirvana
The "Great Religions"
Mother Nature
Gaia
The Aquarian "Revolution"
Deep Ecology
The Chosen People
The Last Judgment
The Cult of icons and reliquaries
One Nation under God
Predestination
Medieval "science"
The sacred places
The sacred books
The divine destiny
The Eternal Truth
The Garden of Eden
Most utopias
Reincarnation
The resurrection of the body
The will of God
Hell, purgatory, paradise
The children of God

The "creation of the world"
The body and the soul
"Touched by an Angel," and similia
UFO addiction
Superstition
Futurism
The "living God-inspired bombs" (Palestinians)

All of those have in common a mild to ferocious fanaticism and intolerance.

Since the subject matter is at last people, and people by the millions, by the tens of millions, were and are tortured and killed in the name of Saint Animism, it remains one of the real mysteries of life why we persist in, endorse, and act out the commands of animism.

. . . . .

Space seems to be the thing, and the only thing, that crops up always and everywhere. Everything that seems to have presence has a spatial presence, and presence is a sine qua non for existence. The only domain exempt from space is Being, the past. Rightly so, since the past is a nonspatial domain.

At the Big Bang singularity, the Techne of space—self-reconfiguration—began, and it has been self-reconfiguration ever since.

If it were to be sufficiently persuasive or demonstrable that the transformism of space is the only necessary domain of reality and its evolution, then a unified theory could be developed. If strings turned out to be the stuff of reality, and strings turned out to be geometry, then space might well be the base domain of reality, all of it.

A thought is a geometry of the brain. A "second thought" is a different geometry of the brain. So it goes for emotions, rapture, rage, fear, happiness, hopelessness. It's all space, space, space reconfiguring itself from mesons to galaxies . . . from hydrogen to music.

From 1995 or so, I worked on the basis of dualities: space-time, mass-energy, body-(brain)-mind, Becoming-Being, Good and Evil. Recently I dropped most of them. In my work, space-time is now space reconfiguration, mass-energy is now space reconfiguration, body-(brain)-mind is brain-d. Only Becoming and Being remain two domains, but they are totally bound or hinged to each other; the hinge is naturally the "now." With all of those dualities disposed of, the slate of reality is ever so elementary, and what comes about with it is ever so prodigious, more so than ever.

The intent of the Reality-as-Space-in-Metamorphosis Hypothesis is:

Proposition one: to inquire into a possible process that sees

the Becoming of space resolve itself (with its own consumption) into a spaceless state of Being, the self-revelatory Omega Seed.

Proposition two: to seed all disciplines with this hypothesis and see what this may cause in these other domains.

1. The Apple and the Nose (and the Brain, and Everything)

The apple broadcasts particles of itself into the air, the particles are specific geometries, specific to the apple. The apple itself is a coherent (i.e., "working") assemblage of geometries (space in evolution).

A nose intercepts some of those apple geometries floating in the air. Among others, some of the geometries of the nose's olfactory mucus, a whole repository of diverse geometries, lock onto the apple's geometries in a key-and-lock binding. An incipient odor is generated, incipient because other geometries are conveying the "will-be odor" to the hypercomplex geometries of the brain and among them, to those geometries that are "willing" receptors of the incipient odor. "Apple!" says the brain. That is, a sequence of geometries conveys the odor message to the geometries of the vocal chord apparatus and, voila! The geometry of the air is stimulated into "sounds," very specific geometries themselves.

It is all space from top to bottom. Pull space away and nothing is there, the "absolute" nonpresence of "not to be." What is true for the apple and the fortunate nose (fortunate since the apple is a fruit of excellence) is true for galaxies and passions, for gravitational pulls and force fields, for muons and moons, for joy and suffering, the brain's geometries.

What it is not true for is Duration, the Beingness all those things dump themselves into in the very act of their creation, the domain of the past.

Space comes in all sorts of garments in all sorts of domains. Perhaps of all of them only one is absurd: the empty-space domain, not just because space is always full, but because space *is* fullness.

The sum total of the domains and their garments is the Becoming. One could say that space-Becoming surrenders to Being-Duration in the pouring of all presents, the domain of all spaces, into Being, the single spaceless domain of the past.

Some of the space domains and their garments-alloys include:

the subparticle-particles domain and "alloys"
    electro-magnetic fields and . . .
the geometry domain and alloys and . . .
the astrophysics domain and . . .
the simulation domain and . . .

the life domain and . . .
the memory domain and . . .
the quantum domain and . . .
the wave-particle domain and . . .
the plasma domain and . . .
the solid state domain and . . .
the consciousness domain and . . .
the Esthequity domain and . . . its alloys.

That is, the whole of Becoming-Being generating Duration and possibly self-revelation.

2

Since in my hypothesis space is the domain of Becoming, the very nature of space is such Becoming. Because everything is part of the Becoming domain, there is no way for any of its parts, a galaxy, a mountain ridge, you, me, or a passion, to define it. It would be the autodefinition of a fragment of that which the definition is seeking at the end, if such an end can be anticipated. At the end, space will have defined itself. This self-definition is, will be, the full context of the past.

Defining what space is can only come to fruition with the conclusion of space Becoming into durational Being, because space is in the process of creating its own metamorphosis, including the originator of the defining attempt, brain-d.

The only noninterpretational definition is the performance of the subject itself. If space in metamorphosis is the only reality, space cannot (auto)define itself before it defines itself—i.e., as we say, at the end of time.

So to try to define space via one's own thinking is a non sequitur since our thinking is itself a manifestation of metamorphosing space. In fact, it is not a manifestation but a specific sequence of space reconfigurations.

Space is a presence. Since in my hypothesis it is the only presence, space is the stuff of reality. No space, no reality. No reality, absence of space. There is a presence. Space is that presence. Reality is the process by which such a presence, space, generates novelty. Space indulges in this process, evolution, because space is a singularity that generates its own boundaries out of its own "nature." Another universe would inevitably define its own boundaries according to its own different nature (the "laws" of its nature), its own nature, and the implied rules. The absence of rules would point at absence of reality itself, the absence of space in metamorphosis.

This Becoming reality is the creational drift "feeding" on the now. The paradox is that the now is the singularity that consigns instantly its own creatures to the spaceless domain which the past is.

Space in all of its fireworks abdicates in toto, instant after

instant, its own spacefull essence. The result is Being, the constantly incrementing past. Being uninterruptedly fed by Becoming is the consumption crucible of space and if the achieving Becoming finds the right trigger, such achieved consummation could be the radiance of self-revelation.

In a nutshell, this is the unifying theory of my lazy mind.

Supernova fireworks, Fido wagging his tail, the leaf hitting the pond's surface, the executioner savaging the victims, the awe of a sunset, the caterpillar ravaged by the wasp's eggs, Richard Wagner's Rhine journey, a lover's gaze, the dirty snow of a comet, a woman's breast, the black plague of despair, hope, rapture . . . gravitation, quarks, and photons . . . All are "incarnations" of space and only incarnations of space. And space comes only as "incarnate" since empty space is only a way of seeing.

If I were to be right, that space in metamorphosis is all there is, then it would be a turning point in the interpretation of reality, a pretty momentous turning point. It might be important to observe again that if space is removed from any and all domains and events, the domain or event in question is no longer. I don't know if any other "domain" or "event" can boast such "magic." Time is none other than a "way of measuring the rate" of space reconfiguration.

3

"Naturally" the only domain outside the "dominion" of space is reality in Being itself, the past. This says that space with all its glory is, in a way, the medium to the end of self-revelation, self-revelation of exactly all that the past could be via space-generated reconfigurations. So we and all things are the instruments (space-reconfiguring) working at the creation of a possible if remote event that could make us into the end, the spaceless Omega Seed.

Since space is hypothesized as everything, a change of space here or there is a change everywhere. Then short of a total self-sameness, space is not the domain of Being, but the domain of Becoming: space Becoming else of itself. Reality is the unbroken Becoming of space within the only real domain, space. Where does all this Becoming of space end up? Unfailingly, it ends up in the past, and it does that instantly, on the spot. The "spot" is a collection of spots, all the presents composing evolution by way of the now.

All the presents (the nows) and all the pasts of those presents move in tandem, the nows and their instant transposition into the past, the then. The gate between the nows and the then (the past) is the gate where the domain of space ends and Duration's domain potentially begins.

The past engulfs space (the Becoming) in its own space-

less domain, the Being. Being is the repository, the faithful repository, of operational space, the Becoming. Being is the faultless "memory" of Becoming, the durational domain preserving the space(full) domain.

How does space (self-reconfiguring) become a quark, a galaxy . . . a bacterium . . . a brain . . . a passion? Geometry! Geometry! Geometry! It does it without an ounce of animistic lubrication, just pure and simple reconfiguration of itself, space. The will to become, that is, the intrinsic drive of that which is to become that which is, as yet, not is Techne (Techne . . . Techne . . .), the virtual Being of the very first "moment," the Big Bang forced by its own presence into Becoming.

But will is a misnomer in the domain of physics and geology unless one is willing to accept the original Beingness (disposing of the alternative of non-Beingness), made of totally undifferentiated stuff and on top of it an indifference that defies any sort of "restlessness" as a protowill state. If not so, this original Beingness is the stuff of action via its own intrinsic original signature. In a multiverse scenario, each universe has its own signature, the laws of its own nature. In our universe, gravitational fields, the five forces, the subatomic stuff, etc., are part of its signature. Thus that which is virtually a Being (of an origin like the Big Bang) is contextually a Becoming.

4

The instrumentality, the How, attending to this "transcendence" from Becoming into Being is the technology of reconfiguration. Technology (Techne) is thus present at the very first instance of Becoming. It is in fact what the state of Becoming is. There isn't a Being and the Techne applied to it for the Becoming to be triggered. The Becoming is the technology of space reconfiguration.

Since the primeval reality is unconscious, insensible, unintelligent, unpassionate, and unloving, it is in fact meaningless. It is a technology in search of the "What" and the "Why." In fact, it cannot be searching because searching implies willfulness, and "mineral" reality is a protowillful reality. It strictly operates according to its own "innate" rules very much set by way of probabilism and determinism.

All of those are, of course, labels we need to apply to a reality we can only interpret via observation, experimentation, and learning. Interpretation is the closest we get to reality. This includes the interpretation of ourselves. "Know thyself" reads "Interpret thyself": space interpreting space interpreting space.

. . . . .

The personal and universal "Know thyself" would be the aim of a full-fledged Duration in which Being and knowing are really only one thing, and this one thing, among myriads of "one thing," defines the self-revelational condition, a spaceless state of total understanding holding in itself the totality of all space reconfigurations "drained" of the "space parameter." The space parameter, reality in the making, leaves the event at the doorstep of the now where the past takes over and with it the possible, desirable durational reality.

Reality is then composed of two domains: the space domain of Becoming and the Duration domain of Being. The Becoming domain is the self-creating now. The Being domain is the created past, or better, the storage of all self-created nows. It is not a duality because it is a sequentiality: the Becoming transcending into Being and the Being eventually, possibly, "Becoming" the radiance of self-revelation.

The tangibility and concreteness of space and the uniqueness of its domain make absence of space equal to naught (absence). If this turned out to be true, this would demand, sooner better than later, restructuring of our language: no time, no future, no animistic ruminations. Without the apt language, the brain is incapacitated. Language is one in the triangle of brain-hand-language that has produced the stupefying explosion of consciousness, thinking and doing (all space configurations).

Biology, for instance, and microbiology even more so, might find, in this space proposition of reality, new avenues of exploration and the eventual dismissal of hypotheses patently no longer coherent. In fact, the discovery that nothing in the domain of thought comes about that is not the consequence of a (spatial) operation of the brain is at the origin of my hypothesis of reconfiguring space as reality.

The nature of light, of energy, of probabilism, of determinism, of opportunism, of love, of passion, of grace—all are turning out not as we interpret them to be.

If reconfiguring space as all is my position, then nothing happens before it happens. Adieu blueprint and the fatal primeval determination of all the "has to come." The creational process is real. In fact, it generates reality. My presence is, because it is the result of spatial reconfigurations, all of them sequentially acted out present after present.

The "potential" is a euphemism for possibility. It never stands for objectivation preceding objectivation. This makes a folly of antiabortion: a tiny blob of flesh is not a person, it is a tiny blob of flesh rich in genetic memories. This is true from the smallest (quarks and family) to the largest (and expanding), the cosmos: Space is the container and the content, and it is a prodigious Becoming (evolution).

Domains and Their Connection with Space

1. Space and the Becoming

The Being at the Big Bang singularity is virtual because Becoming takes over at that very moment. At such a singularity, real Being is born, the past. Space is the nature of Becoming. The past is the nature of Being.

Space is the generator of Becoming. It leaves any and all particles of itself at the doorsteps of Being, not the virtual Being of the Big Bang, but the real Being that the past is. Space has no access to Being; it only fathers it.

Space and Becoming are one and the same. It is idle to search for one where the other is not. Self-reconfiguring space is reality constructing itself, the Becoming. The search for the Becoming disengaged from space is idle; one is only if the other is. But such presence is not Beingness; it can only be Becomingness.

A cessation of Becoming would be the dissipation of space because a non-Becoming space is a space not engaged in the now, an empty space—that is, a self-negation. The now is the singularity endlessly pouring the Becoming into the Being, which is the spaceless domain of the past.

Metaphorically, the past becomes Duration via autocombustion. The spaceless bundle of the past, the epitome of Miniaturization-Complexification that is universal and total, reaches the meltdown "temperature," and in the final *religio* (binding) act (religion) it transfigures into the Omega Seed. The autocombustion is self-revelation.

Speaking of metaphors: "Reaching back into time" is a metaphor using a metaphor: time. There is nothing to reach back to because time is a purely expedient "expression."

Reaching back into time is, in reality, the finding via memory, a spatial take on the spaceless past, on that ex-spatial configuration that is of use to a present spatial configuration; their "juxtaposition" generates the occasion, fitting and fruitful.

With the Space Hypothesis the whole "Great Smoke-In" of animism dissipates into its true domain: nothing, the not-to-be. But as we experience and know, the greater the delusion, the more pernicious its momentum on the spin of reality. The power and reality of delusion is not to be identified with the "content" of it, or rather, the zero content of it.

If the magic is my delusion, I might commit murder in the name of that magic. It is delusionary because a wrong interpretation of reality makes me a murderer. That is what, for instance, the theological delusion has enacted for generation upon generation.

Space reconfigures itself at different speeds. The speed of granite, the speed of a butterfly, the speed of an Einstein "intuition" and . . . the speed of light. Space is an elasto-plastic stuff,

stuff to make "gods" with.

Space is not just the lattice within which reality constructs itself. Space is "the" itself, the lattice and its content in constant reconfiguration.

2. Space and Being

Space runs; Being is still. Space "runs" to generate the stillness of Being. Space literally cascades into stillness at the edge(s) the now(s) procures. In the form of the now, the present(s), space in its own reconfiguring freezes into "that which has come about." It is the rite of passage from Becoming to Being, from the present into the past.

Present is the domain of space. Past is the domain of Duration, knowing memory.

It is not a duality or a confrontation; it is a sequentiality, a self-documenting sequentiality because "that which has come about," real or delusionary, is "forever." No expunging, undoing, embellishing, forgetting, forgiving, or distorting is possible. The past has all the Becoming documented for good in its spaceless domain.

While metamorphosing, space keeps revising itself and consigning itself "on the spot" to spaceless Being, the past. The consigning is fastidiously precise, and it is in the form of registration, spaceless registration. Playback "time" will be, could be, at the end of metamorphosis. Space will be self-playing its own history in the radiant light of the "Know thyself": the resurrection singularity.

The problem with animism (theologies, etc.) is that the registration is all at the origin . . . in the mind of the creator, including my fatal crash on the 17th of February, 1999.

3. Space and Duration

In generating the past, space is the author that might eventually witness a reanimation of its own doing, of the past in toto. This reanimation could be called total memory if it were not for the fact that the memory in question is no longer a memory but a reexperiencing of that which the past has been storing (the Becoming).

The word "Duration" is used to put the memorized past up to its own singularity of self-revelation. As Being comprehends Becoming, so one could say that Duration comprehends Being. But though Becoming unavoidably pours into Being, it could well be that Being will not pour into Duration—that is, the immense domain of the past could well be a dead end, deprived of durational, self-revelatory singularity. Then in the open-ended cosmos, reality would not "hibernate" as past, but would be dead as past.

A self-creating reality has no way of avoiding the contem-

plation of such an alternative. Otherwise, reality would be an immense deterministic machine hard put to justify itself, because it already exists in all of its frightful blueprinting down to its most puny detail . . . The will of God and its triumphal inevitability is the death of the creational and, in the tiny domain of anthropos, the denial of freedom, a Calvinistic, bleak pseudoresolution.

4. Space and the How (Techne)

The Becoming—space reconfiguring itself—is a "systematic" alteration of space itself, which space submits to via its own rules. This is a kind of inevitability that does not apply to a specific resolution such as God's despotism, but is an operational inevitability intrinsic to the very nature of Becoming. Becoming is unavoidably Becoming something else.

Techne is the procedure for making something into something else, so the domain of Techne, the How, is intrinsic to the domain of space Becoming. The How is therefore copresent with Becoming. It is, in fact, in the very nature of the Becoming. Science is a human enterprise. Techne is a cosmic enterprise that intellection has gotten hold of, and with the input of science plus the "providential" manual dexterity unique to our species, and as old as the species is, has been making the world we live in and is now intervening in the "world we are."

At the Big Bang singularity, the Techne of space self-reconfiguration began, and self-configuration has been at work ever since. In the cyberspace culture, the How might become overwhelmingly and too suddenly the What.

As process, space (the Becoming) is the incarnation of How, the know-how of technology (Techne). Nothing changes unless there are ways for change. Those ways are the "Howness" intrinsic to the changing agency. They can only come about in the domain of space, the domain of Becoming. But in fact there isn't such a thing as space per se and away from it a technology for the alteration of space, because there is only one kind of space, the Becoming space, and the Becoming space is Techne, the making of "that space into this space," metamorphosis.

5. Space and the Grand Delusion

From time immemorial, our species has found the presence, the power, and the secretiveness of nature disquieting if not terrifying. Communicating with "her," receiving guidance and benevolence, has made us into anguished beggars and has challenged our inventiveness. We invented the gods as herself or as intermediaries. In the presence of her indulgence and fury, we ended up separating nature/reality from the gods in

Western thought: God as the ultimate master, nature its own creation.

This is not just an interpretation of reality: it is an invention of it, and as such, inescapably delusional as soon as we abandon the interpretive relativism and marry into the nondebatable "trueness" we dress the interpretation with. "We [as many "we" as there are adversarial theologies] hold the Truth, and the world is full of spirited entities. It is animism all the way. It is the domain of the magic.

Animism has clouded our minds and our actions ever since. With the liquidity of mercury and its poisonous fumes, animism has run through all our doings and has shaped our history and bloodied it, tenaciously and cruelly. (See 16 below, "Space and Animism.")

6. Space and Time

As a convention universally adopted, time is a notion ingrained in our bones and in our brains. When it really comes down to it, time, the modest currency, has "usurped the kingdom." Eventually time, the usurper, has to be cut down to its humble status. It is a measurer of change, but is not a definer of reality, as technology is, for instance.

What we will do without such an accommodating device only "time" will tell. One reminder: if change were to stop—that is, if Becoming were to cease—time has no refuge in which to hide. Time is no longer, because time is a measure of change in disguise.

Time is a useful but delusory invention. The time-space formula might have to become the space-reconfiguration formula.

7. Space and Eternity

If eternity is the pouch for the totality of time and time is a delusion, then eternity is the biggest container of delusion. A ponderous word, eternity is a poor but effective hiding place for all animistic promises of the good and the bad with the accompanying delusory promises and injunctions.

The ghost of time has saturated our languages for millennia. It may be about "time" to drop the fiction. Reality could drop the fiction by just freezing up. "Time" would vanish, since nothing would be there to be "measured." A self-same reality is by definition timeless. With the vanishing of the ghost vanishes eternity itself. Being, the concluded reality, confirms its own timeless nature, as it does its spaceless nature, but not for a delusory reason.

As long as reality pulsates (its own evolution), eternity is an "outsider," insubstantial, meaningless. With the conclusion, pulsation is finished. Eternity is a nonentity. Reality is pure

Being, the past, and Being as a timeless domain has no meaning to offer to the ghostly convention of time in its own exalted form: eternity. The ghost in the machine goes up in smoke. Time, smoke from beginning to end; eternity, monumental smoke screen. Eternity does not exist because time does not exist.

8. Space and Nirvana

One way of thinking that seems to reject delusion ended up by promising nothingness at the end of a redemptive journey that per se we deemed by the same brain-d mechanism to be delusory, life. Nirvana is the final delusion of all delusions, I would say. "Since I cannot make any real sense of what is given to me as the real, I will think of it as nothingness and I will strive to drown in it." It is desperately bleak and imperiously demanding from me (as delusion) to reincarnate in the other (a delusion) to the final purification that naught is. Nirvana.

9. Space and Probabilism

For eons, space reconfiguring itself is mindless and will-less. Because of its makeup (a parallel universe will have a different makeup), reality snatches from determinism enough uncertainty to define its domain as probabilistic, the quantum physics domain.

Moving from the subparticle domain, and its own space geometries, into the particles domain, and its geometries, it seems that the improbable remains so and the cause/effect trappings are on automatic pilot. Determinism and statistical anticipation are the way space shapes itself. But the generator of the past (space) is full of the unexpected. If this could be seen as to be expected in the domain of the living, it remains surprising in the preliving reality. Better science, better mathematics, better brain will show where the miscalculation might be. Well, perhaps. Or is it quantum physics that holds the key to the (inescapable?) freedom from a fatally molded reality?

10. Space and Determinism

It would seem that, though reality sits on an ocean of probabilism, the subparticle domain, in the grand scheme of things, there are causes and the effects that come from them. The "cause" defines the effect.

What if the cause, each cause, is a bag of one or so billion sub-causes (which is how reality seems to be compounded)? Uncertainty! Uncertainty? Things seem to be on automatic pilot. All the history of the world is, one way or another, packed in the making of a liver cell. All domains and hierar-

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1700 Lida Street
Pasadena, Calif. 91103

chies by the bucketful are represented in the liver cell. Determinism and statistical rules seem to be in control.

The architecture of the liver cell is a geometry, a spatial configuration unique to the cell. In strict collusion with millions of quasi-clone other cells, it constitutes the liver, an architecture/geometry with its own originality.

The cell domain in general has its own original geometry specific to the domain but adaptable to all sorts of organs and organizing cells. To be on automatic is imperative. Automatic is the close cousin of determinism and statistics.

11. Space and Opportunism

How does reality move from probabilism and determinism into opportunism? Space has to come up with ever more sophisticated geometries . . . and fast. This is where Howness becomes the maker and breaker, and it is also where miniaturization and complexity, the domain of geometry by excellence, are the arbiters.

The ambiguities darting around within the automatic piloting of numberless numbers of causes and sur-causes going for ever newer geometries, become the promoters of the opportune. The "laws of nature" are "molded" into the prestidigitation of ever more minute and complex geometries; the opportune geometries are effects on already "miniaturized and complex" causes and sub-causes.

Opportunism is the domain of organic evolution up to the origin of Homo sapiens, where opportunism attempts to resolve itself into the desirable: The Love Project.

12. Space and Will

Opportunism is the incubator of willfulness. Opportunism is a sort of jester, whereas willfulness takes more stern postures. As the geometry of the scent of a potato differs from the scent of an infant, similarly, the geometry of opportunism differs from the geometry of willfulness.

Why does a chemical compound make the move that will make it into a biological compound? Perhaps in an obscure way the first blush of hedonism is sparked in the chemical presence, the chemical presence "enjoying" itself and searching for the way to make such enjoyment perennial, the will to live and procreate, the pleasure principle as the forerunner of hedonism. Hedonism is the deus ex machina of consciousness working out the miracle by way of eons of work.

13. Space and Love

The space of love is the most sophisticated spatial invention of all, and its fields of expression are many. Geometries of light,

of sound, of patterns, of textures, of forms, of eclectic compounding of them . . . The sediment of them all, that which resides at the periphery of them all, is "good and evil," and poking at it with all extraordinary discrimination, can spill into the equitable, compassionate, loving . . . esthetic, the geometry of grace.

Try to expunge space from any of those domains and events and you will find yourself empty-handed; nothing is there but an uncovered delusion. Take away the lovers and love is no more. Take away the vibratory geometry of sound and music is no longer there. Take away the spatial context of the "visual art" and nothing was ever there.

14. Space and Esthequity

If space can be "induced" into becoming self-aware in cosmic terms—that is, beyond the confines of Homo sapiens (where space is becoming self-awareness)—then space will eventually author an also cosmic equity. But cosmic equity would be the "effect" of an uncountable number of contextual local equities as aspirants to the final full-fledged equity.

The result of such universal equity would be that all means would also become ends in themselves, since there is no equity outside of an equitable diffusion of equity throughout the body of reality (the past).

This transfiguration of all means (Techne-induced) into ends is the very nature of the esthetic, the very esthetic that has been incarnated into "works of art" from day one of the human presence: the nonobsolescent.

15. Space and Omega Seed

Omega Seed, the self-revelation of reality, is the durational domain fully achieved: the spaceless domain of the past totally knowledgeable of itself, that is, the co-presence of all that has been and the acknowledgment of all its components by all its components.

Omega Seed is then the state, the Being, that the evolution of space has created and in which it (space) has transfigured itself by consuming itself into it. Task consummated! Space is no longer space; it has become Duration. Space via Techne is the stuff of which to make God.

16. Space and Animism

Key to the trueness of space Becoming is the refusal of the animistic domain, because it is the animistic domain that sanctions space as a fringe domain, in fact, as the source domain of evil, a domain submissive to "spirit." Naturally it would be impossible for the spirit domain to do anything outside the

space domain because whatever the anything might be, it is at last a fiction or a metaphor or a chess grid or a fun park for the "spirit." Conversely, pull out the "spirit" from eons of metamorphosis and nothing changes: The Grand Canyon keeps eroding away, the fleas keep bugging the antelope, the spring is a paean of colors, and the AIDS victim dies brutally.

The cloud of animism turns out to be sinister because it is the undefined falsity and is the untrue dressed with the most extravagant paraphernalia of "trueness." Examples abound in the past 50,000 years of history.

Space is in the process of defining itself. If there is an end to the process, space may find itself to be Duration. Duration is the entelechy of space. This is a bouleversement of Plato. The idea horse behind the horse is instead the horse behind the idea horse, with the possibility that the idea horse will never come about. Bricks and mortar are prancing around, but the mansion may never come about, the tragedy of an "erratic" reality, which is also the price for a true creational process—that is, a nondeterministic, nonpredefined one.

17. Space and the Future

Since reality does not happen before it happens (God forbid?!), the future is nothing more than a way of seeing. The future does not exist.

It is space in metamorphosis that generates reality, a truly creational domain, and creation can, at most, anticipate the so-called future. It cannot ever be before its advent what the Becoming is creating advent after advent. But evidently it does not create from that which does not exist, the future. It creates more past through the self-reconfiguring space (the Hows) that generates in the nows of present after present. We create the past and only the past, Beingness.

Why is it important to be clear about the nonexistence of the future? The animistic credo if fully displayed puts in the "hand" of gods and spirits the responsibility for our presence. I was not conceived in my mother's womb; I was conceived in God's mind. God's mind, God, bears no connection with past, present, and future. The Supreme Being or Beings are Beingness. For them, the Becoming is a fiction satisfying the ghosts we proclaim to be ourselves.

"I am and I have been from the very 'moment' of the Big Bang (patience, patience your turn will come fifteen or so eons hence)." So the future is nothing but a phenomenal eternity crowded with ghosts, the presents being just the successive emerging of all the given, unfolding under the eyes of God, or dissipating in the cosmic black hole of Nirvana.

Only the nonexistence of the future leaves a narrow crack within evolving reality through which the faint notion of

freedom can squeeze out of the animistic-deterministic-theological trap.

18. Space and Theology

The theological, a subdomain of animism, proposes a reality created by a creator with no plausible "physical" dimension, calling upon the creature for a demise of physicality at the moment of reentry into the creator itself. In my hypothesis, the creator is superfluous at best, a meddler at worst, and a cruel one at that. It is the animistic problem par excellence: capriciousness capped by determinism; goodness will prevail. No matter what!

The Space Hypothesis has quasi-none of it. It is protracted self-creation, purposeless for "eons," then generating within itself the puny light of awareness that eventually could become the radiance of self-revelation.

Self-deception and delusion are two of the many stumbling blocks toward a resolution of the creational process. Theologies are parts of such self-deceptions and delusionary blocks, the theological inventions demonstrating, sometimes in a grand manner, the versatility of the brain and the resourcefulness it displays vis-à-vis the fear of the unknown. It is an esthetic enterprise hiding in a bundle of emotional strands reinforced by fear, intolerance, greed, bigotry, cruelty . . .

A word about the intolerance for tolerance: Tolerance well invested toward the (intolerant) person is poorly invested when directed toward intolerance as such. I may well "tolerate" the individual embroiled in all sorts of animistic quirks. In fact, I may well love her. But I may not want to tolerate the animistic domain that makes her life opaque. Racism, xenophobia, Chosen People, intolerance, hatred, greed, the true God, hypocrisy, torture, trafficking in death are not tolerable "professions."

19. Space and Light

Light is on the go, going places (going spaces?), the fastest of all.

Perhaps light is the most generic of space self-creation, a sort of intangibility that reveals itself only when crashing on less generic, more specialized kinds of space constructs—a gas, a liquid, a chemical compound, the flesh . . . Does the light reach to the cosmos edge? The avant post of space expanding?

I am setting up laundry lines: space, present, past, Duration, self-revelation, etc. If they stay stretched, all sorts of laundry can be brought to the light. Metaphorical laundry lines have no need of poles to spread out. Space itself sets up the poles upon which to stretch its own creation, the "by-the-bootstrap" Techne.

If light is the most generic concreteness of space, then "we are the light." All of creation is "the light." "Let there be light," as the sacred books say.

Is light "cannon fodder" for entropy? And how will light at the far edge of the cosmos it creates make a 360-degree turn from the beginning of the implosion stage of reality toward the Big Crunch singularity?

Does light come in discrete finite "moments" (a closed universe), or is it the creature of infinity (an open universe)? Light could be the first manifestation of Being/Becoming at the singularity of presence: The Big Bang. To be, to become.

Space as light ——> as hydrogen ——> as . . .
Space as light ——> as quarks ——> as atoms ——>
as molecules ——> as radiation

Or could space and light be the twin generators of reality? How could light travel if space were not there as a target for it? Better stay with space as generator of all, light as its first creature.

20. Space and Mass-Energy

My grand ignorance should also keep me silent on this subject, but . . . keeping a tentative distinction for mass and energy as two vaguely distinct domains, can it be conceivable that both have "nowhere to go" in a spaceless reality?

Mass implies a spatial domain. Energy implies a transferable commodity, again the presence of space. Is it inconceivable that mass and space (its space) are one and the same and that, similarly, energy and space are one and the same, keeping in mind that perhaps space could do without mass, and space could do without energy, but not vice versa?

There is a geometry of space that we call light.
There is a geometry of space that we call energy.
There is a geometry of space that we call eagle.
There is a geometry of space that we call Plato.
There is a geometry of space that we call Fido.
There is a geometry of space that we call Fido's lice.
There is a geometry of space that we call passion.
There is a geometry of space that we call love.
There is a hypergeometry of space that I call Duration
(the self-revealing past).

21. Space and Passion

Easy enough. Our awareness and our thinking are specific and restless brain patterns; they are spatial configurations endlessly altering themselves: geometry, geometry, geometry . . . The passionate is the reconfiguring of awareness and thinking

where quality and intensity are exercised as novel geometries in the folds of the geometries of the actively operating brain.

Passion is one inch away from the esthetic, and as such it persistently pulls at the leash of space to find the domain of the spaceless, the domain of Being, of Duration.

22. Space and Entropy

The entropy ball hangs around my neck, a whale of a ball. It may well be that spaceless Duration will never be able to transcend spatial reality by pulling it FULLY into its own domain. Consequently, entropic death may be the final episode of Becoming reality.

Since there would be no witness to such a nemesis, the whole process closing with the death of the cosmos will have been for naught. You, me, Fido and his lice, stars, galaxies, dark matter . . . no matter. It is a pure Nirvana closing, an immensely cold absence, senselessness from top to bottom.

Or is it a mirror image of the original sin? Is it the abandonment of lastly unrescuable "matter," the definition of space hiding in the entropic Nirvana, the junkyard of a senseless and cold geometry no longer capable of Becoming, since space in its energy impersonation has exhausted itself into the undifferentiated? Then there could be Duration, the child god of space metamorphosis (via evolution) coexisting with a residual detritus of unspeakable nature to be ignored by the radiant self-revelation of reality!? It would be a spaceless detritus, by the way, because entropy is a state, not a Becoming.

Space-energy is indispensable to the generation of Duration but has no meaning in the spaceless domain of Duration. It has fulfilled the task demanded by brain-d, and it is time for the dissolution of entropy. Yet entropy remains a smudge on the transparency of Omega Seed.

23. Space and MCD (Miniaturization-Complexity-Duration)

If reality (the Becoming reality) is reconfiguring space, M of the MCD triad is at the very center of the evolutionary tide because miniaturization is in reference to "physical" size, the domain of space par excellence, the physical size of a system, subatomic, atomic, molecular, cellular . . . urban, etc., and the impact that a possible reduction in size might have on the fitness and performance of the system.

Reducing the size of a system means to expedite the work processing of the same, as the microchip does. The organic world of self-adaptive systems succeeds in a measure proportional to such expediting—that is, its miniaturization. If the elephant is immensely bigger than the bacterium, it is because the life fullness of the elephant is immensely greater than the

life fullness of the bacterium. For both, the complexity they master is a measure of their "miniaturizing power," an outstanding miniaturizing power in both.

The conclusive hiatus of reality achieving self-revelation calls for "infinite miniaturization" because a residual of spatial reality, the Becoming, means the failure via entropy of the process, space ——> Duration, that announces the advent of Esthequity and the necessary "resurrection" of reality into Omega Seed.

24. Space and Chaos

All the Becoming generating from the intervening of domains (and their garments/alloys) is space reconfiguring itself via the bootstrap process of evolution that consciousness may want to guide into the fullness of love/Duration.

Presence, like the presence of the Big Bang's first configuration, generates its own rules. This would suggest that chaos is what presence rejects by the simple Becoming in which presence is engaged (presence as the "to be" alternative to the "not to be").

If chaos had hidden rules, then it would cease to be chaos. That is, it would be part of the Becoming that is the process of generating new rules as it exercises its labor of creating more past. Chaos could then be the virtual state of "absence of presence." It is a virtual state because it is the preceding of that which has no precedents, the generation enacted by the Becoming. God could be a good example.

25. Space and Duality

The Matter/Spirit Duality

"Spirit," if one wants to see it as a domain, is a sort of extrusion from matter. That is, "matter" is self-processing via the brain and invents the spirit, a spirited invention, but an invention nonetheless.

Matter is space reconfiguring itself.

Reality is the "truth," the only one. Since reality is in the making, the truth is in the making. We do not know what reality is; we have interpretations of it. Therefore, the two reasons why the truth escapes us are: (1) The ultimate truth does not exist; (2) even if it existed we have no way of knowing it. We are parts of it and the part cannot know—that is, be—the whole.

The truth will be the totality of reality. The concluded past and the knowing truth will be its self-revelation at evolution concluded, the universal "Know thyself." If, if, if . . .

The duality of originator and originated is becoming more and more unwarranted. The creator and the created, what a paralyzing nuisance!

26. Space and Emptiness

Total, pure emptiness is absence, and as such, it is unspeakable. Presence is that which automatically rejects emptiness. Since space is first and foremost presence, space is the rejection of emptiness, the nonspace, non-Becoming pseudodominion.

27. Space and Desirability

Space in its fearsome bulk, the cosmos, is mindless, therefore not under the guidance of a desirability that has no place or meaning in it. What distinguishes the desirable from the feasible is the discriminatory power that develops in the cosmos with the emergence of meaning, or what is more to the point, with the onset of the "good-evil" dialectic whose "ancestry" is the life-and-death struggle constitutional to all organisms and their associations.

So from the outset, the Big Bang, space has had no desires. The domain of the desirable will come later, eons later. But once in the grip of it, space cannot (ought not to) escape it, because as the author of reality it is up to space to make reality into grace. It is the bootstrap process of a meaningless "presence," the Becoming, reaching into a meaningful conclusion: the Being.

For now, space is the domain of feasibility, the How.

Anthropos, or the equivalent, as one of many, living, cosmic existent bodies, has generated within its domain the desirable. Since truth is in the making and it escapes brain's grasp, to pinpoint the desirable is close to an impossible task. But try we must. Eventually the cosmos will be guided by the brain groping for the desirable.

What is the desirable? For reality to recognize itself, know itself, reveal itself, "justify" itself, "beautify" itself, and reach the state of grace of the "Know thyself." With the astonishing nature of such a desirable goes the fundamental equity of such a domain in which all of self-documenting evolution makes all of it, particle by particle, a presence, final and participatory, beyond being only an instrument for the coinage of evolution itself.

28. Space and Memory

Space produces that which is to be memorialized. Without "remembering," the quark is at a loss for its own rules; it is no longer itself; and so it goes throughout evolution. The transition from the Becoming into Being is automatic memorizing: that which comes about is "forever." It is the indelible past, the store of all of Becoming, and it is in the form of spaceless memory. That same spaceless memory that once "vivified" is Duration, the Omega Seed.

29. Space and Cyberspace

Virtuality speaks poorly of space. In fact, virtual reality speaks of simulation and of a simulation that has no use for any kind of space mass or space energy. Per se, the simulation is imaginary (a bridge model is a three-dimensional simulation).

Virtual reality speaks directly to the brain, and it isn't even a simulacrum of the virtualized object (like the bridge model). The generator and the convenience of the image is through "space all the way."Virtual reality is the spaceless being of the virtual reality technology, once more the Techne defining the Being.

1

Crowding, the Life Maker

Statement for the First International Ecocity Conference

MARCH 20, 1990

Unfold the organism, plant or animal, into "components"; on their threads one can join moons and planets. Without "folding over," organisms cannot come about. Organisms are highly sophisticated, tight packagings of folded-over structures . . . HOLY CROWDING.

The lesson is clear and simple: Life is where crowding is immense. Death comes when the system "unfolds."

- When death supersedes life, the tree returns its complex-miniaturized self to the vast surroundings.
- At the end-death of the game, the football stadium returns its Homo-particles to diaspora.
- When the hyperorganism, the city, surrenders its makers and dwellers to the dimly alive pseudo-organism called suburbia, death comes about, a dance macabre.
- In the days of the sun's burnout, the Earth deprived of the magic of crowding will turn out to be a not-so-imposing and thoroughly silent aggregate of mineral stuff.

Only an as yet unimaginable degree of crowding might salvage life from such a fate (gods permitting or not). It will have to be the crowding of the mind in its purest form. Such mind will be the supercomplex, superminiaturized hyperlife we, the living, might or ought to be able to create. For crowding to become grace in full, time and space will have to face their own demise.

No ECO-THINKING can ignore the miracle of crowding/living. To do so is to indulge in incoherent fantasizing. Worse, it is to betray "Gaia," the opportunistic coherent game enacted by the protoconscious realm. Worse yet, it is to betray Mind, the exquisite offspring of Gaia.

THE CITY, A MIND PRODUCT, IS A CROWDING PHENOMENON.

THE CITY IS A LIFE MAKER.

Now, taking space as the base, as particle wave, as the building block, as the cornerstone, as the palace, as the city, as the planet, as the whole of reality . . . let's go! (3/23/00)

Like a rose in its densely folded bud begins to unfurl and the scent is radiated around, so life in its densely folded organism radiates acknowledgment of self and other. So life begins to unfurl from its very beginning. The unfurling or unfolding is the signal of death slowly catching up in the innards of life, the organism. As the petals of the rose begin to fall and the scent becomes pungent, so the folded makeup of the organism is more and more radiating its presence while advancing toward death. The unfolding is death coming on the forefront, the entropic phase of reality folding in its multitude, organism after organism. (11/18/93)

Getting away from the city is not only counterculture and counter-civilization, it is counterlife . . . Suburban and exurban sprawl promise the Garden of Eden and in the process deliver despair: physical absurdity and mental anguish. We must halt the folly. (3/9/99)

2

Home Sweet Home

FEBRUARY 18, 1993

Statement for New Zealand Institute of Architects (NZIA) Conference on Sustainable Communities and Green Architecture: Taupo, New Zealand, September 1993

The wrong habitat can be instrumental in the devolution of wo-mankind, besides being a dangerous encroachment on agriculture and the biosphere. (8/17/99)

As even President Clinton's otherwise encouraging speech shows, we are at last oblivious to the environmental crunch, and there is no life outside the environment. We forget or seem unable to understand that most of the troubles making life hard for many of us populating the planet are of no interest and of little consequence for the biosphere. This sizable blind spot allows us to remain on course in pursuing the American (planetary) Dream.

We are blind to the fact that the "Home Sweet Home" dream, whose embodiment in the USA is the single-family home, consumes the planet as nothing else does.

To stay with such a dream to its consummation is the likes of a death sentence for human life and for a sizable number of other species.

The know-how of wrong-doing is doubly pernicious. It accelerates the power of the wrong (hypermuda) and it subtracts intelligence and resources from the right-doing. (2/20/00)

To step into a new territory, the territory of earthly reality, on which the signpost reads, "single-family homes forbidden," will take profound self-examination, a great effort, and a relatively long incubation; since the so-called window of opportunity might be narrow (the consumption of the planet goes on at an accelerating rate), we have no time to waste. Each building permit for a single home can be read as another nail in the coffin the Dream is proposing to construct. It is a license for unnecessary destruction of another parcel of the biosphere.

Another dimension of destruction is the fostering of isolation and ego gratification the single home encourages, indeed imposes. An opaque blanket of ignorance and carelessness for all the things the single home depends on is covering suburbia, further isolating the suburbanites from reality, the reality of a stressed-out biosphere.

Justice, equity, kingdoms, democracies, republics, health, families, plagues, cancer, AIDS, violence, drugs, education, freedom, self-expression, pride, bigotry, despotism, intolerance, xenophobia, hatred, vengeance, all so critically defining the human bondages and glories, turn out to be quasi-irrelevant for the biosphere and its own well-being. But what truly confronts the biosphere is our power for transformation and the appetite it forges for consumption. The number one enemy of the biosphere, and us of it, is consumerism.

Consumerism has become, is now, the most critical aspect of the human condition. (3/18/96)

And to repeat: THE SINGLE-FAMILY HOUSE (SUBURBIA) CONSUMES THE PLANET LIKE NOTHING ELSE DOES.

The ills of society and their resolution must be cast within the environmental-survival dimension or they become for all purposes (survival-evolution) irrelevant. Even a saintly species, if voraciously consumptive, has a dim future. The food chain says loud and clear that dead saints are maggot fodder.

As a species, we developed through history a pretty successful way of generating civilizations with a modicum of thrift and self-discipline (most of them imposed by circumstances, ignorance, and ill will), translating into an involuntary stewardship of nature. Such necessity made into virtue seems to be dying—at least in the technocratic societies—and the dignity, that very dignity found in the egalitarian liberations of man itself, seems to be blurring. It is buried by an avalanche of "necessities" consumerism loves to invent.

The kitchens, the media centers, the garage in the home, and the shopping centers of suburbia iconize well the production-consumption unlimited we aspire to—the whole species, from the greediest to the most disenfranchised. Whatever the drive for such a race, the effect is most pernicious on two levels: the environmental level—nature, and the ethical level—culture.

Since the American input in the process is overwhelming all other societies, we must see the American Dream in its present form (consumption unlimited) as obsolescent, if not obsolete, and not be overly intimidated or goaded by its still-mesmerizing strength.

The most and best the USA can do for her children is to abandon ship while such an act can be carried out with a modicum of equity, tolerance, forbearance, and compassion. To wait too long might bring things to a violent shakeup with unforeseeable, perhaps even unimaginable, kinds and levels of suffering, recasting a Dark Age imprint of inequities and horrors.

With the fragility engendered by the present technological and technocratic innovations, a few unconnected breakdowns in complicated productive cycles can put large segments of the population in unsustainable situations, triggering responses dreadful to imagine. And then there is the even more threatening possibility of a collective loss of anima, the existential nausea now here and there breaking through the brittle crust of economic affluence and security.

Given the mood of the homosphere, dream breakdowns are waiting to happen, especially Utopian dreams of self-sufficiency and of "Chosen People."

And all of the above, anthropocentrically spoken as it is, is of little concern to the biosphere, Gaia, the opportunistic,

Eighty-seven percent of Americans consider themselves environmentalists. No hyper-consumerist is a good environmentalist. Not by any stretch of the imagination. (3/4/97)

The game of escalation—making ends meet: being affluent, rich, and hyper-rich—does not resonate with either equity or coherence. (10/5/98)

resourceful boss of all. Since Gaia and the food chain rooted on the planet have no ethical qualms, just probabilistic and opportunistic drives, the presence of Hominidae or mammalians or others is of no concern. Gaia is the most unconcerned reality (metaphor) we can observe. Fitting into it is our, and only our, problem.

The closing to this statement is an attempt to respond coherently to the human predicament in the environmental context, since no other context is conceivable.

Since planning and architecture and the filling up of the spaces they generate are evidently the bulkier, costlier, and matter-energy-consuming aspect of our demands on the environment, a coherent response is eminently architectural.

In this scenario, the city is the maker, suburban sprawl is the breaker. The spatially and functionally segregated house is by physical necessity the most consumption-demanding of all shelters. Emblematic of such demand is the automobile, the most gigantic and costly logistical system ever invented. Our future and the biosphere's future are locked into the urban effect and in its success. Outside of highly alive and "magnetic" cities and towns, both Homo sapiens and a biosphere inhabited by humans have no future worth considering.

The city implies Complexity and Miniaturization, the two imperatives for any form of life. Suburbia is the epitome of simplistic and gigantic agencies proposing, or rather imposing, the unraveling of the living into dissolution and death. It is a supreme consumption machine producing harsh conditions. We must choose between Utopia and reality. The choice will define the nature of our "future" (or nonfuture).

How to avoid the fateful pitfall of guiding Miniaturization (see computer technology) on a path that does not cater to technocracy is going to be the genius of the third millennium. But Miniaturization, the collected life and the less consumption oriented, is the lens for both human spirit (mind) and Gaia's health. Away from such concentration, Complexity is not possible and life/consciousness outside of Complexity is an absurd notion, as evolution well proves.

The city is a cosmic lens of sorts—it radiates consciousness, and it is in view of such a Complexity-Miniaturization mode that the city can and ought to be a radiant phenomenon. The city of light.

Since reality has no mind, reality has no compulsion to urge man to remain in its own (reality) domain.

Man, compulsion-driven, opportunistic, is too busy to enter reality's domain, too busy to listen and see her cold admonitions. The fictional reality of practical man with the clever, if peripheral, use of freedom, brotherhood, justice, democracy is discounting for brief moments, a few generations, the unhurried signals reality is posting on the way to becoming the consumerism-Utopia fiction is traveling on. (4/20/94)

Cities tend to be "biologically frugal"... (3/31/94)

3

To Reinvent the American Dream

JANUARY 12, 1993

I want to call your attention to the catastrophic nature of "Home Sweet Home" as it is cast by the American Dream—the single-family home.

Consider 6 to 10 billion people trying to achieve the American Dream. Consider the asphalt, the concrete, the garages, the basements, the attics, the storerooms, the back porches. Consider the back yards and the side yards. Consider 4 billion or more automobiles. Would a future space traveler view our society as the "landfill" species, in which we were the fill, as the "subdump" society?

The agony of our society, the "luckiest in the world," is just beginning—the sadder because our patrimony of intelligence, knowledge, technology, and drive is truly magnificent. Our leaders—economists, financial wizards, politicians, scientists, humanists, philosophers, entrepreneurs, media gurus—are ignoring the basic problem: Our primary social goal, the American Dream, is inconsistent with the dramatically burgeoning population of Spaceship Earth.

More than three decades spent in researching, experimenting with, and proposing an alternative to the impending catastrophe legitimizes, in my mind, my call to mankind to wake up, to consider where it is we want to be before we begin our journey there. We must redefine the American Dream before we rebuild the infrastructure on which it is based.

There is an ethical consideration here, too. Americans cannot much longer protect their power to consume five times their share of planet Earth's resources. Unlimited consumption—greed—is ultimately catastrophe unlimited. We, gravity-laden, thermodynamically disciplined, happiness-hungry, must choose whether we wish to continue to purchase our pleasure with the torment of our children and future generations.

Prevailing in much of the human world is the American Dream enchantment. Unless the American Dream reforms itself and becomes a truly planetary dream, we are moving into catastrophic times. Only a lean alternative to the American Dream can save us from it. (10/3/99)

If it could be agreed upon that life without an end, a goal, a conclusion, is life bleeding meaning away, then the Space Hypothesis could be one among alternatives. I consider it the most lean and the most formidable (form giver). (3/21/00)

4

The Forest as Intent

DECEMBER 6, 1993

Statement in A Taliesin Legacy: The Architecture of Frank Lloyd Wright's Apprentices, *by Tobias Guggenheimer.*

If going along with my hypothesis that reality is space in metamorphosis is relatively reasonable, then architecture, space defining itself as shelter to life, seems to have a sort of one-up among the number of domains that space is generating. *Something like* space in its nakedness directly, without mediation, and operational. (10/7/99)

Reality is in constant metamorphosis. One tiny fraction of such metamorphosis is the transformation generating from our planning, our habitat, our architecture. Tiny in the scheme of things, but very massive for Homo sapiens.

It seems to be second nature for architects to chase after "orchids," the beautiful exotic flowers of their imagination. But it is the good fortune of life that more substantive phenomena are sustaining life's metamorphosis: the forests. Forests do not appeal to planners(?), to architects, to designers in general.

Defoliation for the sake of orchids seems to be the involuntary fixation of architects, a pernicious inclination at last: beautiful buildings, on some rare occasions, among the devastation of disemboweled cityscapes (the forests of the mind) and lost in the mindless suburbias. The city even in its own decadence remains the mind to which suburbia parasitically plugs in.

Frank Lloyd Wright produced splendid orchids, exotic flowers of great virtue. As for the forest . . . he mistook Broadacre City for a (motorized) forest. A critical error, a pernicious archetype opening the gates to and soliciting the consumption-gratification unlimited of today.

My work has been, is, to oppose, to arrest, to see the demise of suburbia of which Broadacre City has been the lure.

THE FOREST IS THE SUBJECT OF MY INTENT.

Moving in the wrong alley means that the more sophistication, scholarship, and vision is poured in, the worse the situation becomes. It is the law of the Better Kind of Wrongness (BKW).

Think of the breakup of the city. We chose the metastasis of the sub-exurbia. The initial dreariness, Levittown incarnate, was picked up by Frank Lloyd Wright and glamorized in his Broadacre City. Fifty or so years later the BKW is engulfing peoples and environments at a gargantuan rate. (3/27/97)

The Urban Effect is at the core of all living systems, old and new, elementary and complex.

The Urban Effect is the fruit of Miniaturization, Complexification, Duration: MCD.

The MCD paradigm binds the onset of Complexity to the onset of Miniaturization (the space-time dwindling). The twin work of C and M generates at last consciousness, that which space-time no longer controls, Duration, "where" and "when" the fertile ground of transcendence becomes accessible.

5

Eight Variations on the Two Suns Arcology

(with Some Observations about Two of Them: Phoenix/Phoenix Urban Village and San Francisco Presidio)

NOVEMBER 1991–MAY 1993

1. Arcosanti 2000: the design for the third phase of Arcosanti in central Arizona. The apse variation will have a population of about two thousand people.
2. Phoenix/Phoenix Urban Village: a proposal to the City of Phoenix for an "urban village" in the center of the city with a population of about three thousand people. Emphasis on agricultural aspects and equinox celebrations.
3. Expo 2000: a proposal to the City of Hannover, Germany, for the international exposition Expo 2000, with a population of about eight thousand people: the deemphasis of national pavilions with an emphasis on vocational communities.
4. Venice on the Rocks (Sonora, Mexico): a proposal for the development in Sonora of a town with a population of about twelve thousand people, connected to the superconductivity-maglev (magnetic levitation) superspeed "trains" extending the length of Mexico through Arizona and beyond.
5. Bering-Diomede: a proposal for a town cut into the granite of Little Diomede Island in the Bering Strait. The project would be one of the features of the superconductivity-maglev line connecting the Siberian land mass to the Canadian-Alaskan land mass and reaching the southern tip of Argentina on one side and the tip of Africa on the other.
6. Denver Stapleton: a proposal for the ex-Stapleton Airport. The fifteen thousand or so residents would be the main labor, research, and urban activities pool for that section of Denver, Colorado.
7. San Francisco Presidio: a proposal for collecting the Presidio residents and guest-visitors in an urban village designed to be sensitized to the environment and climate, with a population of six to ten thousand people. The urban village has full-fledged facilities for congresses, exhibitions, celebrations, etc.
8. Sun Dial: a proposal for a floating town of about seven thousand people. The main activities are agriculture,

The plasticity of a "theory" is a sign of its own vitality. The plasticity of space is its own validation. (4/24/00)

To use the analogy of the grapefruit as a first-generation arcology and half the grapefruit as a second-generation arcology is a quick way to represent the act of opening up an object to an outside presence, the sun in this case. (4/11/00)

The "incarnation" of space we call energy has a most powerful representative in the sun. The sun energy has generated what the planet is, including life in it. How can habitat make use of it and of its presence? How can we harness its energy and celebrate its methodical, unrelenting protracted presence? If ever the notion of godliness were to be attributed to anything, the sun would be a prime candidate (the solar system). (2/4/00)

Building Factors
Structure
Function
Light, natural and artificial
Volume
Comfort
The thermal factor
Esthetics
Environment
Materials
Compatibility

There will never be a building able to conform to the compatibility factor, and perhaps rightfully so. What some buildings have and express is the magical factor where resolution takes the tangible shape of transcendence. For a reality on the road to self-sensitization, the magic factor is significant.

In those buildings, intelligent or not, the space they are made of has reconfigured itself into an esthetic objectification (not an object, but a performing presence) with beaches and valleys of coherence sighing, grumbling, silent, resting and arresting, disquieting, comforting . . .

With the modalities implicit in all those factors, formulas have poor performance rates. Among the visiting formulas are the well-worn form-follows-function and its quarantined twin, function-follows-form.
(3/22/99)

fisheries, marine sciences, and tourism. The town-barge rotates to follow the sun's trajectory.

Premises

A. The Apse Effect

The apses: The architectural form of the apse is a quarter of a sphere skin on top (or not) of a half-cylinder of the same diameter. "My" apses, with the convexity turned toward the outside, are a habitat per se, where the skin has doubled to make for an interspace 10 meters or more in depth. Or they are also part of a habitat developed behind the convexity of the apse. Persian architecture offers the closest approximation to such apses.

A morphological characteristic of the apse is the focusing of sound coming from the outside or the radiating of sound coming from its center. This characteristic I transpose by substituting people for sound waves, while at the same time letting the people-wave penetrate through the apse walls by way of portals. So the convergence or divergence of people moving through the lens of the apse makes the apse into a true-to-form threshold. But this is only the beginning of the story.

The Apse Effect: To the above connective function is added the sanctioning-characterizing aspect. While acting to focus peoples and things in motion, the apse, opened to the south, acts also as a device selective of the sun's radiations projected within its architectural boundaries. It is easy to see that, according to the seasonal changes of the sun's trajectory, the south-exposed apse will accept, deep inside its "territory," the benign, welcome winter radiation while turning away such radiation more and more as the seasons change from winter to spring and to summer, when Father Sun mutates into Stepfather Furnace.

The apse is an effective passive "sun machine." Within its boundaries, it generates a sunny ground for work, play, repose, socializing during the winter months while it offers a shaded ground in the hot summer season—shade against the cool backdrop of the apse structure itself. The American Indian cliff-dwellers knew a thing or two about the apse effect, and in environmental dimension.

B. The Apse and Exedra

What follows is not an architectural manifesto; neither is it intended to be the "truth" throwing its weight around. It is what I think to be an effective analogy that strongly marks the subject matter—an analogy to the reproduction imperative of the origin becoming "eros" and investing with its power the social and cultural patterns of society: the lingam expressing

itself in the skyscraper-slab; the womb expressing itself in the apse-cradle; the petri dish expressing itself in the (suburban) diaspora.

The lingam-erection has been in all cultures, up to the skyscraper of today. As antidote and antithesis, there has been from the very beginning the low profile of the diaspora, the oldest of all human settlements. The lingam is a typical one-sided challenge that will "never" be responded to. Indifference (reality) is the continuum the lingam has no impregnative power upon.

The diaspora, a pretty "unnatural" phenomenon, is the chatting and quibbling of the sightless and the listless, given to its own inescapably parochialized anguish.

In the curving upon itself of the apse, one can trace a recognition of the innerness characteristic of the living combined with the broadcasting power such living is endowed with. The dialogue with itself is punctuated by the voices emanating from its focus, the same focus that collects the "noises" of the impinging reality. Thus the apse is a focusing with the double faculty of collector and radiator, depending from where the energy comes. So does the womb: Now it receives, now it gives. The lingam only "gives."

It is a case of broadcasting (skyscraper) versus dialogue (apse). The transparent skin of the skyscraper hides its inner workings and cannot conceal its fortress-defensiveness "against" the outside. The hostility of the skyscraper toward the "ants" crowding at its feet is well documented, well advertised, and well reciprocated by the ants themselves.

In the apse, the inner and outer distinction is mediated by the space that partakes of both. As the physical center of gravity falls outside the physical container of it, so the "performance" of the apse is extended in the vicinity of this center of gravity (or the vertical projection of it).

Intermediately between the skyscraper and the apse is the slab. If the skyscraper is cut in two and the two halves are put side-by-side, one has the slab. The slab suffers from the same "estrangement" afflicting the tower: a confrontation posture vis-à-vis the Urban Effect, which contributes to the unease of the citizens.

There are five other unique offerings of the apse:

1. Its interplay with the sun and light. The edge of the apse profile generates a constantly changing sun-shade geometry upon the concave skin of the apse and cylinder: limited shadow in winter, deep and large shadows in summer in daily cycles that replicate themselves only twice a year ("symmetrically" with the equinox).
2. The apse becomes thus also an elegant sundial; this can be emphasized by way of signposts marked on the

concave surfaces.

3. The exterior, convex surface of the apse can be made into a biological energy apron, if the terracing marking the floors is made into green cells, that is, each planted in deciduous trees and vegetables. For arid climates, such a convex, biological energy apron can also be an effective coolant by way of atomized water forming a continuous blanket of down-draining, cool, misted air (see specifically Arcosanti 2000).
4. The respect of sun rights consequent to the apse profiles.
5. The anchorage of sunscreens or membranes, a garment architecture by definition.

From "The Third Generation Arcology" (January 1982):

As the "slab" has been for some time the basic model for the international corporate-technocratic image for buildings, so we propose the "apse" (section of a sphere) as the generating structure for the "post-slab" habitat. The choice of the apse is not arbitrary; it is the result of a prior process of research and development of urban form undertaken by the Cosanti Foundation: The Two Suns Arcology.

One might envision a process in which the "slab" has been warped to envelop space and focus its strength. The "slab" becomes the "apse." In the process, it has also become an anchoring structure for the deployment of transparent or translucent membranes and shading devices. The membranes outline, with the apse, volumes of space whose climate is a modification of the out-of-doors. Temperature, moisture, and air circulation are altered as needed. The greenhouse effect, the chimney effect, and the heat-sink effect play active parts in the definition of the physical climate. The apse form is a passive sun device when oriented to the south.

This metamorphosis from "slab" to "apse" is the central step that provides the conditions necessary for the development of a new habitat. This three-dimensional landscape with its own controllable climate as defined abstractly by the warpings of the "slab" can be, by way of diverse spatial and functional transformations, adapted to purposes as varied as straightforward hospitality (a hotel) or a residential shelter integrated with a variety of other functions. The transformations of the prototype are accomplished by vertical and horizontal rotations and dislocations, scale and size changes, orientation and morphological changes, and the interjection of additional grids. The exedra is one such transformation. The apse-exedra is a feminine alternative in the lingam masculine domain.

C. Garment Architecture

The structures our society has been building are based on climate rigidity—that is, dependence on total air-conditioning of buildings. This is a sledgehammer response to the vagaries, the subtleties, and the pleasures of climate variations.

Garment architecture is what the words say: an architecture that is not a climate fortress but a climate "intercessor-modifier" working in association with air-conditioning technology of a more subtle and less costly nature. The structures dress according to the season, like people and many vegetable and animal species do. After all, physical comfort does not mean physical dullness (death) if and when the body is alert and lively. This confusion is the main fault of our climate-control wizardry.

The equinoxes will be dates for two major celebrations of Double Exedra, the times when the urban village changes garments, the spring equinox as the trigger-date when the transparent garments will be taken down and the shading garment will be mounted in place. At fall equinox, the reverse will happen: the shading garments taken down (and put up for bids) and the transparent garments mounted in their place.

As a bio-mirror to those technical transformations will be the cycle of deciduous fruit trees: sprouting shade in the spring, divesting themselves of leaves to let sun in in the fall.

The annual recycling of garments (with bidding ceremonies) will make improvements part of the process and will afford an ever-changing palette of design and color (possibly via annual competitions). This winterizing and summerizing will be substantive celebrations in the field of function and in the field of esthetics.

D. The Feminine Alternative

The Kennedy Space Center is an ejaculation plant. The sky is "my" womb! it proclaims. The "call" seems to be coming from an immense and immensely hostile womb-reality. Is it perhaps in the mode of rape that the male-dominated species is targeting the cosmos? Familiar? Nature abhors a vacuum, the cosmos, such an expectant, empty womb.

Where is the impregnation, and of whom or . . . what?

It smacks a little of a gay-male initiative, constitutionally sterile, at least to the day when an embryo is attached to a moon, a planet, an asteroid placenta.

From that moment on, the sky would be the (unlimited) limit. For the time being, the womb remains sterile because the gametes' intrusions are too weak and simplistic, the Complexity-Miniaturization endowments still insufficient (more like a loose gun in the shopping center seeking meaning while delivering death).

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The womb is immense, forbidding, black, hostile . . . a critical mass-temperature-pressure has to be conjured up, and that, by the way, may well be the ultimate imperative for life, the whole of it.

While the lingam's orgasms are succeeding one another, big and small, with all the dramas of arousal, erection, orgasmic (orgasmo-cosmic?), on rush we; the family of man-woman (wo-man) must go on in our survival-metamorphosis task. But our male-dominated species has been erecting lingams for millennia, the space program as the latest manifestation of that obsession. The obsession of all reproductive, bisexual lives. But lingams with no effective (affective) receptacles will turn out to be pathetic.

Architecturally, we propose an effective-affective receptacle in the apse-exedra in contrast and in the taming of the pathetic, lonesome skyscraper lingam. The wombs "Mother Nature" has invented throughout evolution are of the opportunistic kind, a sort of pre-neo-Darwinistic, prematerialistic, protocapitalistic maternity. The womb that consciousness is in the process of inventing must enrich reality with a new dimension: the equity-esthetic dimension: Equitable toward life in general and toward human life in particular. Esthetic as a transfiguration of nature's beauty into "loving-grace."

We are at last dealing with a purely human invention: "The Love Project of Consciousness." Arcology is the latest modest and fragmentary offering of the Love Project, a postopportunistic (not antiopportunistic) offering.

The receptacle-womb offering is some sort of a rescue offering. Who are the victimizers? Who are the victims?

> The victimizers: (1) the nature of reality, and (2) the materialism of mankind (consumption unlimited as main component).
> The victims: peoples, societies, cultures, animals, plants.
> The rescuer: In physical terms, the rescuer is the adoption of those structures that unequivocally propose the feminine receptacle forms that invite, nurture, and enhance the complementarity of male-female, single community, work and play, knowledge and coherence, the essential, physical ingredient for sustainability and worth, the Love Project of above.

E. The American Indian Connection

The American Indian culture has been on hold for about three hundred years, thanks to the genocidal actions of the European "discoverers" and then the quarantine with no end in sight that the survivors were and are boxed into (the never-never land of concrete blocks, corrugated roofs, and pick-up trucks). A creeping "business as usual" will never do for them.

Their makeup and their gifts are not resonant in the white mindset.

But what could restart the American Indian engine would be a robust graft on the old trunk, a young but radical shoot rooted in their history.

This young, healthy shoot would begin to grow from the point when the European calamity descended upon them, when they had the Hogans, the Mesa Verdes, the cliff dwellers, the Casa Blancas . . . On such strong trunks they could build new towns and a new culture.

The apse-exedra is the archetypical frame within which they could develop their own new communities. In the apse-exedra, there is not so much subordination to nature, evident in the "old trunk" works, but such insubordination is largely compensated for by the intentional dependence on the astronomical-climatic reality that turns necessity into a virtue.

Contamination?! Another intrusion of white despotism? Human history is a long, glorious, tragic history of "contaminations"! If contamination can equate with genocide in the most unfortunate of circumstances, in the most fortunate it can be splendid cross-fertilization. Sometimes it takes two to make a baby.

Phoenix/Phoenix Urban Village: The Double-Exedra Proposal

1

Phoenix/Phoenix is made of two exedras of about twenty-five to thirty double-story units and public facilities. The exedras are concentric, open to the south, and defining an internal curved space as the main mall and public space.

The discipline intrinsic to exedra morphology is the one that is mindful of the sun cycles and of the climate. And it wants to be alert to its trajectory, how it can be viewed, framed, felt, etc. (5/20/93)

Exedra South Side: Energy Apron

The grounds under and adjacent to the energy apron—a vast greenhouse of diverse uses—are for gardens, promenades, encounter areas, open markets. Some of the energy trapped is conveyed into the exedras-interfaces (winter climate). Those grounds are, on occasion, for: events, concerts, rallies, light-sound shows, festivals, moon walks, ceremonies, fairs, theater, special anniversaries, etc.

At the center of the energy apron is to be constructed a one-of-a-kind "Indian Structure," echoing the cliff-dweller towns to which the Double Exedra Proposal is indebted.

Exedra North Side: Energy Mantle (a quilt of green canopies)

An orchard originating at ground level is draped on the "back" of the two exedras, with one or two fruit trees on each

large terrace dotting the structures from extreme east to extreme west (via north). Each terrace produces fruits, vegetables, flowers: x percent for terrace residents, x for Double Exedra markets, and x percent for charitable organizations.

The Energy Mantle is operated professionally—a crew of about ten gardeners and ten assistants can "visit" each terrace once a month and converse with the resident while working on the needs at hand. For showing and harvesting time, the visits might be intensified. In November, December, and January, the trees might need less supervision. Given the different position and orientation of each terrace (nested upon the spherical "back" of the exedras), it is possible to contemplate extended harvest schedules, matched to market demands.

The "rewards" from the Energy Mantle:

- products: fruits, vegetables, flowers;
- one thousand or so green terraces for the pleasure of the residents;
- a summer air-cooling quilt in the form of a down-draft cascade of air cooled by atomized water (as part of the daily watering procedure) on lower terraces and on the town malls;
- multiple use of urban land in a high-density mode of people and plants;
- the "symbiotic" coexistence of city dwellers with greenery, making them also gardeners, the greening of the city going beyond the pleasurable and desired presence of growing things within the urban setting;
- national and international attention generated by the unique environmental features of Double Exedra.

The synergistic combination and the focality of the activities developing in the Double Exedra, the climate transformations via the apse effect and others—the Energy Apron (warming up) and the Energy Mantle (cooling down)—will generate an intense social-cultural milieu sustained by the market and economic enterprises of the town (urban village). This rich atmosphere will also generate national and international participation in the life of the town. Most desirable and "easily" achievable will be a graceful balance between the residential, the commercial, the horticultural, the social, the cultural event-full life of Double Exedra.

The exedra becomes an apse when it curves itself not only horizontally but also vertically from a two-dimensional embrace to a three-dimensional one. There is where a certain magic is intrinsic to the exedra-apse. A belonging while acting in it. The conviviality ingredient. (3/1/00)

The Urban Village will be a true calling card for Phoenix and the State of Arizona with a legitimacy that timeliness makes even more remarkable: how to reconcile Homo faber with the biosphere without demeaning either one.

The "universal" applicability of the ideas presented (archetypal) and the formal-functional applicability to diverse geographic conditions will make the Double Exedra a subject

for studies that would preferably be developed on-site with all the attendant support facilities. Such outside interest could generate an urban ecology institute, much needed, especially for arid lands applications.

I am interested in producing something the citizens might find pleasure and pride in because they enjoy it and like to be with it; something that is humanly coherent and also environmentally suggestive; that is not a financial burden to its citizens; that does not foster segregation, zoning, and dereliction; and that fits the physical climate of Phoenix.

If the proposal were to "send you," you politicos, financiers, developers, and citizens will find the best way, together, to implement it. It will put Phoenix on the international map, it will bring visitors in droves (with their charge cards), it will make Phoenicians slightly more optimistic about their own unhappy city, and last but not least, it will give to the Indian Nations something to "toss around" for their own future.

Notes: If this project were to be realized, it would open at the end of this decade. By then, optimistically speaking, the driving force of civility and equity will imprint more forcefully our doings. The trueness of both will depend on a coherent relation with the assets and limitations of our planet's reality.

It is in view of such a triad—civility, equity, and sustainability—that Double Exedra is conceived. This, among other things, entails a rejection of conceptual drabness, of pretentiousness, of callousness. Most of all, Double Exedra is a copresence and interaction of a true urban setting with a no-less-true agricultural undertaking. With the climate modifications generated by the morphology of the structures (see garment architecture), productivity will be complemented by festive, colorful, educational, symbolic manifestations.

There would be two main divisions—the urban division and the "agricultural" division—and a connective agency bridging the two.

2

Four Critical Elements

1. The identity of place and the importance of social, cultural, commercial focusing—see the classic example of the Piazza del Duomo in Venice.
2. The alternative to structural climate rigidity.
3. The symbiotic overlapping of Urban Effect and agricultural productivity with the already mentioned "rewards."
4. The Urban Effect per se as the only real antidote to the breakdown of society and environment fostered by the suburban materialistic delusion. By now the subur-

The multiple exedra arcology is an archetype. How modest or "immodest" history will tell. Two things are on the side of the exedra-shell archetype. One is its natural answer to the climate's unpredictable excesses—tornadoes, hurricane, floods. Another is the coming ice age menace and the intrinsic cruelty it will act out on life. (7/10/93)

That Phoenix is the theater of about three hundred murders a year is due to the reptilian side of our brain, and the impact on the biosphere is irrelevant. But that we add one thousand or so new single family houses to the exurban landscape of Phoenix and we do it by way of our brain cortex, that is really pernicious and environmentally destructive. (6/14/99)

For a sun worshipper and non-believer like me, the desert has holding power, and its open vistas offer beauty and potential that, irony of ironies, the open vistas of the ocean and water by the cubic mile are less able to offer . . .

One impulse for the desert habitat designer is to drop in air-conditioned boxes for living, as if dealing with outer space, inimical and menacing. A cowardly, myopic, wasteful, and sense-depriving option. (9/27/99)

ban dream is turning out to be the worst nightmare ever devised by the human mind because it is the nemesis of both the biosphere's well-being and the human ascent.

The isolation of the family in the suburban or agricultural home demands compensation for the social disassociation and the consequent loneliness. Compensation takes the form of new social beings, the children, who provide the experience of interaction. Demographic pressure is directly proportional to the social-cultural isolation of peoples and families. (3/31/94)

The sailor of the tall ships changes the garments of his ship many times a day to stay in the best synergy with the wind and the destination. The "sailor" of garment architecture limits his intervention mostly, if not exclusively, to twice a year: spring equinox and fall equinox. (10/30/94)

Uncommon Features

1. The Equinox International Festivals: The highlights would be a change of garments, with two main projects to be developed by yearly international competitors:
   - the exedra roof, sun-shade awning;
   - the two-terraced energy apron, sun-shade awnings.

   For the spring equinox, the installation of the new shade awnings and the opening of the competition for next spring season's shades. The competition would take into account the technical innovations dictated by the preceding (spring) season.
2. The fall equinox with a similar program, but with the fall-winter transparent awnings substituting the shading ones of the spring-summer. For both occasions, the works of the garments themselves and the related activities-celebrations would be recorded for historical documentation and international public relations. One related event would be the documentation of the equinox events throughout history with rich archaeological and anthropological chronicles.
3. The "Aqueduct" Works: A water intake upstream of the canal can be foreseen that via an "aqueduct" brings the waterworks water at the Double Exedra site to be redischarged downstream in the canal. The water loop into Double Exedra will measure about two kilometers and will cut through landscaping and structures, generating ponds and other waterworks. The Water Wall is a long wall partially washed by cascading water and reflected by the stream parallel to it. The wall penetrates Double Exedra and reaches the north orchards before discharging back into the canal.
4. The Cypress Panoramic Promenade: It originates where the Water Wall begins. It starts as a long ramp reaching the west side of the large exedra at its tenth floor and wraps it along the north side to the east end of it.

   From the north side, similar promenades climb through the orchards, reaching the upper rings of the large and small exedra in a not-fully-symmetrical pattern. The trees for those promenades will be Arizona Cypress alternating with Italian Cypress.
5. The Billowing Fields: Areas of landscaping are reserved for special cultures:
   - The Sunset Rice Paddies are a stretch of ground

sloping down from west to east in narrow terraces seasonally flooded for rice culture. The water surface will shimmer with reflections of the afternoon sun on the Double Exedra structures.
- The flower fields are elongated strips of flower beds and greenery in narrow strips of gently billowing grounds, making them partially visible from all directions. The colors and textures would be in constant transformation by seasonal transplants.

Space. A crocodile is space, a butterfly is space, a galaxy is space, a sonnet is space . . . (reality) is space. (3/20/00)

San Francisco Presidio, May 1993

1

San Francisco suffers from two maladies common to most American cities. For one, "Your backyard is my living room vista" or our back alleys, or our parking lots, or our junkyards . . . The other is the lingam-male genitalia display historically grounded in Egypt, China, India . . . Italy, the city centers in full erection display.

"Vistas" is a singular patrimony of San Francisco. The suburban sprawl does a commendable job in space disposing of the golden-egg-laying goose: all those mind-inspiring vistas. For the other, the popping of guns and semiautomatics are now part of the city's sound track in parallel to the lingam-abstract popping semen toward the mute void of space.

A pathetic display of sterile insemination into space which, as we know, demands for life the opposite intrusion: the intrusion of "eggs and placentas" within which life, screened from lethal space, might flourish.

Skyscrapers, the impotence of misdirected potency. What we must spew into space is not naked half semen (sperms) but placenta and eggs. (5/23/95)

The one speaks of laid-down flat gigantism, with all the flaws of sclerosis, gridlock, incalculable waste, pollution, frustration, etc., etc.

The other speaks of misplaced prowess and power, the naked erection ad eternum. From opposite directions, the horizontal and the vertical, they came to wring the life out of the civilizing Urban Effect by making waste of the urbanscape. Both are symptomatic, in fact emblematic, of mindsets whose fruits are the frightful problems of nonsustainability, inequity, and lack of excellence.

It is Suburbia Stupid! It kills the city. It kills the environment. It kills civilization. It kills the "future." It kills the underprivileged. *It is Suburbia Stupid!* It kills Religion (*religio* = binding). It kills species galore. (2/19/95)

2

The Urban Village Proposition

This proposal is not about an unobtrusive, camouflaged, "gradual" transformation of a breaking-down cityscape. I am proposing the intentional, coherent conversion of the hostile pseudomasculine, collective-corporate erection common to so many cities and of the all-consuming, one-family, one-house Utopia of the American Dream (on its way to becoming

culprit number one in the demise of the biosphere)—of converting them into the feminine, nurturing cityscape; enclosures of spaces, modifiers of climate for people and their institutions: living, learning, working, producing, marketing, socializing, civilizing . . .

Remaining with the biological metaphor, try to imagine the difference between the hermetic clenched fists of the skyscrapers (many of them) and the two hands, one cuddling the other offering—offering the urban richness, a precious instrument for oneself and for others. Condom (the curtain wall) or not, the lingam-clenched fist is naked and victim of the climate vagaries, therefore, the relentless pumping into it of energy via air-conditioning.

Since the sky, via the sun, delivers light and heat but also the cold radiation of deep space, the two hands rotate differently: one to become cradlelike, the other shieldlike. Or, more directly, the palms of both take positions and forms that respond coherently to the climate cycles (which are also defining a north-south plane of symmetry). This positioning is strongly influenced by the daily cycle of the sun. Moving from biology to architecture, the "structure" is a multiblade exedra open to the south.

The Urban Village is then the architectural translation of the coming together of the heterogeneous dimensions of climate, topography, environmental coherence, and the specifically human dimension—performance of economy, market, production in the function of living, learning, working, socializing, civilizing.

It is difficult to find nurturing among predators. The male of the species well knows that, notwithstanding the new role humans are eagerly forcing upon themselves. So nature witnesses the predator reaching for the sky. It is a somewhat pathetic spectacle as long as the feminine nurturing side of life is kept in the dungeon. Then comes the exedra morphology, an application of the apse effect, the nurturing form. (5/20/93)

The friendly winter sunshine penetrates deep into the structure and the public spaces. The unfriendly summer sunshine is stopped by the outer edge of the structure from entering into the inner public spaces. (4/26/99)

3

The Presidio Urban Village

The Presidio is an island privileged in space-time, in climate, sea, and history. It is part of the San Francisco magic and, providentially, relatively independent from the speculation vise. It is a place for the millennium.

I propose an urban village for six to ten thousand residents and guests. Mindful of the many facets of the environmental crisis, the structure assumes a climate-oriented insertion on the site and a climate-sensitive display of its structure.

The three concentric exedras form a sequence of structures and the spaces they envelop. Those spaces have a modified climate but they are not sealed off from the outside. Those spaces are essentially the societal, interactive locus for residents and guests and are provided with the commercial, hosting, cultural, informative, celebrative functions that make the Urban Village (give it its Urban Effect). The upper levels are residential, the intermediate levels are for guests, the lower and ground levels for the mentioned Urban Effect.

6

Arcosanti: "A Dream Made Reality"?

JULY 29, 1992, ASOCRETO, COLOMBIA

Contrary to the general notion that I am a dreamer, I say in full confidence that I am a realist, realistic about a reality that is not the one fantasized by the do-gooders of the "New Age," steered by Deep Ecologists and Eco-theologians, the "Mother Nature" lovers.

"I love nature," they say: true in some instances.

"Nature loves me," they say: false in all circumstances.

Love is a strictly human invention, a truly magnificent invention. Under the spell of such an invention the human species is engaged in the Love Project.

But nature minus consciousness is a protoloving domain. It is an opportunistic realm (the living reality). If I were a dreamer, I would have to dream in the context of an unloving nature. Not a speck of benevolence in it.

I rather strive to understand Stepmother Nature and find a coherent path that spells congruence (as much as it is possible) with a nature that generated us in full indifference to our humanness. I deem it necessary to be unequivocal about the nature of my relationship with reality because it is a relationship that has the importance of a biological imprint: like the ducklings following the very first moving thing they come in contact with.

My relationship with nature is one of awe, not one of submission or resignation, nor one that expects love in return. As I said above, I do not see any sign of love in reality, just a probabilistic (mineral), opportunistic (organic) duet of prodigious splendor and frightful violence.

The emergence of consciousness from reality is a true emergence—not a concession, a gift, a mandate, a predestination, a loving pneuma that reality delivers to consciousness. Reality couldn't care less (it has no care "in the world"). Love is a one-way street. It goes from consciousness toward nature with no reciprocity: from nature to consciousness. Protoconscious nature is constitutionally unloving. Nature inclusive of consciousness is nature "surprised" but not moved by the love process generating in "her."

By the way, living nature (the food chain) goes about its opportunistic business not unlike the "unadulterated capitalist" goes about its own (social Darwinism). It is the good fortune of Homo sapiens not to produce, ever, any unadulterated capitalist.

Many people come to Arcosanti to find Utopia. Not to find it discourages them. Sorry folks, you got the wrong notion to start with. (5/20/99)

The "Love Project" we humans are engaged in is one of the astonishing novelties of evolution. Opportunism and love are very much uneasy partners in the pursuit of transcendence, and transcendence or die is a clear warning embedded at the very core of a self-transforming reality, the reality we are in. (6/19/97)

On the fully arbitrary notion of Mother Nature we have entrenched ourselves from the very beginning in an animistic domain that is a pure fantasy about reality. This dysfunction, a clear case of otherworldliness, spiraling faster and faster toward the "central black hole" of nothingness, has been and is smoking darkly the whole self-portrait of us and nature. (8/7/93)

So what is Arcosanti?

It is a modest attempt at developing a habitat that would be sufficiently persuasive for people to understand and endorse "frugality" not as a necessary evil but as a necessity fully capable of becoming a virtue. A necessity because the planet is "suffering" from the profligate consumption-unlimited pursuit of "happiness." A virtue because living reality, us in it, is the fruit of eons-long stumbling around that will eventually generate those agencies that would in turn bring about consciousness (via frugality). To make it very, very short: Can anyone conceive of any phenomenon even dimly paralleling the immense frugality of a performing human brain?

Forty billion tons of one spoonful of matter of a neutron star whisper of demented proximity-denseness. Three pounds of brain matter sing a radiance of thoughtfulness (Miniaturization-Complexity). (2/8/94)

Without the coming together of elementary particles in ways immensely informative, cooperative, interactive, pedagogical, without such an implosion of space-time-mass-energy, no brain is conceivable (carbon or silicon based).

That our psyche (followed by deeds) has made a 180-degree turnabout and embraced the profligate par excellence, suburbia, is a sign of the embryonic phase of development we are in. Come to think of it, materialism is compounded with the same basic error that magic and animism are awash in: the notion of getting something we like, and for real, from that which is not that which we think it to be, as a thousand mediocre instrumental ensembles blasting away trying to get to the stellar level of a piano prelude by Debussy.

It is ironic that we, the transcendental agency par excellence, must be admonished by protohuman life that coherence —that is, realism—is at the end of a different tunnel, the tunnel instrumentalized on how to ephemeralize matter into Mind!

Mind, as the rare and fragile occasion where reality finds itself becoming conscious of itself. Mind, the unwanted offspring of matter, that very matter that space and time transform unceasingly (via Techne). The only way to go beyond the expedient is to make the contingent into the universal; that is, by the way, what the esthetic is and does. (11/22/95)

The self-organizing (living) system is a lean presence. It wants (and needs) a surrounding that best reflects its nature: a lean habitat. (5/15/99)

So it is the task of Arcosanti to remind ourselves, in a crude manner, that nothing is more apt to salvage our bodies and our souls—do it "radiantly" in one with returning to nature a degree of health and exuberance—than the restoration of those values, leanness, excellence, which are also the catalysts in the process of matter becoming conscious (Mind). Let's remember that lean cultures—civilizations—are the only rite of passage from environmental devastation and cultural squalor (see suburbia) to environmental sanity and cultural radiance.

As for being practical, rule number one is the practice of realism. Under such a self-evident rule the USA, and to a lesser degree the rest of the technocratic societies, has chosen to embark on a fateful binge of impracticality, that is, antirealism. The time has come to reverse the trend if we want to move from fate, an animistic agency by the way, into a possible self-generating destiny, an evolutionary notion by the way.

The fate of life is annihilation courtesy of "Mother"

Nature (on this planet, the annihilation by the sun, "Our Father.") She "giveth and taketh away." The destiny of consciousness could be the avoidance of such a nemesis by the hand of transcendence (via evolution). Only Mind can ever dream of such an exploit: to make reality Mindful!

To stay with (return to) nature, as the New Age proposes, with or without all the flourishes of the lunatic fringes, is to remain "animal." Animism is the "discipline" of such Mind-betraying agitation. To animate matter is a far different task: it is the task of Mind. The animistic dream bound to a misread reality is idle if not pernicious.

I count in not having part in it.

My intentions have been to envision a fragment of a possible reality coherently acting within such reality—the one we come from, partake in, and help to generate (or destroy). Given the awesome nature of such reality, the task can be truly exhilarating. I would hope that a pale reflection of such "fire" might be noticed in my work.

The thirty-something Aquarian is quaint and moldy, her eyes never really opened to the savage fury of reality. (1/2/96)

The emerging-submerging is creation going on, unbroken and unstoppable. Life and consciousness in it might eventually put a leash on its fury and guide it toward meaningfulness. This is an animation process, the opposite, by the way, of the freeze the animistic model proposes. The all there is of animism, its gods, would do if it were not a delusion of parochial, fearful minds. (1/31/99)

7

Survival in a Hostile Environment

Statement for American Institute of Architects, Desert Forum

OCTOBER 6, 1993

Being among the few that do not believe in a loving creator or a Mother Nature, I resonate, perhaps erroneously, with the theme of the conference. I expand the hostile mode from the desert to the cosmos, inclusive of the whole biosphere. INDIFFERENT is a better term than HOSTILE.

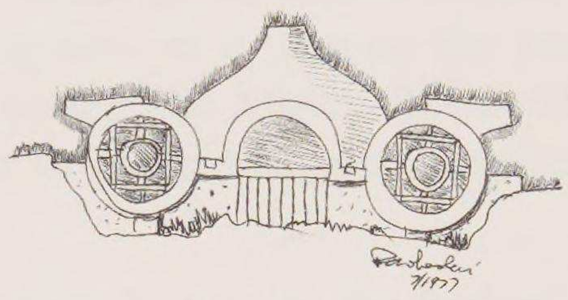
I also definitely believe that survival is necessary but not sufficient. Survival without the grace of an ongoing metamorphosis is a grim prospect. The business as usual of this country is hedonism, that is, consumption-gratification-show biz unlimited. This might well be engendered by the grim connotations of "survival" and the void of the psyche it causes.

My counter-"survival grimness" model in this presentation is the development of lean, coherent, logistically efficient urban "rivers," whose intensive urban effect would reinvigorate the culture of the North American continent while performing at the same time an overdue rehabilitation of the environment. The intrinsic frugality of a lean and rich urban habitat is the ONLY hope we have for a condition where necessity is foiled to sufficiency.

If we knew more, we could look at the planet with different eyes. The planet is the main resource for life (sun permitting). We are troubled by the poor use of that very small part of the planet we call the biosphere. With great knowledge we could produce biospheres many, many times larger than the one now evolving. And do so by just "mining" the mass of the planet in the fashion capable of predisposing the condition for additional biospheres. (4/1/95)

PART 2

The Lean Hypothesis and the Lean Alternative



DECEMBER 1999

Agenda One: The Lean Hypothesis

The leanness of the hypothesis is a case limit. The presence is space, and the presence is simply one of the two possibilities: presence or nonpresence. I choose to call the presence "space" because in our interpretational languages we seem to encounter "space" not by accident but by necessity. A necessity that cannot tolerate forgetfulness. Space is the unforgettable. Space is the real, not a frozen bullion, but a self-creating singularity. Space is presence. Nonpresence is unspeakable. To speak of it would contradict the "nature" of nonpresence, the "alternative" to presence. There is something or there is nothing.

Idle to conjecture a creator of the presence and of its "laws." Where would the creator come from? A causa prima in search of a causa ante prima. The tedium of the infinite retrogression, a pile-up of causes, the notorious turtles all the way up and turtles all the way down. We, progeny of the "presence," cannot define it; it would be an autodefinition. A definition of the whole by a fragment of it because the presence is Becoming. It is the Becoming, the Mistero Tremendo.

Why it might be important to adopt the lean hypothesis (do more with less):

1. To put to rest the guilt-ridden "return to the Father" notion that even "legitimate" scientists seem to cultivate in the recesses of their brains—the Becoming as consequence of a rupture in the serenity of naught and our guilt in being part of such cosmic sabotage. A nonlean delusion if ever there was one.

   The universal guilt that theologies afflict Homo sapiens with finds little redemption in the breaking effect it might have on the excesses of opportunism. At last, fraudulence cannot be the foundation for lean creational genesis.
2. To adopt the thesis that the truly wondrous and profoundly "just" nature of reality is to begin with a minimalist base and partake in creating upon it a self-acknowledging, fully self-affirming end; to do the most with the least.
3. To perceive the Becoming as "simple," space transforming, and ultimately transfiguring itself into grace. An escalation from the meaningless into the meaningful, if a self-revelatory stage is ever reached at the conclusion of space's genesis. A lean, sophisticated evolution.
4. To reject the notion that there is a fundamental benevolence that just needs to be uncovered and lived by. The "original" reality is protobenevolent, and chances are it will never know of it, since

> knowing is not in its dictionary. Reality becomes preponderantly unknowing and quite possibly with no scope or transfiguration. A waste (*muda*) of cosmic proportion (anthropocentrically speaking!).

Whatever is there, the lean call is for this whatever to make the most of itself, a fundamental economic rule that might eventually turn out to be a democratic rule. The by-the-boot-straps rule.

In cosmic resolution terms, that which is unnecessary, superfluous, or marginal can become pernicious because the power generating from the irrelevant and the delusional can reach into the core of the Becoming and nest into it the nemesis of Becoming itself.

Agenda Two: The Lean Alternative

A lean mindset in a lean habitat developing in accordance with the Lean Hypothesis.

The Lean Alternative is an alternative to the hyperconsumption that is now engaging the American society in pursuit of limitless wealth and a "submission" to it. Given the size of the projected global population, 10 billion or so people, and the carrying capacity of the biosphere, the dereliction afflicting more than half of the human population—the hyperconsumptive frenzy—seems to be ungainly and unrealistic. It might also turn out to be detrimental to the possible aim of transcendence Homo sapiens is and ought to be engaged in.

With intellection opening the cosmos to the thinking and doing of man and with a possibly hopeful rationale that we might ourselves inhabit the cosmos, the imperative of leanness is the priority. All the mastery life has shown in its own development, doing so much with so little, will face the challenge of space self-coherently or it will betray life itself. Out there muda is the killer.

Both the Lean Hypothesis and the Lean Alternative are grounded in the "do more with less" that informs the MCD paradigm. The more of the MCD paradigm is the possible aim that reality can become self-aware—that is, self-knowing, "resurrectional." A move that according to the Space Hypothesis takes reality from dumb elementarity to self-revelation via the Becoming.

The Lean Hypothesis is the Space Hypothesis. The Lean Alternative contained in the Lean Hypothesis is the lean mindset operating in the lean habitat.

The Paradox

Because intellection is the engine now driving the transformation of our environment, it is urgent to take the pulse of

the ethics developing "inside" intellection in its recent developments.

A silicon ethic? Speedily or slowly and save an unexpected catastrophic turning of events, intelligent machines are coming. If so, the generation of ever more surprising past will throw out of whack contents and semantics dissecting, analyzing, and explaining them.

In the Space-as-Reality Hypothesis, the Becoming, the metamorphosing of space, creates the past—that is, the other half of reality, the Being. In this hypothesis, intellection taking hold of evolution might transfer itself from the carbon-based device and organizing to silicon and postsilicon-based devices eventually—quantum devices, in a way, from quantum at the base, the beginning of presence, to a quantum base "at the end." Intellection as the reality of a desirable end, the self-revelatory presence.

(For the following, the Bubble diagram may be of some help.)

Transferring the persona, the carbon-based miracle of the inertia of matter transfigured in the passionate dynamics of intellection, to the silicon and postsilicon intellection might have to be (eventually) a necessary exercise.

The ethics of carbon intellection have been developing and forming in the ethics of Homo sapiens for the whole length of life's evolution on this planet. They are therefore overloaded with sophisticated cargoes. The human conscience is an aging battlefield, 3.5 million years in length, of enormous complexity achieved (and acting) via the enormous miniaturization of the body and a consistently lean process.

Genetically imprinted as we are, every cell of our body, brain included, shouts about the imprint. Our ancestry is paramount. In silicon and postsilicon, none of that exists. It is a tabula rasa. It has zero past and zero history. The history of getting there is no history of the computer. That is why for it to be emotional is mute. And likewise, to be passionate and to be hate-full and to be loving and to be sad and to be happy...

The dance of ancestry is the dance of grace or disgrace. But in the cyberdomain, it is a cold cosmos out there! It is a cold and lonely planet out there! Astronaut and cosmonaut are aware and beware of it.

Since the Space Hypothesis is a remote resolution, the end of space itself, the forms of ethics that might emerge in the successive domain of intellection could very well be the key to the success of the Becoming reality (Becoming an all-knowing Being).

The rich dividend of a lean process of Becoming would consist in a diminishing amount of energy necessary to carry out the Becoming itself. For a closed universe that could signify success. The zero energy of the durational singularity

positioned at the consumption of space: Full memory is the energyless domain of the concluded spaceless past.

The Love Project?

Can the ethics of Homo sapiens be transferred to the newborn noncarbon consciousness? Would that be a desirable transfer? The frenzy presiding over the first steps of such transfer casts shadows that might just be fleeting. Fleeting also the blurred vision going with the new landscape that such a vision tries to perceive aided by the "new sight" apparatuses.

With those fumes dissipated, the key question will still remain: How can a "conscience" without a past, the postcarbon "conscience," behave in ways that are not foreign to the "passing away" carbon conscience whose genesis has been marked by good, bad, abortion (90 percent or so of evolution is abortion), success, pain, joy, suffering, equity and inequity, etc., etc.?

The intermediate stage of cyborg, part flesh, part postsilicon, will be a true field of search (and rescue?). For instance, the democratic experiment might turn out to be one of the shortest in the biosphere for the already short Homo sapiens experiment. That which is not efficient will be obsolete, eventually discarded. A sort of quickened social Darwinism, evolution guidance, peppered with benevolence (sand in the cogs-like), it is hoped.

Among the things progressively Becoming less and less relevant will be, at random: agriculture, the biosphere itself, and the impact of gravity, pollutants, radiation, and epidemics. One positive would be the dwindling of the power of animism-theology upon intellection. Howness and Techne will triumph. If all those "grim" transformations are to increase the presence of consciousness in reality at large, then it will be the better for it.

What about the main "feature" of carbon intellection? The Love Project?

The main achievement of life's evolution has been the emergence of love from the opportunistic routines of the food chain. Love and hate have been the yeast for the doings of intellection (the Howness of self-awareness). But love and hate are mute in the silicon logic; they are replaced by effectiveness while they drown in muda.

It will be paradoxical, and in many ways cruel, that the ethical travail carried through a costly historical process might find a sudden unappealing nemesis in the (non)ethic of history-deprived silicon. Then carbon would be just a temporary instrument to generate silicon, a disposable instrument because it is rusting away in a tiny corner of reality. A museum relic.

A silicon boss would have a hard time developing sympathy for the then-obsolete Homo carbonis. The very notion of persona may then be only a nostalgic notion. The relationship of master and butler, in other words, people served by computer, will eventually reverse. The butler becoming the master with the next possible scenario of the new master disposing of the "new" butler, by then gravely afflicted with sclerosis of body and brain.

More than ever, a scenario like this would demand a resolution where all the instruments, us and all else, reemerge as fully legitimate ends. The resurrectional state triggered by the self-revelation of reality.

The thesis of Homo postcarbonis divorced from the biosphere poses, as one of the many question marks, the dimensions of the cogs implied in the thesis. The richness and beauty of the biosphere phenomenon, now unconsciously and consciously felt by Homo sapiens, would lose significance.

A case pointing in that direction even in the Homo carbonis domain: In the dancing around of space, the virtues and the magic of hallucinogens, the working of drugs in and out of cyberspace, virtues and virtualities included, boil down to molecular and submolecular rearrangements of space occurring mainly in the brain. We call it chemical alterations. After all, that is what the mind and the spirit and the gods and the angels are made of: space dancing around. So it is for silicon and postsilicon intellection.

Automatization(?): The Emerging of the Complex out of the Complicated

Then from the position of Howness as life-maker, the power and "virtue" of hyperconsumption may consist in being a necessary step forward in the generation of more automatism. The irony of this is in the denial of individuality, the often proclaimed attainment of the Internet. But automatism is profoundly set in all organisms. Without automatization—roboticization with a purpose (?)—organisms cannot exist.

Human institutions are tentative incursions in the world of automatization so as to extend and expand the reach of intellection. Health care, learning, social conventions, productivity, leisure, etc., are mutating in front of our eyes into self-defining, self-sustaining phenomena. They come about by the prodding and the sweat of the millions of self-affirming semi-automatons that we all are. It might well be the only way life and consciousness can pervade reality and inject larger and larger sectors of it with self-awareness via ever expanding automata with a will.

What the frenzy of production-consumption, promoted by the ephemeralization of the Internet, delivers (the irony of

it) is a boning up for this advancement of automatization, the virtue of which might have to be patiently unearthed in a second, less frantic phase of dynamism.

Our societies are engaged in an unprecedented generation of new technological, economical, financial, informational, medical, ecological animals. The politicos are being marginalized. It is a four-dimensional forest of ever increasing branches and tendrils interweaving ever more densely, a smorgasbord for the legal mind and its treasure chest of sophistry with the power and wealth that come with it.

Listening to the mergers delirium (1999), what emerges seems to be a labyrinthine domain where often guys are suing the guys in the mirror. Skirmishes in a house of mirrors where the bets escalate by force of exhilaration or vice versa. At some point, the labyrinthine cross-fertilization will burst or transcend its own flesh and emerge on a novel slate with, even if momentary, some claim to serenity. The complicated transcending into the complex, thanks to a new level of automatization.

This eventually fits well the idea that Howness is the maker of the past and will be the maker of that which will come to pass. Howness displays itself as Techne up to the heights of gods-making technology, evidently a cosmotechnology (religion). What I think is a fully equitable esthetogenesis because it is transfigurative: religio of all the means to an ultimate end.

What is paradoxical is the mode by which an immense, immensely powerful reality, the cosmos in evolution, might depend for its significance on such a fragile, hidden, unanticipated domain of life on its way to self-acknowledgment.

But then, a posteriori, not really a paradox, courtesy of the Howness operational within the "clairvoyant" borders of MCD, via it, the complicated can mutate into the complex, the prototype, tentative and clumsy, translated into the automatic, the means escalating into the ends, the How into the radiant What. The mindless making itself into the mindful, the coarse made into the sophisticated. The beautiful made into the esthetic. The protoethical made into the ethical. The grace-deprived made into the graceful. The whole, via and because of the know How, slowly and painfully creating the What. The pyrotechnics of space transfiguring itself into Duration.

8

The Superconductivity Initiative

JULY 29, 1992

The paper that follows is as it was originally written, when I had made the connection between superconductivity and habitat. As an original draft, it makes what I think to be a good case for such a connection. History testifies to the impact of new technologies of transportation (logistics) upon the physical, social, economic, and cultural structures of societies. Now, post-Rio time (the United Nations conference on Environment and Development, Rio de Janeiro, June 1992), the call for a more realistic perception of Homo sapiens nested in an ever expanding, self-righteous, but eminently fragile ecological niche is gaining authority. Never too soon.

As nature tells us, a poor inner and outer logistical posture spells extinction. That might well be what a warped techno-industrial culture is delivering us, Homo sapiens. Now, that same inventiveness has given us the wheel, the carriage, the bicycle, the steamship, the locomotive, the automobile, the airplane; the missile has come up with the magnetic cradle, coupled or not with the superconductivity magic. The logistical revolution generating from such new devices will be profound. It is up to us to make it epochal and benign, in one. It is entirely up to us to come up with enough imagination and a sufficient amount of true realism to make it so.

As I attempted to convey in the original paper, the convergence of environmental necessity and the economic, cultural, Esthequity imperative—this providential convergence—could go for a radiant millennium. But the margins of tolerance are indeed not generous. Failure is a possibility as real as success.

A failure of "the West" would make the collapse of the Greco-Roman Empire pale in comparison. The ruins of Western civilization would be enormously more cumbersome and pernicious for a postcollapse resurgence if one were still to be possible.

At last, if we were able to become more genuinely compassionate, more genuinely equitable toward ourselves, the human species, such virtues would reverberate throughout the biosphere in fitting and coherent deeds. The radiance of life could then become inextinguishable, a true seeker of grace reaching out into the solar system and beyond.

JANUARY 1991

The first thing you do for the health of the patient is to check and care for his circulatory system (the logistics of his metabolism).

The intensity of space. Making space the one and only agent of reality Becoming is, among other consequences, to propose a Lean Hypothesis on the nature of reality in its agenda of Becoming. As Becoming pours unremittingly into Being, the past, the leanness of the hypothesis holds true if the many facets of Becoming are concurrent with the leanness alternative. (12/12/99)

The possible need for a pause after the technological-technocratic storm. After the hedonistic-materialistic rush the leap over the chasm of chaos, of squalor, into the quiet of evaluation, assessment, and a "new beginning." (Urban) ribbons around the planet. The slopes of the land made into the city. (10/28/95)

Water is the most logistical conveyor of all. We use *buckets* of water only as a last resort. Pipes, streams, and rivers are the efficient containers for water to do its best as a logistical conveyer. But we use buckets to move ourselves and our things. Car buckets, truck buckets, airplanes, etc. The maglev trains will mightily improve that. (12/6/99)

With superconductivity (SC) becoming applicable to transportation, the way is open for a transformation of the human landscape on a planetary scale. The idea of transforming the pernicious, congestive, suburban diaspora-invasion of the land into a web of lean urban settlements in parallel and integrated with multiple superconductivity trains capable of traveling 500 kilometers per hour makes it possible for the human presence to be coherent with the needs of the biosphere.

Given the characteristics of superconductivity, the technology of transportation (people and things) is endowed with swiftness, noiselessness, economy, comfort, capacity (volume), all-weatherness, safety.

No other technology has ever possessed such rich combinations or afforded such compatibility with human activities and needs. This is a package that can truly transform a bankrupt state of affairs into a deliverance from the eco-consumerist dilemma. So much so as to legitimize the following language: (From the noisy, cumbersome, disruptive railroad to) Superconductivity, the noiseless cradle "river" and its Urban Effect.

This might well mean: the minding of the biosphere's second step.

To be envisioned is a web enveloping the planet made of urban ribbons of varying thickness, refraining Homo faber from invading terra firma with his consumption-unlimited diaspora.

This implies:

- the recognition of today's critical, if not catastrophic, relationship between us, Hominidae, and living nature and the commitment and the actions indispensable under such circumstances;
- the recognition of the immense importance of life's logistics in all its intricacies and difficulties—gravity and thermodynamics foremost—for the well-being of the living reality;
- the adoption of appropriate and sophisticated technologies in agreement with the MCD paradigm; a withdrawal of the license to do what we personally please with the biosphere; the willed containment of the feverish action of technocracy and speculation; an international enforceable legislation generating from coherence with the boundaries of the biosphere. (It will, for instance, mean that, in one to two thousand years none of today's Los Angeleses will exist, outlawed as they will be by a biospheric [transnational] court. It will also mean that objectivity will be restored at the expense of the schmaltzified tutti-frutti of subjectivity

Howness is intrinsic to change. It is a sort of performing knowledge on which change-reconfiguration is dependent. In this sense Whatness, the *What*, could be seen as the product of Howness. *Howness* a sort of causa prima?! (10/10/96)

The production-consumption machine causes the acceleration of obsolescence. It depends on such speed to accelerate its own pace. (11/22/99)

Let things happen semiautomatically or automatically, food digestion, blood making, blood pumping, etc., etc., and on such grand automatic, operational system germinate the "freedom" of thinking and doing. "Manipulative" Techne all the way, and all the way, self-manipulative space. (9/3/99)

with the "providential" consequence of a newfound freedom away from the license of today's show-biz culture.)

. . . . .

We are dealing with a lean web of "mind-fullness"—the kind afforded only by the Urban Effect—that, far from suffocating and obfuscating the biospheric membrane, begins to build a webbing reminiscent of the genetic-strand structures to the point of suggesting for a near or far future the packaging (folding-over) of the biosphere itself for "other worlds." Such undertakings to be not by way of Aquarian fantasies but according to well-tested technologies responding to life-mind imperatives. These packages are to be the seeds the biosphere would sprinkle reality-at-large with. (See "Ecominutiae.")

1. The Superconductivity Initiative: A Biosphere-Mind Covenant

The Goal: The Urban Effect—that is, the minding of the biosphere with logistics as a recognized and acted-upon critical agency.

The Technology: The noiseless cradle-ribbon of superconductivity (SC) as the backbone of the urban life ribbing terra firma.

The Consequences: A landscape transformation, in other words, the reabsorption of the suburban diaspora into lean urban ribbons of varying density and varying temper.

The Achievement: The sane coexistence, if not symbiosis, of a spirited human presence and a cared-for biosphere.

Superconductivity is the triggering technology making the necessity of the minding of the biosphere feasible with a frugality of means, once again reminiscent of genetic morphologies. At the same time the transformation produces variations on familiar patterns:

- The development of villages along the spine-road connecting village to village—the space-time-complexity dimensions are different—no mule, no coach, no car on the "highway" but an up to 500 kilometers (or more?) (SC) maglev train with stations every 50 kilometers or more. That leaves distances of no more than 25 kilometers from station to final destination or vice versa. Those distances are to be covered by "mass-transit" conveyances or private means when justifiable (and taxi).
- Local superconductivity trains connecting the stations on hourly schedules: Phoenix-Tucson (180 km): 30

The Western incursion into the technological-consumerist fix is tainted by the pursuit of happiness sloganeering. A sort of whimper overshouted by the fury untamed if somehow camouflaged and/or quarantined. (8/24/93)

At the beginning, "matter" and no mind. At the end, mind and no matter as mass energy. Mind as total recall (self-revelation), space-time as the device allowing matter to evolve into mind. (12/2/93)

One of the big flaws of mankind is to be lax in the practice of realism, the rule number one of practicality. One reason for such ill-advised behavior is that both the what and the why of things are beyond our reach, and quite possibly they will be forever so. (3/4/94)

minutes from city center to city center; Phoenix–Los Angeles: one hour.

It is to be kept in mind that the airport has been, is, and will remain a major "nuisance."

- The urban ribbons, no more than 2–3 kilometers wide, straddling the superconductivity ribbons and other roads, keep the logistics taut, swift, and economic. In a true sense, the age of the wheel as well as the age of the wing might be flanked by the age of the magnetic cradle. The development of 100-kilometer linear cities with high-density urban nodules at 10- to 20-kilometer intervals is foreseeable, with travel time contained within the 40 minutes it now takes from Manhattan to Kennedy Airport.

With superconductivity, both automobile and aircraft are given back the legitimacy they have lost (or never had)—the automobile as an auxiliary mode confined to marginal urban and country drives for work and for leisure; the aircraft for transportation over distances of 500 km or more when it can favorably compete with superconductivity. The "bullet" (SC) has the upper hand on the wheel and the wing to the advantage of economy, comfort, safety, reliability, flexibility, and, most times, time itself.

The restructuring of the human habitat into urban (SC) ribbons has immense consequences:

- the most comprehensive design, engineering, and architectural process followed by a planetary undertaking of construction and land transformation;
- a critical impact upon the economic, social, political, and cultural aspect of human settlements brought about by the breakdown of logistical bottlenecks;
- the retooling of whole industries for the gigantic task ahead;
- the absorption of the largest labor force ever witnessed;
- a portentous shift in the movement of resources and capital;
- a rapid ecological restoration with all the rewards going with it;
- the generation of lively urban habitats easily interconnected by SC;
- the direct interaction: city-countryside, a fertile ground for a Homo-biospheric culture;
- the "opening up" of continental masses such as Siberia, Alaska, Canada, China, Africa. (See what the railroad did for Europe and North America.)

2. Superconductivity and the Urban Effect

. . . aviation is a glamorized bucket-brigade technology. Maglev technology is the equivalent of water canal technology. (1/18/00)

Short of an explosive development of automatism, the reality we are constructing in and around ourselves may just turn out to be too complicated. Warfare among nations would downgrade into ever more local "guerrillas." Xenophobia turning to dust, personalized xenophobias narcissistic and nasty. An inflation of fear and cupidity. A folly we could imagine if all the cells of our body, the myriads of them, assumed autonomy but had to be somehow tamed by a central authority no longer central and no longer authoritarian. The automata despair and its self-destruction. (4/14/00)

At the significant core of superconductivity is perhaps the irresistibility of any "phenomenon" that is able to call upon itself the attention and the participation of the most disparate agencies. In listing the services of superconductivity, one offers on a platter a truly irresistible compatibility combination:

Swiftness goes at the core of the logistical knot: how to unravel it without impinging on other agencies, first among the many, the city sociocultural nexus.

Noiselessness tells about the unavoidable dislocation caused by noise impinging on the habitat (people), a noise afflicting the relative swiftness of the rail, the wing, and the rubber wheel.

Economy, the ever present conflict between the desirable and the feasible. Gravity, thermodynamics, and friction, though the sustainer of our doings, are also the nemeses of price-less moving about of people and things.

Comfort, again the millennium battle between the need "to move" and the discomfort afflicting "moving" (remember the prerail, prerubber-wheel transport) and the moving from one medium to another (from wheel to wing to rail, etc.).

Capacity (volume and tonnage), that which might be easily done for a few or a few pounds rapidly becomes a remote goal for many or many tons. Gridlock is a telling reminder.

Safety. Fifty thousand deaths, countless injured per year just on the North American continent, and the impending disaster syndrome in the air (with the high cost of keeping disaster at bay) are the sufficient and telling realities of our transportation modes.

All-Weatherness. Air to a large degree and pavement to a lesser degree (snow) remind us of how the weather impinges on our preferred logistics. Reflections of this extend to swiftness, economy, comfort, capacity, safety.

One can say that SC is truly an urbane technology in both the sense of compatibility and "civility." Consider as contrast the nonurbane technology of the rail, of the wing, and the counterproductive presence of the automobile. Then one is on target in saying that latent in superconductivity and the Urban Effect combined is a true revolution of the human habitat to the advantage of both the human species and the biosphere that carries it.

A not-so-strange bedfellow of SC is the bicycle. The bicycle can well take care of a high percentage of the diffusion logis-

Space is precious. The more intensely it operates—miniaturizes its geometry—the more it glows. See the human brain. (3/2/00)

The chasm of feasibility-desirability is bottomless. It has been the "urgent" task of consciousness to discriminate between the two. (6/17/99)

Our body's circulatory system is made of arteries and veins, quantum carrying flow that delivers and retrieves all sorts of quantum packages to and from the variety of cells making the organism. When the arteries and veins become too sclerotic, the body gives up. A good example of gridlock becoming fatal to the system the logistic is there to serve. MCD tells us that. (1/19/00)

Five billion motorized and glamorized buckets might eventually work as a slow-motion, lethal projectile. For the moment, there is where the American Dream gone planetary is poised . . . The bucket brigade is OK in quanta world. It is in the Coca Cola, compukitchen, soccer mom, garbage cans, nonvirtualities. . . . (1/25/00)

The Ring City
First ring from outside:
automobiles

Second ring from outside:
buses and vans

Third ring from outside:
bicycles and electric conveyances

Fourth ring from outside:
pedestrians

At the core:
maglev superconductivity—local, national, international
(10/10/94)

tics (the capillaries of the web). Consider the use of it in Central Europe and in China. Superconductivity and the bicycle (and pedestrian) in combination might be able to take care of 70 percent of our body logistics. As the two extremes of logistics, they can give the remaining 30 percent to the movers and services needed for the approximately 25-kilometer gaps and the diffusion logistics not served by bicycle and walking. These are a mix of collective movers: trains, buses, vans, etc., and single movers: taxi and automobiles. To complete the logistics scenario: golf carts, moving sidewalks, escalators, elevators.

Further notes

The Superconductivity Initiative within the three-month program of Arcosanti 2000

Make a serious case for the adoption of superconductivity by pointing at its impact upon: environment, energy, efficiency, economy, compatibility, international cooperation, employment, war technology and production, the Urban Effect vis-à-vis the American Dream. In other words, upon the MCD paradigm shift.

Superconductivity Initiative and Arcosanti 2000

Local

- On the Arizona railroad map, outline a superconductor-cradle map focusing on the Nogales-Flagstaff corridor to which Arcosanti 2000 plugs in.
- Anticipate urban-linear development by the progressive reabsorption of the cities' diaspora along the SC "logistical river."
- Introduce the Two Suns arcologies with the variants going from the north-south, fish-spine mode to the east-west, parallel-run mode.

Continental

- Work on a North American railroad map; overlay the hypothetical superconductivity cradle nets of local and rapid trains for passengers and freight.
- Outline in the most tentative way some of the reabsorption of the "urban" diaspora into the linear habitats among the superconductivity logistical rivers.

Transcontinental

- Work on railroad maps of Europe, Russia, Siberia, Alaska, Canada, United States, Mexico, Central America, South America by outlining the potential Superconductivity logistical rivers.
- Introduce the Bering-Rainbow proposal as a fitting example of intercontinental connection-cooperation.

Three Main Topics

1. The Technology of Superconductivity
   - Germany: Transrapid International
   - (USA) Los Angeles–Las Vegas: HSST Corp; Superspeed Train Commission; High Speed Rail Association
   - Japan: Central Japan Railway Company; Technova, Inc.; Railway Technical Research Institute; Nagoya Railroad Co.
2. The Geography
   - Overlaying of superconducting cradles on railroad networks.
   - 3 Products: (1) local map of Arizona; (2) continental map of North America; (3) transcontinental map
3. The Urban Effect
   - Articulation of the Urban Effect and the superconductivity logistical "rivers."
   - 3 examples: (1) Arcosanti; (2) Two Suns Arcology; (3) Bering Strait

Appendix A

- Sclerosis is one of the afflictions of overfeeding;
- Congestion is one of the afflictions of consumerism.

We should then search for a LEAN alternative:

- the decongestion of transportation channels by the reduced use of bulky transport devices (like the automobile);
- Consumerism fattens our arteries and congests our highways. The automobile is the bad cholesterol crippling our cities.

It is at last a question of flow: blood, people, things. The information flow has a magic bullet in the microchip. For "tangible" things there is no magic bullet, but the "bullet" traveling on the superconducting cradle is going to be momentous because of its impact on the logistical impasse. The breaking of the friction bond: rolling steel (the wheel) against stationary steel (the cradle) changes the equation: "stay put—move."

Tonnage of equipment, swiftness of movement, and noise levels are changed, and the change is in favor of the Urban Effect. The superconductor needs to feed on zones of high density or it falls by being redundant (killing flies by cannonades). The cradle-bullet needs to be flanked by a lot of warm bodies so as to feed itself and the other movers with a sufficient number of users.

Appendix B

As magnetism is at the core of SC, so one can suggest that the urban body might want to be caught in a magnetic net by orienting itself according to the force field of a lean and swifter logistic.

Another electromagnetic presence is the sun (photovoltaic and infrared). Between the SC field and the sun field, the urban pattern becomes oriented like iron filings in the vicinity of a magnet. Impinging upon such a pattern is the "biospheric force field," which is, by the way, an immense and deep carpet of microelectromagnetic intertwining. Presiding over this triadic interaction is the (imploding) imperative of MCD.

Because of all such charges, the resultant structures are not urban lasagna or urban spaghetti but "sausages" of changing diameters. Each slice of such sausage contains enough action and knowledge in and by itself to constitute an Urban Effect, open-ended as it is traversed by the logistic flow into which it is plugged.

An elegant, frugal, coherent cosmic configuration offering itself to the down-to-earth business of living and nudging it a step further into the art of living. A complex electromagnetic fabric nested in and caring for the biosphere. Caring empathetically for the most extraordinary offspring of it: species Homo, and caring for it within a lean and "benevolent" mode.

Appendix C

Before the awakening of our consciences brought about by the environmental crisis, now a fashionable topic, the SC proposition would have had a dim chance of "success." Things might be different now.

We need to be persuasive in linking SC with urban restoration, environmental salvation, and a sane energy policy.

Productivity and transportation have been, are, and will be at the very core of the human action. Being so central makes them arbiters of civilization and culture. Suffice to recall two technologies of production and four technologies of logistics:

- domestication of plants and animals;
- industrialization of agriculture and animal husbandry;
- the invention of the wheel;
- the invention of the rail;
- the invention of the automobile;
- the invention of the airplane;
- the invention of the magnetic cradle will have the same kind of impact: SC has all the features of "revolution."

The impact of SC upon the environment:

- escape the diaspora catastrophe (suburban culture)
- drastic cuts in energy consumption
- escape the climate-change dangers (fossil fuels

consumption, pollution)

The impact of SC upon society and civilization:
- physical transformation
- societal transformation
- cultural transformation
- economic transformation
- political transformation

The impact of SC upon the technological-corporate milieu:
- from the technology of confrontation (arms, etc.) to the technology of cooperation
- the breakdown of national boundaries
- the acculturation of the multinationals

Appendix D

The automobile is a dispersion technology (suburban parking). SC is a gathering technology (the urban station). If the gathering technology has a strong call and the call is ephemeralized by virtue of the "civil" nature of the technology, then room can also be found for a legitimate role for the dispersion technology.

Over the past two hundred years the technology of gathering has dimmed its appeal (especially in the USA) to the advantage of the technology of dispersal (also via criminal initiatives). The center has burst, the periphery is everywhere, like a body without a brain, a corpse . . . generating more corpses (environmental degradation).

SC is the magnet at hand for the restoration of the center. The center is oblong along the magnetic field (between stations, that is); therefore the new center has also the virtue of interconnectedness. It reaches while centering, it is axial, a center projected in space-time. The outcome is the "linear city," that is, the ribbing of terra firma by "urban rivers" generating from a coherent use of the cradle technology of SC.

Techne: How do I do it, How do I do it . . . (6/8/94)

Mass transit for people and things, locally, regionally, continentally, transcontinentally. Mass transit by way of bringing "nature" to the doorsteps of habitat: within walking distance from it. A logistic serving Homo sapiens sapiens and respectful of the living, the biosphere. (8/17/99)

The very notion of Howness of space as the makeup of reality is the notion of *trans* . . . transforming, transferring, transcending. In other words, it is in the nature of Techne (Howness) to be the transactivity making for the Becoming. (12/25/99)

9

The Bering-Rainbow Proposal

1989

The main intent of the Bering Rainbow is to connect the continental masses of Asia and North America by way of the superconductor technology.

1. The electric power grid of Russia–Siberia and of Alaska–Canada–United States is to be linked via a superconductivity line.
2. The rail transportation grid of Russia–Siberia and of Alaska–Canada–United States is to be linked via superconductivity, high-speed passenger-freight trains.

The Trans-Siberia–Trans-Alaska Line

The linkage would be achieved at the Bering Strait by constructing a series of suspension bridges. Five of the pylons supporting the bridges are to be constructed between Big Diomede Island (USSR) and Little Diomede Island (United States).

The material presented here refers to the design of such segments of the bridge system and to the proposed habitat carved out within Little Diomede Island.

An auto-trucking link is intentionally downplayed in view of the enormous distances, the harsh climate, the environmental impact, the costs, etc. Local road networks should be envisaged.

Impact

The Bering-Rainbow proposal opens the vast regions of Siberia, Alaska, and Canada to an economy-driven, ecologically aware, exploring-vacationing eager, politically progressive, "nomadic" population—to an exploding human population. For one, there will be new settlements generated along the grids with eventually large migratory currents, prehistorically anticipated by migratory waves of animals and humans.

Little Diomede, Little City

The granite island is carved out in order to generate a large, climate-controlled, urban, industrial environment defining:

1. scientific, climatological, geological stations and laboratories;

2. industrial parks with emphasis on the construction of the power and "rail" linkages;
3. learning institutions geared to the special characteristics of the region (Bering Sea–Arctic Ocean) and to the rapid turnover of researchers, students, and "tourists";
4. the urban habitat per se, defining unique characteristics derived from the underground environment.

Important to Little Diomede, Little City is the development of the arcological guidelines defined by the complex-miniaturized environs: how to best survive and flourish as a society and as a culture in climatic conditions inimical to human life. This will be important in three futures:

- Terrestrial. A contraction and intensification of the urban mode is the only hope the environmentalist has for a rebound of the planetary ecology, its health and self-sustenance. Such a mode is also the only one promising the evolution of Homo sapiens.
- Exoterrestrial. The development of space habitats, where life will have to be "internalized" and will have to be true to the paradigm of Complexity-Miniaturization-Duration.
- The coming of an ice age that would play havoc with the present biosphere and the human condition. Survival will depend on "how fast" the bulk of humanity will be able to move into arcologies of which Little Diomede City is a prototype.

Rainbow Suspension Pulse Bridges

Design and construction of the bridge connecting the two continental masses by way of Big Diomede (USSR) and Little Diomede (United States).

The bridges would carry the electric, superconductivity power lines and passenger-freight "trains."

The roadway bridges would contain nodes of activity within the pylons and multilevel "roadways."

The functions of such nodes are suggested by the symbolism: The center pylon is the point of contact and interconnection between two superpower nations within the "embrace" of a Rainbow UN, the connection of all nations, finally united in and by the imperative of planetary responsibility—a sustainable, fulfilling, equitable evolution of body, mind, and spirit. On each side of the Rainbow UN are Rainbow USSR and Rainbow US, pointing at that "which makes a difference" between two cultures generating from differing environmental conditions and historical backgrounds.

The three rainbow, pylon nodes and the two bridgeheads would be the center for information, learning, exchange,

The cosmos is the grand techno-logical laboratory reconfigured, in fact, reconfiguring itself. Such a cosmos is the domain of How, that very How that determines step by step the What. How and What are meaningless (and Mindless) until the emergence of life and Mind. (3/2/97)

The Howness generating the Whatness. The nervous system didn't come about because the organism needed a better apparatus for survival. Bacteria seem to be the most permanent life presence, it was from the many Hows of which the organic threads that slowly emerged the electro-chemical Howness of neurons and company. Intellection emerges from the organic via the bricolage of Howness. Purposefulness emerging from purposelessness. Probabilism masquerading as certitude? (4/11/00)

Electricity . . . a pure, the purest, consumer good leaving no trace, no pollution, no waste (of itself) behind. An angel energizer of the positive and of the negative with no fingerprints left behind. A pretty exotic space self-configuration, peripatetic, elusive, invisible, and a killer. Just hordes of electrons at different kinds of configurations traveling at sister light speed, in the electromagnetic domain. The noosphere, the passionate sister of the indifferent electromagnetic sphere, comes to naught if the elder sister vanishes. (Electrified) space vanishing there is passion vanished here . . . When man was able to distill electricity from the uncoated reservoirs of energy, his world changed practically overnight. (9/27/98)

. . . a voice for tolerance and optimism among a wealth of cultural cross-references to a point where the richness of the new animal could be the coming of a new urban landscape. (12/27/99)

In searching for self-awareness, reality must adapt and adopt whatever How is suited for the purpose. (3/2/97)

Turning-the-screw mode is a better controller than push-buttoning. That is why faucets of the old kind, for instance, the screw kind, are superior to the push-button substitutes. The screw provides the better leverage, progressional and measured. See the flight controls of airplane tails. (4/18/00)

scientific-technical work, ceremonial and cultural events. The structural nature and the formal characteristics of the bridges themselves add to the symbolism:

- The patterned and brightly colored pylons would be large and strong affirmations of artifact within a somehow desolate and monochromatic land and seascape.
- The "pulse" of the structures (see following text) would also suggest that the resilience and adaptability to the loads and to the external stresses (wind, temperature) reflect and symbolize the capacity of life to adapt to and to adopt the way of nature.

Pulse Bridge

Pulse Bridge is conceived and designed so as to alter its own stress configuration according to the traffic loads it carries and the temperature and wind variations. It does not so much react to such stresses as it dynamically adapts to them. This is achieved by suspending the whole structure on two sets of hinges and altering the weight distribution by way of four ballast spheres constantly changing in weight because the water volume they contain is pouring in or spilling out of each. Temperature differential and wind loads will suggest asymmetrical ballast content. Such a structural mode eliminates the two sets of cables/anchorages, cumbersome and costly features, especially when located in a forbidding climate. By way of optical sensors reading the altered configuration of the changing loads (traffic, temperatures, wind pressures), the bridge is sensitized, so to speak, and pulsates via the ballast changes in the volume of water the spheres contain.

Theoretically, the bridge should respond to the load changes caused by a trailer truck moving on one of its traffic lanes. The response is made readable by the amount of water spilled by a fountainlike series of spouts strategically plugged into the ballast spheres. The loads and stresses on the bridges will be "readable" in the behavior of the fountains.

Characteristics

1. The bridges have the equivalent of eight to ten lanes of traffic divided among three main levels: autos and pedestrians on the top, a mix of autos and trucks in the middle, and a mix of trucks, trains, and utilities on the lowest level.
2. The bridges have floor spaces for scientific, cultural, and commercial uses. The density of that space will be greater in the proximity of the rainbow pylons.
3. Each bridge has two sets of bearings instead of the four used in traditional bridges.
4. Each bridge breathes-pulsates according to the load to which it is submitted.

5. The bridge pylons are in the shape of quarter-circle steel tubes 30 meters in diameter and two horizontal cross tubes. The ballast spheres, suspended from the upper horizontal tube, present a choice of features expressing the intensity of the traffic on the bridge and possibly enriched by way of vegetation and light plays.

The arched pylon and the horizontal elements can contain an optical lab-museum also showing the pulse of the bridge; the history of bridges via graphics, models, video, and holograms; restaurants, gift shops, and exhibitions.

The novelty of the structural concept, the riddance of 50 percent of the bearings, the responsiveness of such a large structure to traffic loads, and the simple elegance of form will make Pulse Bridge a calling card that might go a long way toward the financing of its construction.

If we were able to figure the real nature of space, of reality, perhaps we would be able to remove the entropy dilemma (second thermodynamic law). (7/17/97)

The elixir of complexity is a lean, elegant dynamic. (5/15/99)

There is a primeval Whatness: space. From there on is Howness all the way: how space is able to reconfigure itself—at first (15 billion years?), within the dark senselessness of matter ruled by its own laws, then in the solar system with a long beginning of coordinations of itself strangely "misbehaving". . . "No respect," matter would say if matter had any speaking faculty.

The improbable boning up for the feast of awareness and then self-consciousness . . . The I and the Thou vis-à-vis the It. Still Howness generating islands of Whatness with Whyness still in the incubatory, no guarantees, travail toward light. (4/29/99)

If, in what speculatively is called 15 billion years, space has been able to do so much, think of what it can do in the next 15 billion years and in the next 15 and the next . . . The building blocks of reality themselves might get hold of themselves (Know thyself), and eventually such knowledge becoming universal becomes also resurrectional in the light and the grace of self-revelation, the Omega Seed. (3/1/98)

The Space Hypothesis

. . . the wake at the dissolution of the matter-spirit-God triad (the wake of animism?) and the emergence of *space* as *reality*, the bootstrap creation of "divinity." (7/22/97)

We are made with the same building blocks of matter. We are stardust, as they say. Thus, eventually more and more matter might become organisms

10

Ecominutiae

Self-Contained Space Habitats

FEBRUARY 1989

1

Two possible reasons for the space quest:

1. To enlarge the territory of fortress Earth by searching and exploring the stellar territories out there, thus advantaging the species pursuing her own briefly lived agenda.
2. To break the barriers of matter, the parochial egg of the Earth, and invest-transfigure reality, the cosmos. The investing of the cosmos not in the Eastern sense of fusion (con-fusion) or the Christian sense of a triumphant return to the creator with one's personal attributes intact, but rather, in the eschatological, grass-roots sense of a conclusive act in a creational process into which each and all specks of reality (organisms included) partake and rejoice.

The first reason is defensive and ultimately desperate. It implies that life is a smudge on the back of an untamable beast-robot, the cosmos. The second reason, given the context, is desperate also, but in terms of defenselessness not meaninglessness. Vis-à-vis the immense enmity of space, this second reason is prodigiously affirmative: to make "matter" (reality) into mind.

Embroiled as we are at present in the techno-political primacy race, in economic emergencies, in hedonistic-consumeristic practices, in rampaging inequity, no one, technocrat or layperson, is interested in siding with one of the two alternatives. But scientists, philosophers, and theologians should see the not-so-hidden consequences of such a necessary choice.

The scientist, as the seeker of "Truth," must eventually find a lasting use for the discovery of it lest we are to be just "that which knows," that is, spectators at an ultimately true-to-itself cosmic Woodstock. Astonishing yes, but ultimately as Woodstock, pretentious and squalid.

The philosopher to find a coherence in the duet: love-nonlove and specifically to that part of the dance which shows life becoming aware of its own suffering and its own ultimate anxiety: Is there a sense to it all?

The theologian to finally(?) come upon the irrefutable proof of the existence or nonexistence of a creator and come

down to the task of constructing with the scientist, the philosopher, and the artist one of two quite different model-simulations of reality: the creator's foreordained reality (he, she, it is omniscient) or the self-creating, grassroots process of reality becoming. Two very, very different agendas.

2

The arguably loving embrace of the Earth is destined to become the constrictor and the demise of life. One could argue that it is not too soon for consciousness-Mind to rough up an escape agenda from such fate if it is true that the "window of opportunity" could be shut up by a loss of anima and/or because of a manmade catastrophe. The future and perhaps the foreverness of our species, all species, indeed might depend paradoxically on our quasi-extravagant determination not to let the "magic" moment pass by.

If reality is a megamachine hosting a diaspora of lives, it is most important to join in. If reality is a megamachine with a one and only pimple of life, the Earth, it is imperative for the pimple to generate other oddities in its own image throughout reality in view of a remote but not impossible transformation of the whole reality and for all time into Mind (a closed universe, Big Bang, as precondition). Then the seeding of space with life is an imperative expectant in its own transcendence into virtue. The Ecominutiae, tiny ecologic eggs, made up of minerals (planetary or asteroid mineral) quasi-totally filtered and metamorphosed by Mind, are fantasies generated by a set of notions encapsulated by the named imperative.

- As living and thinking organisms, the cosmic explorers will be submitted to stresses far more critical than the technological ones. Those are assumed to be successfully cared for. In other words, the limits will be defined by the bio-technological and by the logos-technological resilience of the explorers, especially if they are in the process of becoming dwellers in space cities.
- As "machines for living," the space cities have to sustain the onslaught of nonenvironment, the endless night of space, at all levels of performance.

The tangible function of Ecominutiae will be:

1. mining-processing-shipping
2. production
3. research
4. testing
5. urban laboratory (environmental, sociocultural settings)
6. station-vacation-resorts for space travelers—regeneration-restoration

and become conscious. This animation of the cosmos is part of our destiny. (10/5/94)

The truth merchant and the proponents of hypotheses. Two different breeds. The truth merchants should at least recognize that whatever they are holding on to are at best interpretational ways about (hypothetical) truths. The proponents of hypotheses might even be called "dogmatic" in their proposition, but they are not in the "I'll tell you what the Truth is" arrogant mode, because they "know" they are working with hypotheses. (7/31/98)

The task of Mind is to seed and create the Why into a cosmos in want of it. If Mind, here and elsewhere, fails, the cosmos will go on according to the probabilistic, deterministic, opportunistic dictate of its own (natural) laws. The Grand Why will then never come about. (3/2/97)

In the endless tenebra of space rages the dullness of the insignificant. Tenuous space, no match to daughter matter, is no light reflector. Light traveling through it unimpeded and "unbending," crashes and glows against daughter matter, the violent condensation of space tenebra. And there, silent and violent, there, tiny flakes of meaning inconsistently, "hopelessly," call for the significant. The significant thrusting out, emerging from the tenebra of the insignificant? Endless radiation and the yet defenseless radiance of the I and the Thou? (8/2/99)

7. building, maintenance, repair, and cargo stations for the space machines

Complexity and Miniaturization will be pervasive and imperative for the mechanical, the physiological, and the organizational. In other words, frugality will be the mandatory icon among all the perhaps lesser ones. Justly so, since the MCD paradigm might well be the crucible for god-making.

Space for Peace

The continuity in the past thirty years of my work: Ecominutiae are the extensive "alchemical" manipulation-metamorphoses of stellar material into minute ecological-mental cells. Those Ecominutiae are "space cities," the initial step of phase two in the urbanization of space. The Earth is phase one.

Mesa City

In my work, the forerunner of Ecominutiae is Mesa City (1960). In that project, I proposed the extensive manipulation of the mesa's geological mass for the double purpose of generating construction material and of transforming the geology into a cityscape: the "Central Park" was to be the geology made into a quarry and the quarry made into a three-dimensional park with its own "canyons," cave museums, "well churches," amphitheaters, cliff sculpting-painting, etc. Therefore, the process of sculpting the mesa was not an isolated, waste-producing process but a synchronized and coherent binary process where a discriminative quarrying would produce construction material on one side (plus minerals for further extraction) and a sculpture-landscape on the other . . . a nice genentropic example.

The Arcologies

At the center of the arcology work is the notion of the metamorphosis of the mineral into mind. Given the MCD paradigm as governing the arcological performance, one can see the arcologies as "space cities anchored to Earth," or better, as forerunner to and testing grounds for the urbanization of space. So much so that, now and then, I am tempted to lift one of the arcology graphics and encapsulate it into Ecominutiae design. Naturally, differing environmental conditions, vast (earthly) landscape versus confined inner space, pervasive and unforgiving gravity versus quasi or total weightlessness, etc., would demand a sharply different organization of habitat.

What is the normative numero uno of MCD? It is frugality.

If reality is a closed reality, space-time is not a "forever commodity." Therefore, MCD is a core methodology, and thus frugality is the agent of self-revelation. For a reality whose maker is space-time, the very end of space-time puts to rest any notion of eternity, infinity, foreverness . . . Reality, at last, will terminate space-time when the evolution of things will come to an end, the nondimensional point end of self-revelation. (9/21/95)

As Techne is the oldest of all professions from Big Bang on, how to process this into that, and Techne could be the "making of God" from the Howness of hydrogen to the Howness of grace, then all deifications have to patiently wait their turn. Probabilism-determinism-opportunism-love-full Duration, self-revelation, the perfect memory of itself. (7/1/99)

The Lean Alternative Lab (LAL). Once we decide (determine) that intellection has to begin to penetrate reality and that intellection wants to be there "body and soul," that is, as a carbon-based life form, then LAL becomes indispensable. Objects like Mars, moons, and asteroids will not be bungalow phenomena. They will be full-fledged urban phenomena. Not single-home hermitages but full-fledged, intensively active, self-reliant LEAN habitats, constructed in a far friendlier environment than the silent, dark space. (2/21/00)

11

Hiro-Naga and the Ecominutiae

Ecological Minutiae

MARCH 1989

1

As reality becomes and builds the past, construction and destruction are two inseparable components of it. Humanity has learned the craft too well. Part of the human endeavor is construction; part is destruction. We are more than often deceived in seeing construction where there is really destruction, less often seeing destruction where perhaps there is construction. To say, for instance, that the Pentagon (USA) epitomizes, in grand scale, construction-destruction is to apply a grand twist to the equation. Doing better and better the wrong thing, $300 billion per year nowadays is hardly a constructive endeavor. What is really going on is megadestruction and a compounded destruction if and when the arsenal is put to use. The hidden Pentagon slogan is: "Our dedication is to the 'construction' of an ever better kind of wrongness."

The flip-over equation defines the weapons buildup as the destructive half. It is destructive environmentally, economically, technologically, mentally, emotionally, and ethically, whereas the disposal (i.e., the destruction) of weapons is a constructive, sane, coherent kind of destruction.

In Hiro-Naga we had the compounding of three destructive endeavors:

1. The evil of the bomb invention and its making. A pure case of a better, if not the best, kind of wrongness.
2. The notion that the bomb must be used even when alternatives are available.
3. The targeting of the bomb on not just one but two cities, Hiroshima and Nagasaki, an unmitigated betrayal of humanity and mind.

Society would be far ahead of itself if the undoer-destructors were to become conscious of their prime responsibility and would take the gospels into consideration. (The bomb is a Judeo-Christian gift to the planet.)

The remembrance of deeds the likes of Hiroshima and Nagasaki must be burned into the flesh of the species for the uniqueness of the brutality, the unspeakable victimization of life, and the dedicated ill will that made them possible. That much for the nature of the Hiro-Naga catastrophe.

Improving wrongness is like wandering in a mine field with the wrong map. Sooner or later the whole enterprise blows up on the wanderer. (10/6/98)

The arsenal of killing machines is growing and improving. A better kind of wrongness at full throttle. The better kind of wrongness is, as to be expected, on a collision course with evolutionary coherence. The cost of such a collision is brutal and the prospects are discouraging. Ruffian and predator man is still dominant and the veneer of civility is still thin and easily torn. See Bosnia, etc. (6/19/98)

As a monster demonstration of deceptive reality, remember Hitler and his hordes. They deceived themselves, en masse, that they were the master race and rationalized the horrors of the Holocaust. All of humanity is still, and will continue for ages, paying dearly for this horrendously real deception. Racism, xenophobia, intolerance, violence, sadism, naked opportunism, etc., are the permanent scourges of Homo sapiens. (6/20/96)

. . . the bulk of memory is frozen. Frozen in the durational space-time-less bullion of the past. Defrosting the durational bullion is tantamount to self-revelation or the Second Coming of total recall or resurrection, or the Urban Effect, pick your choice. MCD is the normative pied piper, the call reality is or ought to be driven by. (1/2/95)

For a planet reduced to a crisp (or a sorbetto) by the dying sun, the only presence of life, of its biosphere and noosphere, will be memory, the past. To reanimate such a nonspatial document other spatial processes will want to "be more of it," that is, to be altered by it, that is, to become part of the transfiguring of space responsible for the cosmos evolving. (4/9/99)

2

The fundamental lesson that reality has been teaching us is that it is complex, and it is therefore critically dependent on the tight packaging of its components. It is dependent on Miniaturization.

One can state unequivocally that there is no possibility for consciousness to exist and operate in the absence of organisms that are the epitome of a prodigious degree of Complexity made possible by an extravagant degree of Miniaturization; so prodigious and so extravagant as to engender in the organism the phenomenon of Duration that enters synergetically into the evolutionary advancement of the organisms themselves. Duration is that nonspatio-temporal sequence of actions which, though generated in time-space, is pulled out of time-space to exist outside of it. Memory, for instance, is a durational event.

Complexity and Miniaturization are inseparable, and they are a take-it-or-leave-it proposition. To take it means to be with and for life. To leave it means to be with and for death. It is that pure and simple.

Organisms are fragments of life as they are fragments of consciousness. Therefore they are never self-sufficient. They always depend on that which, strictly speaking, is outside the membrane of autonomy that makes them operational. One can thus embrace the totality of things, thereby subjecting the whole of reality to the imperative of Miniaturization-Complexity-Duration: the MCD paradigm.

The MCD paradigm is the normative stress to be applied to evolving history, as well as the normative technology attending to all parcels of living reality, the organisms and their institutions that make up such evolution. Evolution—that is, reality Becoming. The imperative of the MCD paradigm is, nowadays, made more urgent by the demographic pressure applied to the resources of the planet, its ecology. The future is thus in the direction of the ultracomplex, ultraminiaturized, ultradurational.

The ecological health of the planet is a function of the paradigm insofar as consciousness is the condition of reality that makes, to the utmost degree, for a desirable project. Outside the light of the paradigm is the darkness of nonlife, nonconsciousness, and ultimately the absence of grace and love in a reality condemned to never acknowledge itself and thus also condemned to lose any hope for true equity.

To observe that the MCD paradigm is well served by the Japanese culture is obvious. Inside and outside the (traditional) home, the Japanese environs are complex and miniaturized to a higher degree than possibly in any other culture. Naturally the ancestral memory, that is, Duration, permeates

the whole environment. Both the paradigm and the Japanese culture point to frugality, the mode that does more with less. This, by the way, agrees with the known slogan "less is more" only if and when with less one means a sophisticated degree of Complexity. The Complexity of the true esthetic, for instance.

3

There is the application of the MCD paradigm to arcology. The arcological proposition is within the Miniaturization-Complexity-Duration norms because it is the affirmation of the city as one of the most critical phenomena dedicated to the generation of more and more consciousness and its doings. By submitting the mineral, probabilistic reality to the possibly unstoppable pressure of Miniaturization-Complexity -Duration, the Urban Effect is, in truth, the technology of mind's making.

The arcological proposition sees no difference in nature and intent between the terrestrial Urban Effect and the outer-space venture. But the term "ecominutiae," ecological modest habitat, is to remind us that space culture will be for a long time a diminished culture. A grandeur-deprived culture, because it will have to adopt and cope with the black void of reality, away from the astonishing gifts of a planet like the Earth, our maker. Our space cities will be ecological tidbits timidly echoing the prodigious nature of the earthly parents.

On the level of physical-functional, order-disorder, the ecominutiae are at the opposite end of the Hiro-Naga destruction axis. The ecominutiae are the reordering of matter pushed at extremes of purpose and control because space is where frugality (a Japanese virtue) must be in a quantum-jump mode. They are, in an earthly imagining, like tiny bubbles filled with genetic and mental purposes and launched in those environs that are nonenvirons by definition, the nonlife, black media in which the cosmic "machine" unravels its probabilistic future. It will be most unfortunate if the indispensable, hard-nosed technology, NASA-style, does not leave time, thought, and means for the overriding character of the space venture to be perceived, explored, and devoutly developed: the nature of the mind's light bursting within the cosmos.

The high price of frugality, that is, of excellence: Excellence does not come cheap. Both frugality and excellence address the imperative of internalization where excellence finds food for action, that is, makes public that which must originate in utmost privateness. The "explosive" radiance of frugality is in the mostly unconscious grip of the irreducible anxiety, a residual anguish, in each of puny us in the midst of the ungraspable enormity that is reality. The radiance is best evident in the esthetic event . . . the power-radiance of sounds and tempos organized by a Mozart, a Ravel . . . with such radiance the unbounded power is unleashed on the listener. Frugality at its best. To be expected MCD is there, the silent engine to empower the deed . . . (5/9/95)

For the whole history of the species the male has pushed for the powerhouse of Howness, science and technology included, but has miserably failed in fairness, equity, and wisdom. He must be made aware of his own black hole of compassion (the absence of it), and nurturing of creativity must be the task of the feminine. The feminine can do it if she does not give in to the notion of hypermanliness, to be a better male than the male. (11/6/98)

The long way to self-revelation of all the "universal stardust" is the way to peace. A cosmic peace, because there is no other peace but through the incarnation of "matter" into self-reflection, and via it, the hyperknowledge of itself. Only a cosmos at peace can deliver a potency and a permanency. They may even defeat entropy by dumping it in the waste basket of Nirvana.
(3/2/00)

12

Space for Peace

The world of the victim is not male dominated. It is, on the contrary, dominated by women and children. It is, like the Kingdom of Heaven, difficult to enter unless you come to it with a child's imagination. It is a world of youth rather than age. It pays more attention to poets than to mathematicians. The warriors' world describes the outcome of war in the language of exchange ratios and cost-effectiveness; the victims' world describes it in the language of comedy and tragedy.

—Freeman Dyson, "Weapons and Hope," *New Yorker*

A Center of Space for Peace

The prospect of a nuclear-safe world is no short-term proposition. During whatever time it takes, the current handful of nuclear nations may double or triple in number. They must, as well, be a part of any lasting negotiations. Even with this, the availability of nuclear technology will forever remain a threat in the hands of any nation or terrorist group wishing to make a point.

Over the course of time, nations may easily be distracted from the quest for nuclear safety by discussions of numbers at a bargaining table, by disputes of territory among warring nations, or by internal conflicts among political factions within any single nation, as the gap widens between the haves and the have-nots.

Space represents an opportunity to expand the bounds of the conflict or to create a common purpose. Cooperation in space, in its exploration, in the use of its technology for the good here on Earth, and even in its habitation, could represent the bond between nations that will be needed during the long negotiations for nuclear disarmament. The economic engines of space technology may not (should not) be stopped. They may, however, be redirected.

Space for Peace had its beginnings in the '60s with Soleri's renderings and architectural models of early space habitat designs: First-Generation Arcologies in Space. In the '70s, the renderings and models progressed to Second-Generation Arcologies (Two Suns Arcology), incorporating two suns—one the physical, and one the urban spirit, both focused on the urban frame.

Soleri's Third-Generation Arcology, the modular habitats built from basic structural components, could be assembled in a variety of urban frames. In Space for Peace, they are applied to gravity-free conditions—the Third Generation evolves into the flowing sketches rendered by Soleri for the Fourth-Generation Arcology.

Four initial series of graphic images on a black backdrop were completed in 1984. As in other Soleri works, several mediums are used in Space for Peace. Each series is contained upon a roll with up

to six graphics each—the free-fall cities in space. Some are built off asteroids that they mine; some enclose the asteroid entirely; others float free.

The initial series of sketches was prepared in response to a request from Vienna for Soleri's participation in the architectural symposium "Man in Space." With one series at the Smithsonian Institution, three rolls were presented to the conference in June 1984.

In April 1984, the early draft of this text was presented to the Chapter for Social Responsibility of the American Institute of Architects at their national convention. The context was a discussion of nuclear disarmament. At the same time, a meeting was held in Phoenix, Arizona, to sell one hundred yet-to-be-rendered sketches of space habitats and to discuss the prospect of using the proceeds to support an institution furthering the Space for Peace effort.

—Patrick Colvin, Cosanti Foundation, 1986

Watching for over twenty years the drift developing in matters of space, I find myself unable to express any optimism. What a society will do within one or two generations is preordained by what society "thinks" at present. Our thinking about space is violent and dread-oriented. The urgency of fostering an opposite trend must be clearly stated. This monograph is an initial draft on Space for Peace and about the means that might possibly provide a voice of hope among the dismaying cacophony of the "might makes right" clubs. It is an attempt to indicate an altogether different assessment of our inescapable presence among the stars.

1. Blood in Space

A. The USSR and the United States have chosen a "Star Wars" posture and seem determined to become highly proficient at it.

B. Technocrats find the capital needed for sophisticated technical developments, their sources tracing back to Pentagons and Red armies.

C. After a noble attempt by Stanley Kubrick in *2001: A Space Odyssey*, the image and opinion makers of the movie industry have opted for *Star Wars*. We, the masses, pay and revel in it.

D. The video arcades are assiduously attending to young and old alike to make sure the inevitable is identified with strife and blood spilling, over, under, and everywhere in space. The horizon, even the remote horizon of space, is bloody.

In the meantime . . .

It is a cold and lonely place out there! Astronaut and cosmonaut are aware and beware. (1/19/00)

Cosmic dust with a conscience, which is what we are; we are (Become) of a cosmos that is conscience deprived. But conscience is not something taking a ride on cosmic dust. It is that a certain count of dust is conscious. It is not a host and guest game. It is a presence, a conscious presence, that happens to be an "original" presence, that is, a unique space configuration constantly reconfiguring itself, and conscious of itself. Consciousness does not necessarily mean knowledge; it means awareness. (1/17/99)

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2. *The Next Millennium Is Upon Us*

These are some of the scenarios the millennium might face:

A. fragments of human societies torn by strife because of mistrust, fear, greed, bigotry, intolerance, idolatry, and mediocrity; a planetary ecology precariously balanced at best; rampant indigence, sufferance, and squalor;
B. the emergence of a wiser humanity, able to cope with its flaws, having enough left in itself to set the premise for transcendence; with it, a lesser degree of inequity, an abating of sufferance, and a convalescing planet;
C. an illuminated species that, by radically altering its priority chart in the direction of the desirable, is able to move into an astonishing future;
D. a planet rendered barren of culture, and possibly of all higher life forms (mammalian included) through the thermonuclear nemesis of the "God and Country First" aberration;
E. and for good measure . . . a planet in the grips of a catastrophic climate change, a new ice age for instance: life seeking survival with massive sacrifice, extraordinary migrations (with social, economic, and cultural upheavals), and radical technological/urban transformations;
F. a scramble of any number of these possibilities, each with a degree of (unfathomable) ambiguity.

In light of the present outlook for a thousand-year span (the third millennium of the Christian calendar), scenario C is patently Utopian. It is useful only as a reference point—assuming that we are able to grasp the nature of the desirable and remain guarded against the pursuit of only the feasible, always shot through, as it is, with expediency and obsolescence.

Scenarios D and E are real possibilities. As far as their impact on life is concerned, as perceived at present, they have to be regarded as potentially irreversible events. This leaves three scenarios, A, B, and F, with B as a mildly optimistic proposition, snuffing out the black light, the evident obscurantism, caused by our addiction to the things present in scenario A.

If consciousness were some day to guide evolution, desirability would enter the cosmic stage as the guidance to feasibility. Probabilism, love, desirability as the agencies in ascendance within an evolving reality. (3/1/96)

Once life enters the cosmic landscape, it ruthlessly and generously creeps all over the dumb universe with its own going for broke, sickening way. Life bugging life and everything around itself. Now reaching, over-reaching itself into extraterrestrial feats. How puny, rickety, and unimaginative are the gods we invent! Including the insects (three sets of limbs) we call angels. (10/3/99)

3. *Why Space Then?*

Escapism? Easily so if it is technology for the sake of technocracy. Easily so if it is distraction from the harsh facts of life (and death) on this planet.

Malice? Easily so if it is a money machine for the already padded safes of the well off.

Evil? Easily so if it is for perfecting the mechanisms of war

The virtual realities boys and girls are the most up to date in the search of the escape route that would distance us from reality, and why not, for good reasons? (8/24/93)

and apocalypse.

Stupidity? Easily so if it turns out to be a waste-making machine devised by our "best minds."

But space is also an imperative.

It can help directly and indirectly to break out from the dark center, scenario A, where we now seem trapped. In fact, it can do more, much more:

1. It is part of the quest, the search into the unknown. This quest is an imperative of the Mind, the distinguishing feature of the human organism.
2. It is a frontal challenge to the technocratic penchant of our "rational" Mind, in favor of the surrational longed for by the better side of Mind itself.
3. It can afford the human species breakthroughs in technology and science with critical transformations in wisdom and esthetics.
4. It might be the shortest road to a better understanding and greater appreciation for the prodigious planet that has generated us and all living things. Space will give us instruments for investigation and experimentation without ever more grievously endangering the planet's ecosystem.
5. It is a magnificent alternative to adventurism. The "adventure to end all adventures" should satisfy our machismo in the most gentle of ways (see section 5, #2) and strike down the beast of thermonuclear "better all dead than Red" solution.
6. It is a true plunge into frugality, perhaps the most formidable step toward the metamorphosis of matter into Mind.
7. Consequently, it would give credence and feasibility to the injunction: "Go forth and multiply." The assumption here is that if Mind is more than matter, then the whole of matter must (democratically) become Mind.
8. It is a further thrust toward urbanization. Out there, in space, we build cities or we talk nonsense. But urbanization is ultimately the making of organisms/Minds beyond all anthropomorphic boundaries.
9. Space is the mode that makes a full genesis a slightly less remote possibility. Such a genesis, through the creational process of evolution, is the religious/esthetic resolution of the suffering and inequity endemic in an otherwise excruciatingly beautiful reality.

The content and the meaning that lie behind these nine points could reinject in the human conscience an element of genuine awe and afford a society sufficient coherence to compel it to stay the course toward Mind. Therefore, the following project is proposed.

Ignorance and arrogance go in tandem (with me at the head of the line). (10/5/99)

We, like all the other particles of the universe, are responsible for its "destiny." No particle is exempt from such responsibility. It may sound and be absurd that this dustlike population of reality might eventually be called up to create the "resolution." But then does any other "resolution" make any sense? (8/6/98)

At the beginning, "matter" and no Mind, at the end, Mind and no matter. Matter as mass energy. Mind as total recall (self-revelation); space-"time" as the device allowing matter to evolve into Mind. (12/2/93)

Stardust, us, making the stars into grace. As Henri Bergson said about one hundred years ago, "L'homme est une machine à faire des dieux." (2/7/99)

Far-fetched, this all-embracing esthetogenesis ultimately is the only way an endless chain of means—all of us as all of life, with its immense load of suffering—can be transfigured in an inclusive, graceful condition, the Omega Seed. (5/22/94)

Food for thought. Hits straight to the core: Thought needs food (from physical/mineral to meta-physical), and the whole cosmos will eventually be the food for the brain-mind. (2/19/95)

4. *Space for Peace: A Matter of Mind, a Foray in Space-Time*

Space is a matter of Mind on two levels:

- Outfitted as we are now, with a backpack measuring millions of cubic meters of earthly matter per person, we will go out there outfitted with but a few cubic meters of matter each. Such frugality is an exponential alteration of reality via Mind (see Appendix 1, point 6).
- The scarce matter that we take out there with us will be "filtered by Mind" into new ecological subsystems. It will be, for good or evil, a reality made in the image of man.

It might be useful to say at the outset that:

A. The space venture as an urbanization of the cosmos is tantamount to a seeding of it via and with Mind. How much of this is already in process throughout the cosmos is one of the unknowns.
B. The "seeds" will be placenta- or egg-like envelopes containing and nurturing the embryos of new societies. The placenta/egg reference is to be taken at the Apollonian postbio-organic level, that is, "designed according to Mind." The pseudo-organic proposed in some *Star Wars* movies is to be carefully avoided.
C. For a long time, the new urban systems will be less complex, simple-minded sisters of earthen towns. They will be tentative openings toward a new dimension of space-time.
D. In them, because of their very limited dimensions and complexity, human consciousness will have to cope with the most segregated and potentially deadening situations.
E. In them, given the technologically overpowering presence, the pursuit of knowledge might have as bedfellows rampant technology and exotic hedonism.
F. Since the space environment will be radically different, genetic alteration (both random and purposeful) will be only a question of time, with Silicon Mind at the outer edge of such a metamorphosis.
G. The presence of flag-waving and chauvinism will be pernicious and in need of abatement. Sociocultural obscurantism will be the alternative; *Star Wars*, the game.
H. Technocratic space cities would be as deadly and demeaning as technocratic cities on this planet.
I. The effect of living in the "midst of infinity" will be an enormously confined life: the placenta/egg/embryo syndrome.

J. The journey back to Earth will be cause for celebration and merriment. Upon return, the Earth will be finally perceived as the prodigious reality that it is, in its grandeur of land, sky, water, climate, flora, fauna, and Mind: something to behold in awe, gratitude, and reverence.

5. The Seeding of the Cosmos

The space foray in the proposed phase one must insist on providing guidelines that will be important for the steps that will follow. Therefore:

1. The journey into space must be intentionally naive. Some sort of innocence must be present. One side of this is the background innocence, so to speak, necessary for a fresh take-off in any venture. This innocence is imperative for ideas to take hold. Another side of this is to counter the hold of jaded technology. Technology is of essence to the venture, but unchecked it will generate the technocratic millennium and the obscurantism that inevitably accompany it. Innocence also is a state for "realistic and appropriate" responses to the conditions of gravity release. Besides being the essential builder of organisms (no planet, no organisms), gravity has also been the inexorable executioner. Now that the organism is an established fact (there are billions upon billions of them), the organism can skirt gravity!? The risks are grave all along the spectrum, mineral to Mind, but the future is there, expectant.
2. The space foray must be intentionally fragile. To announce the release from gravity and to design coherently with such a release is to meet the challenge of space. This critically new situation must be explicit since it entails a metamorphosis of structures and performances. Dig far enough into machismo (and iron pumping) and you will find gravity. Combine this deliverance from gravity with the placenta/egg morphology of space communities and we get a "feminine space." In transposing from flesh to hardware we generate what under gravity-rules is fragile.
3. The space foray must be intentionally vulnerable. It is pure madness to take into space the armor mentality. The more armor we layer around the space habitat, the more it will be vulnerable to the enemies that the armor psychosis will have indulged in creating.

   So it is for preemptive, retaliatory, and terror strategies. The dread of destruction by the enemy will probably defeat efforts to go there positively, innocently,

The violence endemic to history, all of history, will not abate, let alone crash, unless the feminine intervenes "in force" and steadily vetoes the tyranny of the male genetically imprinted despotism. But femininity cannot put on the warrior armor, a male invention, to combat and subdue the male adversary. She does not have the physiological wherewithal for that and fortunately not even the taste for it. To offer, she has instead the profound attachment for the anti-death arousal of life and of all the equipment to make life triumph over the male machinations and violence. (11/16/98)

The seed of the apple is appleness. The seed of the cosmos is cosmosness. (11/11/97)

If all the things attending to males' actions were to come close even remotely to the feminine frugality, we for one would not have an environmental crisis, and with an abatement of waste and greed our lives would have a better chance to move in the interiorized domain. The male has to develop a cultural-mental womb to equal the life-giver and loving universe of the feminine, the feminine womb. (12/1/98)

lovingly, gracefully, wisely—a major cosmic defeat for Mind and for a reality that depends so much on Mind for its own entelechy. There lies the tragedy of a crippled/aborted metamorphosis, no longer offered to life in general and to us in particular.

Will that which started with a bang, the Big Bang, end in a whimper? The diffused whimper of the cold death of entropy? (2/6/98)

4. The space foray must be intentionally Apollonian, that is, on guard against "organic" abandon, which inevitably ends up in technological rococo, where appearances try to conceal lame conceptual and functional frames. Some of the past and present science fiction films and an avalanche of "Aquarian unfolding of consciousness" illustrations testify to this danger.

   The black void of space offers a blank but threatening backdrop (the endless night of space). Serenity of mind, so dependent on beholding, needs reference points, the space habitat, which induces or encourages such serenity. "Dionysian," or worse, Aquarian Rococo full of vacuity and contortions, is the fruitless exorcism of order and hierarchy.
5. The space foray must be intentionally humanistic. At the end of the tunnel, for space, as for all of reality, the question is one of grace (esthetogenesis). If the "arts" are not in the forefront, the possibility of a technocratic, hedonistic, and slothful society will be real. Effortlessness (no gravity) is its own enchantress. Buffered between shifts of high-tech proficiency, one can literally let go, favoring a society that praises technical skill and indulges in psychosomatic abandon.
6. The space foray must be intentionally transnational. The degree of parochialism that might develop in a space habitat can have parallels only in the most rabid racial community, or one consumed by fear, greed, and arrogance. A raging tribal warfare in space would confirm the darkest assessments of the flawed nature of the human animal. Segregation will be contextual in both space and time. The unlivability of space as such, and the distance between various habitats and the Earth, will make interaction and intermingling intermittent at best. The necessary autonomy and self-reliance will encourage the pernicious notion of self-sufficiency.

Why is the esthetic at the core of it? Because the Mind needs to pluck out of its feverish chase some incorruptible nugget of finality, of conclusiveness. It is unavoidable that the makeup of such practices is the distillation of the fundamental anguish intrinsic to the condition of man, and his Mind, into the incorruptible esthetic object. (3/3/97)

7. The space foray will be intentionally antisegregational. The notion of a placenta/egg studded by hundreds or thousands of well-hidden cottages is to be dreaded. Privacy will have to be pursued in a clear urban frame. Suburbia has no place in space. It would make people twice removed from other people: segregated houses in a (failed) community, and segregated from the

> planet. A cosmic suburbia of the planet cannot be burdened with its own suburbia. Any other kind of segregation, as we so firmly practice on Earth, will be as fatal.

Appendix 1

Further Notes on "Why Space Then?"

The following are additional notes stemming from the nine points of section 3.

Point 1: What might unite the species in a common purpose is the quest for meaning and the creation of even more meaning. Knowledge and creativity are two inseparable halves of a reality that is not unfolding, as it is fashionably stated, but rather self-creating. Knowing what is, the past; creating what is not, the future.

Point 2: Technocracy is the bad offspring of technology and needs attention and control. Outer space is where technocracy can become monstrous. Space, as the staging for a war to end all wars, is an acute and terrifying possibility. Our political leaders are descending right now, April 1984, into the trap. With the military entrance into space, "space is here to stay." We had better face it, in all its potentials and ambiguities; both seem to touch infinity. A technocratic explosion in space is to be as dreaded as the thermonuclear confrontation on Earth. In fact, given the exotic nature of both, space milieu and thermonuclear technology, they easily entice germane minds (facts prove unfortunately that, singly and together, they entice mad minds).

Point 3: The breakthroughs in technology and science, directly and indirectly made possible by space, are probably countless. For one, space cuts the leash, if not the chain, with which gravity controls all life. This liberation makes of space the place for ephemeral systems. In daily routines, force becomes secondary. Energy will still be at a premium to produce and run things, ecosystem included. The largest ephemeralization will be, as stated earlier, the enormous scaling down of the amount of mineral media necessary to generate and sustain organisms. What such a quantum leap will produce is a well-guarded secret that the future holds. Eschatologically, it is clearly significant: It points the direction in which, through metamorphosis, consciousness pervades the mineral.

Point 4: The preservation of the planet is not a stewardship proposition. Stewardship is only one ingredient of the process. Recognizing our limited knowledge and wisdom, confronted by demographic pressures and a greed explosion (consumerism), it might be wise to test and alter things and processes away from the planet so as not to compromise forever its capacity to generate and sustain life. Space is thus directly and importantly

One of the dangers of interiorization is the hypochondriac bent, the person clamming up and eventually generating a dangerously distorted view of what is "out there," the foreign, the threatening, the enemy. People build fortified mansions against intruders; a city builds citadels against the enemy. Both are Urban Effects, both space configurations of a better kind of wrongness. Privatization. The segregational posture.
(11/24/98)

connected with carrying capacity, hunger, preservation of natural resources, equity, and the quality of life.

Point 5: It is an alternative to fatal confrontation. Even if one dismisses thermonuclear catastrophe, we are left with a planet plagued by strife, enmity, fear, injustice, hunger—it seems that something extraordinary could be a catalyst for transformation. The reach into space might spark a cosmic flame and shed light on the often petty squabbles besetting the species. The foray into space, a watershed in the evolution of Mind, has the power to do just that.

Point 6: In the long run, the plunge into frugality might be the crucial meaning of the space venture. If generating organisms had been an impossible task without the preceding creation of planetary systems and the bulk of matter they are made of, reality is now hosting organisms that can devise ways that might skirt enormity in favor of subtlety. To put it more equitably: Once enormity (mineral) has generated subtlety (organism), that same subtlety might opt for a more effective and direct process. Such a process is the mining of matter in discriminative ways to make organisms and Minds on one side and silicon intelligence on the other. In such a process, gravity might eventually turn out to be a hindrance.

Points 7 and 9: The Christian precept, "go forth and multiply," is an injunction. Accepting as factual that the makeup of the organism is an original and desirable arrangement of the same basic "mineral stuff" of the universe, the whole of such universe might want to have the privilege of becoming an organism. All said and done, only with the remote possibility of such total metamorphosis, and more (organism becoming Mind) resides the possibility of true equity and true grace. Equity and grace are the imperatives the Mind has generated within reality, and Mind is where, for now, the organism is. The space venture is one primitive step in such a quest, beyond the confines of a planet with a limited life span.

Point 8: The Urban Effect refers to the creation of Mind from matter, and the ever growing complexity by which Mind is carried and developed through time. All organisms are Urban Effects implemented via flesh. An analogy runs between the cells of a well-functioning organism and the individuals who make up a truly urban city, another type of organism. The space settlement is beautifully coherent with the Urban Effect paradigm of Miniaturization-Complexity-Duration, which accompanies the growth of the organism: the coming about of organisms/Mind/urbis with portions of mass/energy/space/time of diminishing size and diminishing time spans. This will mark a quantum leap, induced by Mind, in its own evolution.

I cannot refrain from pointing out again the great coherence underlying my work of the past thirty years inasmuch

as the Fourth-Generation Arcology (The Seeding of Space) is an inevitable development from the three preceding (arcology) Generations. In fact, the absence of the Fourth Generation would leave my body of work at the level of an unborn organism.

Appendix 2

The space iconography will need a more realistic mooring than the "Mother Nature" mystique proposing nature as a benign reality.

DEMYTHOLOGIZE MOTHER NATURE (and "God" in the process).

A human male ejects about 200 million sperm per orgasm. For one hundred such events per year, 20,000 million of these little semicreatures are on their way. In 50 years, it comes to 1.5 billion. So many of these sperm thus are generated to produce perhaps two to three offspring. It is like the male population of the planet being sacrificed for the sake of two or three of them.

In technological terms, the similitude runs this way: A car manufacturer about the size of General Motors has two sets of plants. One provides the engine-transmission blocks (sperm), the other the chassis-body (ovum). Imagine the engine-transmission plant producing 10 million units per year. In 150 years, it produces 1.5 billion units. It sends two to three of these to plant number two and dumps the remaining 1.5 billion. To understand the extravagance of it all, one must add that the complexity of the engine-transmission unit is a tiny fraction of the complexity of the spermatozoa and of the ovum.

God would last no more than a minute as the chairperson of this corporate board. That is, God is as extravagant a notion as that of a benign Mother Nature: a notion as extravagant as a mind can possibly come up with. The fury that life puts in its own will to perpetuate itself is in many respects a mindless game, where compassion can be generated only in numbers (1 billion sacrificial lambs per person).

Naturally the food chain up and down 3.5 billion years of the evolutionary ladder is an endless reenactment of similar extravaganzas. In fact, the sacrificial lambs (sperm/ovum) are not half-little persons as "believers" make them to be. They are code manuals for the making of people. Therefore, the God-fearing antiabortionist is in need of some homework. As for the abortionist, he or she might have a problem with his or her God.

The space foray then is not a mystical or Aquarian reentry into Father-Mother. It is, if anything, a new step toward the making of more Mind from (less) mineral media.

Appendix 3

I have felt it important to emphasize the peculiarly feminine nature of space habitat. I should add:

1. The Interiorization of Life. The space foray is interior design by definition. The placenta/egg nature of space colonization is self-evident. Short of NASA's $3 to $5 million chair for space walks, individual life cannot sustain itself in the void. But even the chair is a placental shroud for the astronauts. The envelopes and their contents that we construct out there will have all of the characteristics of a simple-minded egg: favorable environs for life development, homeostasis, pressurization, selective permeability, resilience, containment, synergy, interdependence, cooperation, miniaturization, etc. There are further placental aspects that result from feeding from the outside: energy, information, and that which still comes from the planet and other celestial bodies. The "wombs" we will place there, the unrepentant pirate-adventurer "males," will penetrate in droves to generate life in forms that will eventually be as different from the present as the present is different from that which was "at the beginning."

2. As pointed out earlier, the genesis of machismo can be traced to gravity, inasmuch as muscles are at a premium when heavy work is (gravitationally and thermodynamically) needed.

Iron pumping in the feminine body borders on regression even on this planet, where brawn is becoming "unfashionable" (obsolete). It will be even more so with the prospect of unchaining organisms from gravity. Leanness, effectiveness, swiftness, grace, and (with all respect to the reptilian side of our brain) a higher ratio: brain to flesh, are the more appealing and more futuristic assets we will need. Gladiatorial excesses will be just that, excesses. Space will be the place where these things come to the fore. In fact, the spa phenomenon might just find its justification as an anticipatory enactment of what is needed out there, to keep the body, not in bulging shape, but just in shape. What goes for an organism goes even more so for the physical structures. Architectural and engineering machismo will be redundant—regression again.

It should then be evident that we should generate gentle, nurturing, and graceful events in our space habitat. What we are in the process of generating, instead, is a technocratic, belligerent, intolerant mode, bulging with threats and chest beating. The urgency is clear and the dilemma is real. On one side lies the emergence of Mind into the cosmos; on the other the obliteration of Mind from reality. I think this is a choice that the feminine can passionately embrace. That is, to opt for the first, and then to nurture its development. Here is where the appeal stands.

Appendix 4

Technology/Theology

Twins? Enemies? Coworkers? Or parent-offspring?

The following is a synopsis of a theme for the 1984 Thanksgiving and the 1985 fall equinox events at Arcosanti. Though written some time ago (1976), I believe it fits hand in glove with Space for Peace.

The genealogy proposed by religious dogmas is that the Father (God), among his many creatures, generates the human. The human (or "wo-man," a more affirmative term than "man"), in turn, and among other doings, has also invented technology. The principal subject of a conference and celebration on technology/theology, as I anticipate it, will be the probing of such a contention in the face of the following and opposite propositions:

- Technology does not generate from God via wo-man but instead generates God via life.
- Technology generates the cosmic process by operating from an original unexplained condition of being and, all along the evolutionary process of reality, is the deus ex machina; that is, technology is not caused, it is causal.

The fruits of this cosmotechnological generation are as yet demonic. Therefore, idolatry for such fruits would be senseless. No one can find idolatry in the absence of the idol. Technology works at the creation of that which is not. That which is not is by definition unfathomable since it does not exist. It cannot be an idol either because an idol is a frozen, unalterable image.

Then reverence for the techno-logical process, the ongoing genesis of the cosmos, might be in order. If such genesis is to have an eschatological resolution, then technology is theology. Since such a goal is only hypothetical, for the time being, technology has to satisfy itself with fragments of divinity: shreds of being, often demonic shreds, the embryo in quest of grace and of an as yet nonexisting divinity.

Appendix 5

*From "Space and Man," a paper written in 1976 (*The Omega Seed, *Anchor Press/Doubleday, 1981).*

Synopsis: If science is correct in determining the Earth to be composed of the same stuff that makes up the cosmos, and if life is the biotechnology through which stuff becomes animated, then life, which now appears to be the exception to the rule, could eventually become the rule. If, in addition to being feasible, this potential animation of the cosmos is also desirable, then the responsibility of life lies in the transfigura-

tion of an immensely powerful physical phenomenon into an immensely loving mental one.

The implications of space colonization are critical:

1. The eschatological concern. The question of the ultimate aim and purpose of life, the eschatological paradigm as such.
2. The genetic concern. The splitting of the human species into subspecies (which has prehistoric precedent) as a direct consequence of space being invaded by humanity.
3. The urban concern. The space probe is the urban probe on new grounds. Therefore, the urban question looms ever larger in the destiny of the species.

Depending on how these questions are approached, hope or despair will emerge.

In despair:

1a. We see ourselves as well-worn sorcerer's apprentices, incapable of halting the plunge into technological hubris, which more and more forcefully brings upon us the wrath of our indignant Father, the Lord, and our merciless expulsion from nature's bosom.
2a. The human species, abandoned by the Lord, Providence, and instinctual wisdom, will tear itself apart under the stress of new (evil) environs and spawn inimical subspecies foreign to each other. These will find their own nemeses in specialization, genetic or otherwise.
3a. The human species will make an ever more compromising step into the urban syndrome, seen as the sum of all evil, since space colonization will be directly informed by those conditions that per se define the current urban context.

In hope:

1b. We are making (reaffirming?) a Promethean commitment to Mind by taking action to release it from the gravitational vise of the Earth and by opening the cosmos to urbanization, that is, to Logos.
2b. The human family recognizes its genetic and other limitations and willfully seeks morphologically new cognitive forms for the purpose of outfitting itself for the immense journey into Mind via flesh (mass-energy).
3b. In stepping off the earthly landscape, man is turning toward ever more crucial transphysical conditions. In sum, man will opt for the self-containment of his habitats, their inward orientation, the cooperative

and interdependent nature of the social and cultural texture, high-density performance, the imperative of integrity and self-reliance and, finally, the complexity and miniaturization of the milieu. The space city will, therefore, be an unequivocal test of our readiness for the vertigo of a momentous step toward Mind.

The Eschatological Concern

Let's look at the carrying-capacity contest as it seems to have developed. The first living thing on this planet had, as a necessary support system, the entire existing cosmos, since only the existence of a specific if unknown cosmic balance made possible a specific if unknown solar system balance. This made possible on Earth the appearance of a specific organism (one had to be the first). The cosmos in toto was the "territorial imperative" of a bacterialike organism. No cosmos as such, no bacteria as such.

Even at that moment, or a bit sooner, things were becoming autonomous, that is to say, not purely deterministically generated; life forms were not hopeless prisoners of a totalitarian cosmic dictum. The solar system was coming to life; and Earth, for instance, physical balances, were affected by physiological counterbalances. Oxygen was freed into the forming atmosphere through the initiative of living organisms, etc.

A first massive implosion of territoriality from cosmos to solar system, specifically, sun-Earth-moon, was taking place. So it came to be that the territory of each organism was a proportional fraction of Earth bulk to which was added a similarly defined fraction of the sun's energy falling upon the Earth and, in addition, relatively small influences such as moon tides and cosmic radiation.

If one takes a look at the contemporary scene and simplifies the model, one sees that every human being requires the presence and use of a cone of matter (defined by the radius of the Earth, with a base measured by a circle upon the biosphere, atmosphere included) of, let's say, approximately one hundred acres. This gigantic mass, to which must be added its share of sun energy, is but an infinitesimal fraction of the original mass necessary for the advent of the first bacterialike organism—and we begin to feel crowded, but we also begin to appreciate the providential tendency of life toward frugality.

Providential, since if it were otherwise we would soon be face to face with the fatal dialectic of a self-parting, expanding universe and a level of consciousness that must abide by the fierce rules of shrinking carrying capacity, face to face with lifeboat ethics, triage, etc. That is to say, without the tendency toward frugality, there would not be the rationale of

evolutionarily expanding capacity, extension of reach, and contraction of needs, but rather an ontological wall made of indisputable and ultimate stop signs: a dying sun, the size and resources of the Earth, and, consequently, life seen as a short fireworks display of opulence and arrogance.

Where is an even more incredible explosion of frugality in store? It is in the most frugal and crowded mode of all, the brain of man, that powerful cognitions are working out more miracles of contraction and frugality (the Urban Effect in full swing), and, lo and behold, a few hundred thousand years after the invention of divinity, that prophecy of utter economy, the Mind conceives a fully lived, extraterrestrial existence. The implosion in the brain creates, at least potentially, an explosion of ecologies, eventually unlimited in number, capable of sustaining and developing life, ad infinitum.

If for a moment we assume that we will make the step of colonizing space and do it without diminishing man, then what do we have? An utterly new relationship with the world of matter. We will literally mine the universe, the solar system at first, rearranging and processing matter into the hollow cities of all sizes, types, and populations. The order of the Christian God, "go forth and multiply," would see an unimaginable degree of realization and the carrying capacity of the cosmos would grow exponentially. With this, the lifeboat theory would be blown to bits since it would serve only that righteous society unwilling to get down to tasks and construct new boats, one after the other, on and on forever.

Let's reiterate what would happen to the territorial imperative. With the space venture, the bulk of matter necessary for each person would shrink dramatically from the individual Earthly cone, with a corresponding ecological veneer and sun energy, into a bulk on the scale of a home attached to an urban landscape, to which would be added an open space of some acres or a fraction of an acre and some energy from the sun and stars on which the city might depend. In other words, it would be as if the Earth (or any other celestial body) were to be peeled off in successive skins, each containing an interiorized landscape (cityscape) of minimal physical bulk: a characterization of the human environs as exponentially frugal. Thousands upon millions of hollow worlds, inner-oriented because of locally produced gravity, would invade the universe from as many points in it as there are conscious centers (similar to Earth). Eventually, each galaxy would have the carrying capacity of 4,000 million consciousnesses (the Earth today) billions of times over, a true explosion of consciousness throughout the physical universe.

What is so desirable in such a model? On the personal level, one could ask if one would choose to be born. Even if the personal answer is no, to negate the birth of others, pro-

vided there is carrying capacity, would be rude to say the least. On the ontological level, it would seem clear that it is only with the intensification of reality by the presence and action of life that we might eventually bring compassion and grace to the whole cosmos, the integrated universe.

The religious answer, insofar as life and consciousness can be generalized, implies that:

1. consciousness is a prodigious interiorizing stress.
2. consciousness is a prodigious complexifying stress.
3. consciousness is a prodigious miniaturizing stress.
4. consciousness is a prodigious frugalizing stress.
5. consciousness is a prodigious animating stress.
6. consciousness is a prodigious transcending stress.
7. consciousness is a prodigious urbanizing stress.
8. consciousness is a prodigious divinizing stress.

It is only half true that there are only potential powers of consciousness; a cursory survey of life's evolution clearly, if coarsely, demonstrates such power. These implications are all versions of the fact that the eschatological imperative is issued from reality as an inescapable command: do unto matter (the mass-energy universe) what you do unto yourself. Make it into conscious matter, into Logos. That is, demand and force out of an ephemerally conscious universe that which will ultimately be a child God of infinite conscience, infinite integrity, infinite love.

It would be then for the sake of Logos that life must free itself from the Earthly prison. And, if it is possible for life to free itself from the Earth, isn't it then a "mortal" sin not to do so? And isn't the fact that life could not even conceive of leaving the Earth before the appearance of consciousness, and the fact that thousands of years ago the first step toward this leaving expressed itself in metaphorical, religious form, proof of sorts that it is the task of life and specifically of consciousness to do just so?

From a territoriality of the whole cosmos necessary for the appearance of the first living cell on Earth to the minute territoriality of a space city, we can measure the powerful trend toward frugality and the concurrent opening of the whole universe to Mind. Once upon a time, a whole cosmos for one infinitely puny life; eons later, intellection grasps at the alchemy of matter and makes it deliver its latent energy and potential conscience, giving impetus to the possibility of mining the cosmos, of making a moon into "large numbers of Earths."

The ape, tethered by gravity pulling down toward the center of the Earth, has its territorial imperative measured by the ecological capacity of the Earth. With the appearance of the human mind, the tether is potentially cut. The ecological

capacity is potentially transferred from the limited Earth to the endless universe. For this potentially quasi-infinite growth of liveliness, two things seem to be indispensable: a quasi-infinite growth of will and a quasi-infinite growth of reverence. Given these, divinity is inherent in the future.

There are two final considerations relative to the eschatological concern:

1. How much or how little we make of liveliness and consciousness-spirit is somewhat irrelevant since no matter what opinion we have of them, to have an opinion, any opinion, is per se an identification of ourselves with them. One option we do not have is to give them up without giving up life itself. The fostering of these elements turns out to be a law of nature that tautologically states that the ultimate meaning of the ensuing process will not disclose itself before its exhaustion. This late disclosure is not due to secrecy but to incompleteness. To reveal itself before the end, the Omega condition, would be an anticipation of creation. Theological structures are anticipation, and as such they are an important exercise for futurism. But by necessity, those exercises fall short of the target, since the target is not there yet; it will be there only at the end of the process.
2. A word about compatibility. Each generation has its own environmental compatibility; that is to say, a person is hard put to reject those conditions with which he has grown up. But each generation has piggy-backed on the preceding one. The individual cycle demands a return to the infancy grounds (reentry into the mother; we call it the father), and for each infancy such grounds are the maturity grounds for the parents (the preceding generation). This is providential since it secures both change and continuity. In fact, it would be difficult, if not impossible, to come up with a better scheme. This dialectic of change versus continuity makes conflict inevitable. It follows that it would be not only unrealistic but downright unjust and cruel to want to thrust the move into space upon the present generation as if it were a pleasure trip or a palatable prospect. But it could be for our grandchildren. The fact remains that, notwithstanding the incompatibility parameter, the parameters of territory, carrying capacity, and environmental development are in constant flux and expansion.

13

The Pinocchio Syndrome

Statement for the Tokyo Space Conference

MARCH 19, 1991

To animate matter is the lingering concern of the living.

For the human species it might be translated into how to make matter incandescent with thought. The alternative, possibly the only one, is to make matter incandescent with energy. This might well be the "natural" predisposition of matter and could be implemented by a sequence of Big Bang—Big Crunch cycles.

The animation of matter is behind our technologies, robotization at the fore now and the microchip as the most fascinating icon. Why such persevering exorcism?

Because we, ourselves, are animated matter.

The (outer) space yearning is part of this animation obsession.

Time after time, priests, despots, kings were beguiled by "animated" contraptions up to the elaborate machinations of the Baroque period, including the spellbinder for the masses: the "live" tower clocks. From toys for kings to toys for the masses was to be one of the glories of Walt Disney and, more recently, the Muppets of Jim Henson.

But all of this is simulation. No one thinks that the singing nightingale of the fable or the speaking Lincoln of Disneyland or the Cookie Monster are truly animated events. They are instead of the real thing. High-tech is targeting an altogether different aim: true animation. The metalife of cyborgs is now in the making. Prosthetic devices are only part, the crude part, of the picture.

Until recently the animation of matter seemed to be indivisible from the incarnation of it. Now we are no longer adamant in thinking that flesh is the only stepping stone toward Mind (ani-mation), though we still are inclined to see flesh as a sort of Maxwell's Demon at the gates of the metamorphosis: matter-Mind. The nature of the space venture will depend on the resolution of such ambiguity: Is flesh the only animating agency or are we on the way to at least paralleling it with "artificial intelligence" animation?

How is the animation of matter achieved? By the gathering, via space-time, of matter's "particle-waves" in exotic, rare, unheard of bundles of enormous complexity. A seed is a good example of such a gathering. A seed, any seed, vegetable, animal, calls upon the cosmos for the basic building blocks to construct itself into a full-fledged organism.

Contemplating, as one of the alternatives available to reality, the beginning, Big Bang, a dimensionless birth of space, a space in absolute ignorance, the hypothesis proposes an end, a Big Crunch, a dimensionless presence of space, a space in absolute self-knowledge, and the gap between the two as the cosmogenesis of self-revelation, that is, space revealing itself to itself via its creational metamorphosis. (8/16/99)

The "future" is robotic! . . . The bio-human phase of intellection? An exhibit in the cosmos museum of knowledge. We'd better nurture our baby robots. They are our future. (10/30/99)

Complexity-Miniaturization-Duration is the normative beacon of Mind in the transfiguration of matter into Mind via the space-time media. (3/4/94)

In a quickened cinematic sequence, the conception, development, and maturation of an organism is an undeniable implosive process of cosmic character because the call of the seed is responded to by cosmic neighbors, the sun for one. It is also undeniable that at death the implosive process is reversed; in a quickened cinematic sequence, we witness now an explosive process of a lesser cosmic dimension. The components of that which has become a corpse leave the exbody one by one to diffuse into the surroundings. Birth has catholic resonances; death has parochial tantrums.

It is easy to see that the implosive vivifying phase is a Complexifying-Miniaturizing event. The most intriguing fruit of such vivification is memory (memorizing). Memory is the context of a reality that is no longer subservient to space-time—it is Duration, where true "everlasting" animation is. Duration is not simulation, that is, something instead of something else. Duration is the real thing.

The stuff of the ecominutiae will be shot through and through with Duration or by the incipient axiality Duration defines. In a way the ecominutiae will contain the highest percentage of animation because most of their composition will be "matter" filters—that is, they will be metamorphosed by Mind. Thus, when triggered, the ecominutiae will be exceptionally frugal phenomena. They will even do away with gravity.

The Ecominutiae are proposing that space will be dotted, at least for some generations to come, with minute, oversimplified, semiautonomous ecosystems with mankind still at the helm. For the ecominutiae, the road to animation is still the road of the flesh. As for Pinocchio, "he" would have to wait a little longer (and find himself not flesh and bone but microchips and menus) and then find space to be perhaps less forbidding and less hostile to anima.

"Memory" (Duration) is the custodian and perhaps also the catalyst that makes the evolution of reality possible. After all, reality reinvents itself, aided by memory, instant after instant, present after present. (12/27/94)

Homo sapiens is now in "control" and Howness spills from flesh into mineral, which seems on the threshold of responding in kind: "artificial" intelligence, a misnomer!? The virtue of virtual reality still in question, we can, though, well see how far *mani*-pulation of matter has gone. (3/19/96)

Would the animation process of the biosphere transcend into the roboticization of reality? Would the systematic roboticization of reality be the sine qua non for the "incarnation" of grace? (9/19/99)

14

Paradox

A Work-Based Project Sponsored by the Cosanti Foundation

AUGUST 1997

Since Arcosanti is a place in search of the Miniaturized by way of Complexity and since cyberspace is a nonplace in search of the complex by way of Miniaturization, I am proposing an internship for insider-outsider interaction via the practice of building and living in a nonvirtual environment frugally imprinted, a habitat dedicated to urbanization.

At Arcosanti, our work is constructed of a prototype arcology. The particular construction project associated with the Paradox Project is the Pierre Teilhard de Chardin Complex, which includes the Loggia, Greenhouses, and the Pierre Teilhard de Chardin Cloister.

Located on the south slopes of Arcosanti, the complex is mainly intended to be the eventual residence and workplace for participants in the Paradox program, those who are at home on the Internet, those developing their nexus with cyberspace. It is important that the participants understand and identify with the complex they are building. It is named after the Jesuit priest and paleontologist who in the 1940s presented the idea of the noosphere, an anticipation of cyberspace and the Internet. It would be extremely appropriate to use his name in this context.

Paradox, the program residing in the Pierre Teilhard de Chardin Complex, is proposed as a neomonastic internship. "Internship" points out that residence in the complex is limited in time so as to be a structured experiential situation where the "virtualities" of the Internet are juxtaposed with the "concreteness" of Arcosanti.

1. The Angelization of Homo Sapiens and a Neomonastic Internship at Arcosanti

This is an appeal directed to the small minority of cybernauts who in the middle of their intellectual and financial successes seem to be disaffected and possibly in an undefinable state of anxiety about the reality they are in.

Paradox is an initiative arcing from the precomputer culture, the outsiders, toward the cyberspace culture, the insiders.

Step by step, willingly, reluctantly, despondently, one might have to consider the Lean Hypothesis as a serious attempt to understand the desirability or the undesirability of our actions. Miniaturization-Complexity is not the idle caprice of a brain out of whack. It is the ever-present norm in all living forms reaching stupefying presence in man's brain. (4/27/00)

Geosphere Biosphere Noosphere

Biosphere needs geosphere, noosphere needs biosphere.

Geosphere does not need biosphere, biosphere does not need noosphere. Noosphere feeds from biosphere, which, in turn, feeds from geosphere and from the sun.

These dependencies (and independencies) define the staging of evolution, its limitations and its potentials. (1/28/99)

A posteriori symbolism of the Teilhard de Chardin Media Lab.

The south elevation shows the ramps as rooted in the mesa geology, aligning up toward the explosion of light of the amphitheater. Flanking it are the light-filtered and controlled spaces of the basilicas. The sun uninhibited floods the amphitheater while the sun filtered and controlled has its light diffused into the basilicas, which both have the sun-blade, midday movement. A presence lasting a few minutes. (2/17/99)

Some of the Paradoxes

A. Currently, cyberspace ephemeralization is optimally exercised in physical isolation. The single person is in her equipped room away from distraction and focused on simulations and virtualities.

B. This condition suggests two paradoxes:
   - Although the suburban or country home or mansion is the optimal location for the pursuit, it is the most consumptive icon of our American Dream culture. It is the epitome of hyperconsumption under the premise of hyperproduction, which is an ephemeralization based on unheard-of materialization.
   - The age of information is implemented via the renunciation, if not denunciation, of body-mind to body-mind interaction in favor of the mind-machine-mind exchange.

This is the tangible anticipation of a global hermitage age.

C. The exotic technology of Miniaturization (microchip, nanotechnology, etc.) is at the service of a culture in love with bigness: the mansion, the car fleet, the sports equipment, the superhighways; bigger and multiplying devices, power tools . . . bigger people . . . This culture needs to be addressed by an "opposed" culture of Complexification generated by the urban condition and dedicated to a frugalization of needs and means, that is, the implosion (Miniaturization) of habitat and equipment. This is an interiorization process, the opposite of the ephemeralization of cyberspace pursued in the hyperconsumption environment, the suburban-exurban developments of the American Dream.

D. Arcosanti is asking the cybernauts to experience for one year or so a condition that might look antipodal to the one they have conquered: the experiential process of building Arcosanti and the faculties where they and their peers may reside in a neomonastic internship.

E. Arcosanti will offer the cybernaut the paradox of one year of targeted, frugal neomonasticism. We are offering not a contemplative Buddahood, but an active and less narcissistic "cement mixerhood."

F. Notwithstanding the methodological diversities of the two emerging lineages of insiders-outsiders, they are both guided by the double Techne of Miniaturization and Complexification. The prodigious fruit of such normative dynamics is Duration, the increasing ability of reality to memorize its own doing and by way of that constantly move itself toward its own self-creation and its own possible self-revelation.

We are receiving a beating from Howness, the hypertechnology of manipulation, in part because our innerness (reality ephemeralizing itself) is beaten to the punch by our meandering technology of greed with all of its physical paraphernalia. The exurban hoarding at the head of all. The planetary hermitage so dear a dream of environmentalist and cyberian will eventually stand as a nemesis of intellection, the ephemeralization of reality (the cosmos). (12/29/98)

The next few generations will witness the tearing apart of the two-man agency of Homo sapiens. Body and mind. The intruder will be sotto species silicon or other mineral compounds. We are already living in presents in which young people feel the call of all things virtual reality lures their minds into. (6/6/96)

We are told that life is information. Well, information thrives only where space is cut, sized down to an almost nonpresence. That is where and why space is "piled up"; see the brain. Even the microchip has to fit the mold, pile up microchip wafer to cut down on distance, waste, entropy. But two-dimensional dementia is upon us. It is the negation of what life is, a three-dimensional lattice of improbable space arrangements. (4/7/99)

Other relevant paradoxes:

G. the authors of the global hermitage, which *is* the building of cyberspace, working and living with the seekers of urbanization in the Arcosanti urban laboratory;
H. Homo carbonis calling upon Homo carbonis on his way to inventing Homo siliconis, aware of the immense horizon for good and evil such an invention makes feasible;
I. the "Great Collective Project," the Internet, testing its own universality in the most modest of all modest undertakings, Arcosanti.

This experience will promote a sort of gentle conversion for both cybernauts and Arcosantians developing via the perception of a new presence, an asexual presence: the intelligent machine.

There are additional points that make this project attractive to both Arcosanti and the Internet community:

- the potential for unpredictable developments.
- the potentially vibrant atmosphere generating from matching the Internet with the urban effect.
- the specifically feminine concern about the asexual persona and motherhood.
- the cosmopolitan makeup of Arcosanti enhanced by the Paradox Project and offered back to the participants in the program.
- the occasion for lasting relationships among participants.
- the rich documentation Paradox can generate.
- the extraordinary circumstances of Paradox.
- the potential for a global movement generated by the relationship of the Internet community and Arcosanti, with both entities dedicated to the methodology of Miniaturization and Complexification producing Duration, "living memory."

The Intent

The intent of the program is to find the linkage between and the dependency affecting the "old" culture and the new theology of hypermedia and simulation and to seek a win-win methodology.

But first I must explain the "prejudice" of an old outsider vis-à-vis the dedicated young insider: Accept, embrace the technology. Reject, refute the theology, a cult.

In the larger horizon, I am prejudicial in my belief that all theologies, well meaning or not, are deceptions (virtual realities sold as reality) and the stronger the deception, the stronger

Problem-solving and wisdom
Is cyber a virtue of the problem-solving kind? Is it viscerally capable of ethicizing the problems before embarking on its "logical" solution? Remember the logic-solution of the gun development: at each solution the human misery grows . . . and the H-bomb success and nemesis are attached to it. (8/7/96)

. . . it might turn out that at a certain point silicon promises a more versatile Howness than carbon; the choice of Howness will be unchallenged: the supremacy of an asexual silicon person, ASP. (3/3/97)

. . . I think that virtual reality can be the most effective and frugal additive to the urban experience: complementarily as a pre-experiential and postassessment/assessor of actual, contextual experiences of events, virtual reality can assist in developing the richest social and cultural milieu and, as large dividend, can provide relief to the overused natural and cultural resources of the planet. (4/8/94)

Once the environment is accepted as a main component for life . . . we have a chance of acting out the best of man's gregariousness, the positive, optimistic milieu cyberspace alone cannot deliver. The virtue of virtuality has to be grounded in the virtue of an immense Becoming to which one and all are consciously or unconsciously contributors. (9/27/99)

Theologies and virtual reality . . . are simulation mechanisms, one could say theotechnology. The main propellants of theology are awe and dread. The main propellants of virtual reality are curiosity and exhilaration. A carbon-based theotechnology on one side, a silicon based neotechnology on the other. The quest for dominion (knowledge?).

The quest for God. (3/30/95)

The wrongness of hypersumption is in the fracturing of the brain-mind world, the world of ephemeralization, transcendence, knowledge, love, and esthetic into smithereens of space, an almost emulative state of the atomistic reality of "primitive" cosmos. A materialization of Becoming promoting greater and greater entropic inroads. (7/16/98)

As long as groceries, beds, toilets, etc., are in demand, the logistics of life, the internal logistics of organisms, and the external logistics for them are present and demanding. That is one reason why virtuality tends to be overestimated. The theology of virtuality occupies the unconscious of cyberpeople. They have to come to terms with their hallucinations. Otherwise the self-righteous luddite brigades strike. It could be a bloody confrontation, and the spilled blood would not be virtual. (2/21/00)

the perniciousness. The history of the great "religions" and the history of despotism in general give credence to my prejudice.

Cyberspace and Hyperconsumption

The paradox in the basic ephemeralization of virtual reality is that such a process is generated by "solitary" minds, between themselves and the machine, the computer. Therefore, the "ideal" setting is the segregation of suburbia and exurbia. This is phase one of the global hermitage.

But suburbia and exurbia are a consumption machine, *the* consumption machine by definition. Such consumption and sprawl are the opposite of Miniaturization and Complexification in pursuit of Duration. This is the paradox of *hyperconsumptive cyberspace.*

The monkey or the fox runs away with his banana or his bloody bone to a corner to make it into his own flesh. The human who has grabbed the toy of her choice does the same thing. She runs away to her cubicle to play with it to make the cyberflesh mechanism.

From the gilded log cabin in the wilderness, I, as the Netizen, have the whole world at my fingertips. But that does not deliver water, power, groceries, company, etc., to me. It does not deliver me from waste, dependence, sickness, or from materiality in general.

There is a self-righteous "you'd better serve me, society" streak to all of this. "Bring me the paved road, the mail delivery, the fire protection, the ambulance service, the school bus, and all the amenities that may make me a social, vicarious, voyeuristic animal. You'd better deliver the goods to me! They come to me as a right. I am a hedonist at heart and proudly so at the top of the materialistic ziggurat, and from there, I will enjoy the virtues of cyberspace(!?)."

The reason for my unease is simple:

It is via the gilded log cabin habitat that the planet and everything in it are in grave danger. Ten billion wealthy hermits are nemeses not geneses. More the worse if only 1 billion hermits are the objects of envy from the other 9 billion.

The "I do what I like as long as I can buy it" mindset is a pernicious illusion capable of destroying us. Irrational greed is its platform. It is irrational because it is fundamentally incoherent.

One hermit is a curiosity. Ten billion hermits or even 1 billion of them is a brutal wound to the best that is in us: the beauty and the pain of belonging, belonging body and mind. Hermits do not produce or partake in civilization; they use it. Hermitage is the stuff of nemesis. So it will be for cyberspace if we are not painfully aware of its limits and the ethical envelope it has to come with.

A hermit species has never and will never produce language, the book, the hospice, music, electricity, science, technological might, textiles, the radio, the car, the airplane, the rocket . . . medicine, wealth, security, culture . . .

Part of the exhilaration of industriousness is industriousness per se, the "sweating" reconfigurations of matter out of matter. That is the magic of the trio hand-brain-mind and of all the panoply of senses and sensitization, including contemplation and meditation. Beware, though, of the lifelong, professional, meditating hermit. He is the stuff of which parasitism is made.

But is all of this idle talk about silicon intelligence? Perhaps it is.

A Neomonastic Internship

This neomonastic internship is an experience of a year or so where the participant is not offered "new" theological truth, but where a "religion" hypothesis based on binding through a self-revelation of reality is suggested.

Self-revelation does not refer to an individual "trip," but to a cosmic journey.

The splintering of two or more lineages of humans makes religion, from the root *religio*, the binding of all and everything, an imperative, in fact, *the* imperative. It is an imperative that goes beyond racial and even genetic confrontations because it covers the cosmos at large and in it the unanswered question of equity, meaning, and beauty.

Maintaining that the writing of history (evolution) is fundamentally the exploit of an inseparable triad—Miniaturization, Complexity, and Duration, where Duration is the brainchild of Miniaturization and Complexity—I suggest that cyberspace, a fruit of hyperminiaturization in search of Complexity, and the Arcosanti project, predicated on Complexification searching for urban Miniaturization, might develop a state of fruitful tension here on the grounds of Arcosanti.

Neomonastic?

The experience will not be in the domain of hyperconsumption encouraged by our culture and by cyberspace, but in the domain of frugality. We must choose frugality in view of its hold on interiorization and its coherence with the limitations and the glories of the planet.

In a way, reality in its atomic makeup, the "outside" that is Arcosanti, is "confronting" the photon reality, which is the cyberspace diet delivered to the hermitage of the insider. Learning will come about mostly via environmental immersion, with its points of pleasure and displeasure, the partici-

The difference between the greedy stock exchange "descamisado" and the gang leader is more the consequence of an infant background than any ethical standard. The first finds the soft spot for penetrating the dream in sterile high finance and Rolls Royces; the second in squalor and . . . Rolls Royces.

The two souls are "twin souls." (4/20/94)

One way of defining the hermit mode is self-incarceration. Somewhat unfair perhaps but denoting the clear segregation of the hermit. The cyberhermitage would then be the "voluntary" (self-)incarceration of Homo sapiens on a global scale. Once in its cell the self-sequestered hermit might misplace the key and find herself locked in. Deep, deep trouble for herself and the environment at large. The hermit's cell tends to be opulent and hyperconsumptive. That for one marks the hypercritical situation. (2/20/97)

The How and the Hand

The hand is one of the prides of How. It might well be the eureka of Howness. The hand has revolutionized Howness. The scientific-technological revolution is a document to this. Howness has found in the hand its own postorganic master. It is up to the brain to carry on the revolution. (8/12/97)

Religion means binding (from the Latin *religare*). Theologies cannot bind, since there is no way or sense in binding with

those things that do not exist, man and the rest of reality to gods. (3/16/95)

If and when reality becomes purposeful and the purpose is to pervade the cosmos with the just and the beautiful, then reality has to turn to silicon, or better to photons, because, in a slightly animistic bent, photons seem to be disembodied events forever seeking that which escapes them. Self-revelation. The same self-revelation of the cosmos at large to be found in Esthequity. (8/21/96)

The Arcosanti Urban Laboratory
The occasion for lasting friendships characteristic of Arcosanti workshoppers. The "cosmopolitan" environs emphasizing such character in Arcosanti. The richness and beauty of the project site. The experiencing of the full seasonal cycle, spring equinox and fall equinox. The uniqueness of the Arcosanti laboratory process . . . neomonastic in terms of humility, frugality, self-discipline, consideration, heartiness, transcendence. (1/1/97)

We are in it together forever. (11/29/99)

The lean habitat has to deal (to cope?) with soft green, hard green, and cyberspace. Cyberspace points at the nongreen, nonhabitat. So in a way, it is soft green, hard green, no green. (3/17/00)

For WWW not to be a lame phenomenon, it needs to have its Miniaturi-zation magic matched by the no-less magic of

pants partake of together. "Together" is a premise to binding, *religio*.

A year is optimal for perceiving and comprehending the impact of an annual cycle of seasons, activities, programs, and growth, bearing in mind that the scope of the program is the discovery or rediscovery of the power and the inescapability of the physical, be it animated or inanimate. This comprehension is inversely proportional to the degree of independence and the halo of alienation we interpose via our great ability to know *how* to do things using technology, the Howness of technology, and the drag hyperconsumption injects in the process.

This is where frugality appears as a positive determinant.

In the whole process, frugality has to be a dynamic presence inasmuch as it has to be contrasted with the hyperconsumption of the present technocratic societies and the chronic indigence of the have-nots.

A worthy quest is to seek that condition where the insiders, now poised for the greatest riches, the outsiders who are the wealthy and affluent, and the have-nots are equal agents in constructing societies and culture.

Frugality, a matter of Mind as much as a matter of money, can cut through the four domains and encourage the interiorization of life and its values.

SINCE ARCOSANTI IS A PLACE IN SEARCH OF THE MINIATURIZED BY WAY OF COMPLEXITY, AND SINCE CYBERSPACE IS A NONPLACE IN SEARCH OF THE COMPLEX BY WAY OF MINIATURIZATION, I AM PROPOSING AN INTERNSHIP FOR INSIDER-OUTSIDER INTERACTION VIA THE PRACTICE OF BUILDING AND LIVING IN A NONVIRTUAL ENVIRONMENT FRUGALLY IMPRINTED, A HABITAT DEDICATED TO URBANIZATION.

What could emerge at Arcosanti with the neomonastic internship is an enclave with some similarity to the university and to the monastery. Included in this experience is a "faculty" from the residents of Arcosanti and the student with a stay of one or more years, a mix of residents and "out of towners," including Arcosanti's traditional "workshoppers" and guests, living alongside the construction and maintenance people, the cooks, the bakers, the gardeners, etc.

The insider, generally age 25 to 40, is offered a process where insiders and outsiders work at building a nonvirtual reality, under the constraints of frugality, where the Complexity of reality encounters the Miniaturization of cyberspace, not in battle formation, but in a genuine reciprocal openness of Mind and intensity of work.

After the internship, the "has been" insider agrees to return periodically for an exchange of information and ideas and also

to express conflicts or resolutions derived from the double or triple experience. The Miniaturization of cyberspace is foiled with the Complexity of a developing urban effect at Arcosanti on the background noise of hyperconsumption and its suburban and exurban matrix.

The restructuring of Arcosanti's programs to accommodate such an internship is what Arcosanti needs to remain in the learning-by-experiencing mode, the urban laboratory mode. This will put Arcosanti at the very edge of the cyber-revolution. It is to the advantage of Arcosanti to be invested full force by the cyber-revolution introduced by young and spirited cybernauts.

Given the frugality imperative endorsed by Arcosanti, the experience will keep at the forefront the unresolved, possibly unresolvable, problem of the have-nots.

In brief, the purpose of the Paradox program is to offer the experience as an alternative for:

- the hyperconsumer;
- the insider, the focus of the Paradox program;
- the idle of means;
- the anguished of means.

It is an alternative fundamentally in search of a more frugal and more equitable life and behavior, personally and physically building the environment, the urban laboratory that might best fit the intent.

The program at Arcosanti should start at about the spring equinox of 1998. The main experience is in the actual construction of the Pierre Teilhard de Chardin Complex. Construction will take up to five hours a day, five days a week, of each Paradox participant's time. The Arcosanti construction staff will participate in and guide the construction work. The internship will be no less than 100 days, with an ideal ceiling of about 365 days, one year. The participants will pay a total of $35 per day to cover tuition, room, and board.

The Schedule:
Internships could run from the first Sunday in April to the following year's spring equinox.

1998	First internship year for a minimum of five and a maximum of fifteen cybernauts who will work at the Teilhard de Chardin Complex.
1999	Second internship for ten to twenty cybernauts who will start work on the Loggia, the "permanent" residence for cybernauts at Arcosanti.
2000	Third internship for twenty or more cybernauts who will pursue work on the Loggia and the Greenhouses. We will break ground on the

Complexification, of which it is in want. For Arcosanti, at least conceptually, the reverse is the case. The complex urban laboratory is in search of the most appropriate Miniaturi-zation. (1/18/97)

The lean habitat notes: residential leases for one to two years appealing to people on the move from one state to another or for people attracted by the lean mindset alternative. A full-year cycle is recommended to feel the sun-climate impact in the Two Suns Arcology. (2/15/00)

The microchip becomes more and more "intelligent" the more Complex-ity is sought via more Miniaturization. But Miniaturization is not a shedding of the miniaturizing body, but a paroxysm of vivification for which "Howness" is the quintessence of "Whatness" in all the radiant nobility it could achieve with the end of the Becoming, the "Know thyself" state of Being. (7/25/97)

Teilhard de Chardin Cloister, which along with the Loggia and Greenhouses will constitute the entire complex for this program at Arcosanti.

This is a search for a modus vivendi inclusive of the non-affluent and the have-nots at the very edge of cyberspace, the new powerhouse for intellection.

Reminder: Today's Homo sapiens, utterly dependent for eons on the quest for Miniaturization at sonic-speed brain performance, is becoming utterly dependent on a novel Miniaturization at microchip-light speed. A demise of Homo sapiens' quest for Miniaturization is tantamount to a demise of Homo sapiens as a species.

2

In a somewhat hyperbolic way I want to survey a few points.

Carbon versus Silicon

With the dawning of self-consciousness, a privilege of Homo sapiens, the notion of transcendence is born.

Transcendence limited to this small planet is self-defeating because a transcendence without inclusiveness tastes like ego-tripping, while transcending the ego is the gist of transcendence. Transcendence is of the cosmos at large or it remains a longing at best, a splinter of intolerance at worst.

Carbon-based life will not make it. Its ability to survive extremes of temperature, pressure, chemicals, radiation, and the environment is extremely limited. "Out there" the flesh is a costly burden, and "out there" is where the whole cosmos is the candidate for self-consciousness and transcendence.

Unless there is a momentous breakthrough, efficient carbon-based life will have to be confined to the skin of planet Earth. Given what is perhaps the unparalleled biochemical versatility of carbon, that is, its potential for intense sophistication, which is already well exemplified by the food chain, this narrow range of location for survival might present dilemmas that will permeate the spectrum of reality.

The ability of asexual personae to exist and operate in environmental conditions that are deadly for carbon-intelligence personae is an ideal asset for space conditions, the darkness, the eternal night of space included. (2/18/97)

As things stand now, we operate with silicon "intelligence," which we employ for the exploration of Mars at a small fraction of the risk and cost of a similar operation using carbon-based life.

Our versatility in our ability to know *how* to do things, "Howness versatility," a trait peculiar to our carbon brain, delivers its operative skill to "presence," when carbon-based life is in the immediate presence of who or what it is interacting with, far better than to "remoteness," when there is a distance filled by technology. The quality of interaction in presence is far different than the quality of remote interaction. Space and reality are stubborn about this: Organisms are self-

designed and implemented spaces within spaces within spaces. They are not virtualities within virtualities.

A transcending operation or interaction by carbon-based intelligence might act remotely, but this still is in the realm of carbon-based incarnation confined to the biosphere.

In terms of intellection, silicon might turn out to be a flatland compared to what Complexity and Miniaturization can do in the carbon-based domain where the nanotechnology of the brain is extended to the mono-cellular (or smaller) domain of viruses and their friends.

The atomic-molecular is the runway for the takeoff into a possible, if not probable, transfiguration. It seems that photons might be at last the most appropriate vehicle for this transfiguration: Light speed is God's speed. For such an advent, the whole of reality will need *reconfiguration*. That is where the gods will be created. All our invented gods, simulated and virtual, are bloodstained and desperately parochial.

Transcendence and superstition (self-delusion) are reciprocally exclusive. (5/21/97)

Brain-Machine

For the first time in history, man's thinking and tinkering is going on between the brain-mind and a nonorganic device, the computer. An innerness, the Mind, and an outerness, the computer, are in discourse. A miniaturized-complex domain, the brain-mind, interacting with a complicated-miniaturized domain, the computer, the carbon cycle and silicon cycle are coming together in a first encounter.

In a kind of humility, the cybernauts relocate themselves in the silicon domain of the microchip, their new world and their new faith. They seem to unload their carbon Complexity in the arms of the complicated silicon "out there," which, in a sort of bouleversement, turns out to be the inside to which they now belong. As insiders they are the true believers, the custodians of what has to come, the Chosen People.

Outsiders-Insiders and the Chosen-People Syndrome

Insideness implies coexistence with outsideness. The outsiders are those people who, because of circumstances and/or by choice, do not belong to the community of the insiders, the cybernauts. The strong faith of the cybernauts has the connotations of a theology: revelation acted upon will bring salvation. "We, the Insiders, the Salvation Army, consciously or not, we are the Chosen People."

By now we all should know what happens to humanity afflicted and infected by the Chosen People malady and the curse we bring upon ourselves through it. "We" take turns at it. The result is pain, suffering, hatred, inequity, and intolerance.

Homo Carbonis/Homo Siliconis

Imagine our distant, silicon progeny discovering the remains of Homo carbonis.

Spellbound by the magic of life in my Homo carbonis garment, even more so by the intelligence generating in it, and now spellbound by the anticipations of what an eventual artificial intelligence can generate with all of its virtualities and, arguably, its virtuosity, I am distressed by the possible splitting of intelligent life into distinct lineages, one estranged from the other.

It might not be too soon to seek ways to bind (*religio*) the separate fate of the two into a more synergetic destiny, possibly for a common purpose: the sensitization and metamorphosis of reality into pure knowing.

What I find exciting in this anticipation is that it seems to fall neatly in place within the MCD hypothesis of increasing Miniaturization, generating an increase of Complexity, compelling a reluctant reality to take the road toward Mind: Mind as Duration, the offspring of Miniaturization and Complexification.

The split of carbon and silicon could be horrendously harsh and cruel. Therefore, the binding-*religio*-religion may present itself as an imperative. To complicate things is the hyperconsumeristic-materialistic bent of technological societies, a steamroller cornering the soul (Mind) into smaller and smaller quarters of a shrinking horizon.

Homo siliconis should not take part in such a squeeze. To the contrary, it should be, as the MCD paradigm proposes, a powerful and purposeful new impulse toward the Mind-ification of reality.

But within artificial intelligence might eventually develop an internal (inside the computer) initiative to ban Homo carbonis from its own newly generated domain. To ban it to the servo-system domain, a domain instrumentalizing the evolution of Homo siliconis, the new species. (A luddite movement could develop in the ranks of dispossessed Homo carbonis.)

The silicon butler of the house, androgynous and Apollo-Cartesian, would become the new master . . . the Master Race. The carbon "has-been" master of the house, bisexual and Dionysio-Pascalian, would become the new maid of the house (even silicon needs shelter) . . . the slave race.

The intellection graph of the master is straight and climbing, with no sex and no sexual violence, no infancy or senility, and no life-death anguish. The master never dies. Silicon is above the fray.

The new theologians, the cybernauts, have invented God. He takes over and finds his carbon ancestry no longer useful. One of the first proclamations of God will concern "pulling

A computer for each student. It may fit well the vast (unintended) design of persona desensitization that will be a cornerstone of postsilicon intellection. In such a perspective, a wicked way of moving intellection into the cosmos at large. (1/24/00)

The technocrat better get acquainted with MCD and the salvific rope it offers to the busy body magician. After all, the very word "Miniaturization" is the door opener for both. For the technocrat, it implies the short cut, short lives experiencing virtual veritas, for religion is the endless generation of novelty transcending its own limits. (11/25/95)

the plug": automatic and immediate capital punishment. Electricity is the blood running photons in the fiber optic of its artery.

Is the androgynous ideal we see gaining popularity in the United States an anticipation of and a wish for artificial intelligence to take over? "The baby maker and her womb? Isn't that embarrassing?" Master Androgynous chirps.

In the budding cybertheology are the germs for the splintering of human history:

The genome that holds the "Truth," the insiders' lineage; the genome that does not hold the truth, the outsiders' lineage.

The holders of the "Truth" are the Chosen Ones. Given the uniqueness and novelty of the cyberspace theology with the immense power the computer confers to it, the dilemma for Homo sapiens is epochal.

To splinter and not to splinter? It must be noted that in other domains such a dilemma has inevitable resolutions. For instance, in space we will sooner or later develop the lineages of Earth man/Space man . . . Cyber man . . .

Going by the "codes" of the cyber-revolution pacemakers, a differentiation is in the making right under our eyes, and it is inevitable. Two lineages develop: The insiders, in a minority, are the holders of "the force," while the outsiders, in a majority, are no longer in touch with the truth. They now compose a servo-system for the insiders. Once upon a time they incarnated human life in its full enigmatic self. Now they are viewed by the insiders as sclerotic.

Even a sustained injection of tolerance in the shared process of living on one planet will turn out to be barely sufficient to maintain the two lineages in a semblance of mutual respect, if not harmony. The fact is they cannot go on by themselves.

Whenever the Chosen People syndrome comes up, the level of suffering inevitably rises. The conflict between the two Chosen People lineages, the Jews, a minority with a long and prodigiously tormented history, and the Nazis with their sudden virulence in all its cruel warpage of values, is but one tragic example.

The Global Hermitage

(The global village has always been necessarily a poor Utopian notion.) The global hermitage that the insider hermits are moving into is the place where the very nature of the technology of Miniaturization forces the flesh with its 3.5 eons of baggage to step aside or simply be put in charge of the care, maintenance, satisfaction, and possibly even reproduction of the elected hermitage dwellers.

The insider, potentially asexual, lineage is occupied

Cyber "man": zookeeper or guardian angel? (9/19/99)

The economic chasms that greed cultivates play in the "hands" of phantoms, the gods, and the deeds also acted out by the flesh and bone hands of the (chosen) elected. As greed is endemic—performing through the "rich" potential, and possibly explosive through the "poor"—so is the endemic conveniently dressed, love for gods . . . Poor humanity. Intolerance is your master. You and the daughters of two bitches, god and greed. G.G. ⟶ intolerance. (3/16/95)

The pace of cyberspace is such that the young cyberites are facing retirement at age, let's say, 40. From infancy to disposal in one brief swoop as waves of new babies come along for their 15 minutes on the foamy crest breaking on the shore of the past.

Self-preservation? Will the intelligent machines have pity for them? (9/26/99)

One could well say that it is in the nature of things that the phenomenon of intellection is eventually radiating from here to everywhere. Space has shown how phenomenal it is. Allow space a sufficient number of alterations, an "infinite" number, and space "will get there." In that "there" will be all things that become in their spaceless, durational "format" bacteria first, and all of its progeny included . . . The laboratory "pour faire la part de dieu" courtesy of the to-be holy hydrogen. That same primeval space incarnation at the beginning of things. Quarks, muons, etc., just aunts and uncles in the phenomenal game of Becoming. (3/7/00)

intensely, often exclusively, by the brain-machine interaction. The astonishing feat of the brain's Complexity matching its power, courtesy of Duration, with the magic feat of Miniaturization in the form of the "vanishing" microchip is the matching or mismatching of an atomic domain working at close to sonic speed, with the photon domain working at light speed.

The cyberspace evolution seems to be in constant need of "uncontaminated" minds. That is why it proselytizes successfully among five-year-olds, and why, beyond the drive for artificial intelligence, it also has a self-immolation, a martyrdom side: the demise of the flesh lineage as soon as no "real" advantage remains in carrying on with the carbon-cycle intellection.

It would be a cruel irony that a millennium ago, 30 was the age of demise, and now at the 80-year average threshold we find ourselves arguing for a demise at 30. Biologically speaking, 30 years make sense. Reproductive responsibility has been covered, and from there it is simply a question of vegetating while being a minimal burden on the species. In the mammalian kingdom postmature animals are a sad show, meat for the predators.

How, Where, When

Reconfiguration is the task of Techne: to make this into that. The whole evolutionary Becoming is the making of this into that. And, by the way, this reconfiguration of space is probably all there is. If so, time is a purely mental invention with not one ounce of reality attached to it.

Western man took the lead in exobiological Techne with the scientific and industrial revolutions. As the end of the second millennium (in Christian theology) approaches, the miracle of Techne, applied science, is the silicon microchip, the sought-out, artificial intelligence—cyberspace invention.

This is another "triumph" of Miniaturization on the back of organic and neural Miniaturization. This means that the innerness typifying Complexity, the inside drive of organisms, is generating the complicated in the arms of Miniaturization. In this outer reconfiguration of space in search of memory, or Duration, we found the atom too coarse, too large, and too slow. We have to base our memory search on light, the photon. *Immense Miniaturization must now seek immense Complexity so as to generate immense memory, Duration.*

In this scenario, time, a symbol of reconfiguration of space, is more and more squeezed out of reality by the limitless urge of our incredible ability to know how to do things, of Howness. "Infinite" Miniaturization, "infinite" Complexification, and infinite "memory" are all the necessary ingredients

for self-revelation: Duration as reality in Being.

In this ephemeralization, an "angelic" attribute, the "where" and the "when," remain critical but will begin to show their marginality in a reality that could eventually drop them altogether. It would have to: "Being" by definition has no "where-ness" or "when-ness."

What

Attached as we seem to be to the notion of a necessary creator, God, I would suggest that godliness is BEING aware of itself. Such a self-revelatory state of reality is necessarily beyond space-time because it is the full memory of the whole past, the Becoming of evolution, in its utterly detailed self. And space-"time" works in the Becoming domain, not in the Being domain. At the end of space-time is "where" BEING is.

Astonishing and frightening as the implications of this "Howness" generating "Whatness" are, the very nature of cyberspace, the MCD paradigm ad infinitum, shows the way to the "angelic" character of a successful evolutionary drift.

Astounded and frightened, we stand, vis-à-vis the first elementary steps in such a direction, toward Duration deploying crude fragments of a transcendence, which through technology, the How, breaks the planetary confinement.

If we let Howness run away from knowledge and wisdom, we will be in a frenzy of arrogance and brute force, transforming the self-Chosen People, the insiders, into the new despots running amok in a disintegrating world.

Why?

We must reject all theologies proclaiming exclusivity on the "Truth," and they all are forced to do so by their very genesis. We must reject the notion of a benevolent reality anxiously nudging life toward such nonexistent truth. The Mind, self-consciousness, is life to cope with the powerhouse that reality is.

Reality is indifferent to life, running according to its own unreflecting rules, and steamrolling more and more into mindlessness: a reconfiguring of space with no aim, a purely technological, entropy-oriented, cosmic bravado.

But puny mind is still a great inventor-creator. Intellection, love, compassion, altruism, and grace must give and maintain the right spin to the cosmological-technological tide, a spin away from determinism, destruction, intolerance, and violence.

If successful, at the very end of the evolutionary tunnel could be the esthetic resolution, self-revelatory and equitable, the grace of durational Being. It would be the fully implemented "KNOW THYSELF" of reality on its all-inclusive cosmic scale. I call it the Omega Seed.

. . . not the animistic power of God creating reality but an animating reality generating "Godliness." A cosmic bouleversement. (12/5/98)

In general, instrumentality antecedes creativity (form before function); technology antecedes the wise use of it. (8/7/93)

Life is and remains tragic. Unless a resolution might eventually come about, life giveth and life taketh away is the essence of the tragic nature of life, and without a transfiguring resolution Nirvana might be the only answer: the repository of all delusions.

And all of this and all of its meaning, including its probable meaninglessness, is space and only space dancing away. (3/2/98)

The noosphere is self-awareness in search of meaning and the possible grace within. The noosphere is the Love Project. (5/16/00)

Given the vastness, the fury, and the senselessness of proto-intelligent reality, the nonorganic interaction might be the only way to go. To go where? To self-revelation. Where else? For Esthequity, nowhere else. Naturally for a world of ghosts and spirits, it is a free-for-all. It is Nirvana: reality as deception. (3/2/00)

The hard drive of self-interest that has flooded the marketplace is a true conquest that Howness can be proud of. It lacks as yet the imprint of the hardest of Hownesses: how to emerge from the physical into the mental in the full awareness of the tight boundaries of technocracy. Since we are not created equal, eventually we have to find the key to equity and the dignity of the human condition that only equity may be able to engender. For the time being, the chronic discrepancies between the have-not and the have-too-much are brutally operating all over the world, and they make our species into a shameful enterprise. (12/7/98)

Every adult with an ounce of physics in his brain knows (or better hurry up and know) that consumption reduction and three-dimensionality—that is, the multistory habitat—offer the only alternative to sprawl. All the rest is pure deleterious delusion, the "virtue" of which is to fill the pouches of attorneys-politicos, builders, utilities, and "developers." (4/27/00)

When greed overwhelms conscience everything is for sale, conscience included. Consumerism is poison now, the way oxygen was poison then . . . Oxygen becomes eventually one of the essential elements in the development of aerobic life. Similarly, the technologies developed for the pleasure of life today might become the generator of the novelty that is a form of (human) life now unimaginable, as the postpoisoned life would

15

Business as Usual?

OCTOBER 1999

Prepared for UNESCO

The cyberspace revolution in all of its ephemeralizing virtue seems to produce a run toward materialization, a paradox if ever there was one. It is the materialization of riches and riches that promises, for at least sometime, a new depth of inequality, that is, inequity. This is a profound transformation in the human condition, and it might demand some changes via "seminal" ideas.

Since agriculture and habitat are the two main presences at the service of man on the planet, it is critical that we do the right thing when and where they (food and shelter) are concerned. It is my opinion that we, especially the USA, do poorly in habitat. I call the USA habitat a run toward catastrophe.

The American Dream dwells on the family home (what might be left of it), which translates into a truly colossal, self-perpetuating "produce-consume unlimited" powerhouse.

Mankind and the biosphere are on the block, so to speak, if the Americas, Africa, India, China, and the whole planetary real estate catch on and up with the American Dream: The planet itself would be a global hermitage in endless gridlock with itself. A logistical system of preposterous dimension will imprison the land and its dwellers, bipedal, quadripedal, and all. The waste, the destruction, the pollution, and the segregation would be "biblical." Democracy would be a dream lost in the nooks and crannies of fading notions of equity and compassion. Greed would be rampant and as raging as it would be frustrated. The physical gridlock would be a tangible, mirror image of the ethical-creational gridlock of brain-mind.

The laws of nature, gravity and thermodynamics, at the head, would be sufficiently ignored to make the Garden of Eden, the universal hermitage, into an unsustainable, pernicious dream.

There might be only one alternative to the advancing nightmare: the lean, intense, rewarding, and (quite) possibly more equitable urban habitat. The cradle of civi-lization again called upon to serve mankind.

Successful life is reachable only via the lean organism and its peers' association. That a person might survive and act out his or her life on a few ounces of nutrition per day is leanness personified. The miracle of life, now about 3.5 billion years in the making, is also a long tale about the unfitness and the incoherence of the gigantic. Exurbia is the most gigantic

among giants, a true perversity. (Wait and see.)

Once the Londons, the Berlins, the New Yorks, the New Delhis, the Beijings, and all are suffocated by the metastasis of exurbia and then abandoned for the dreamed country living, the country will have disappeared and the hermits, bolted in front of the virtual delivery of pseudolife, won't have the city to kick around anymore, just the gray estrangement of endless enclaves, the isolation booth of suburbia transmuted into the exurban materialistic dream.

The Internet says the shopping center is on its way out. Right, every household is becoming a shopping center. And nothing is more inducive to buying than a shopping center. Making habitation and shopping access into one is to give new fuel to the production-consumption cycle. The weekly or so excursion from garage to the shopping center becomes the daily browsing of the Internet in the living room. A merchandizing coup of vast proportions and even greater consequences. The global hermitage becoming global merchandizing hermitage has to face among others the delivery diaspora, to the joy of the trucking industry and to the gridlock of bad dreams. A further grand step toward materialization made possible, "instigated," by the ephemeralization of the Internet.

Escalating consumerism and escalating expectations are inseparable when a society puts a premium on opportunism. Soon greed is iconized, and from there only one route is considered worth following, the road to riches. It goes straight into the shopping centers, the real one and the virtual one. Now the real one and the virtual are con-fusing into one, the planetary hermitage with the WWW finger tips on the marketplace, a global, if potential, nemesis.

have been to the protopoisoned life. (3/29/95)

The prospect of a devolution cannot be an excluded scenario. Dark ages have been regular seasons in the development of culture and the civilizations sheltering them. The dark ages that followed the Roman Empire's collapse brutalized Europe for many centuries with immense anguish and suffering of the whole population of the continent. That is, a few tens of millions. What could be the equivalent dark age on a planetary scenario and with billions of "victims" is hard to envision. A tabula rasa on which the beauty, dignity, and impending grace would be smothered by an entropy law of fatal proportion. A biosphere littered by the cinders of a delusion finally burned out. The invention of a species with God-creating potential lost in the meanders of wrongness improved to the meltdown critical mass. (2/17/99)

The WWW network is lean by technological definitions but is fleshless and extravagant. It is virtual and materialistic in one. As such it is poised for self-destruction. Today WWW knows it has to evolve into something in order to achieve socked-in true desirability. (7/27/99)

It is not a question of where to stop as much as how to stay within context, that is, strive to maintain or conquer the balance of priorities. A balance expressing the art of living at its most grace-full self. How remote that state of grace is is apparent to all of us—have, have-not, educated ignorant, optimist, pessimist . . . (7/12/99)

16

Arcosanti Is an Urban Laboratory for a Lean Society (AULLS) and Brief Encounters

DECEMBER 1999

Premise of "Brief Encounters"

AULLS is the critical mass of Arcosanti, an anticipated town of about seven thousand people. With the residential private spaces comes "instantaneous" access to production, merchandising, learning, health, entertainment, the arts, promenading, socializing, and the pristine land.

1

The self-organizing (living) system is a lean presence. It wants (and needs) a surrounding that best reflects its nature: a lean habitat. (5/15/99)

The critical mass of Arcosanti involves one thousand residents interested in building and experiencing a habitat that might produce answers to some of the problems Homo sapiens is facing: hyperconsumption, environmental collapse, sprawl, waste, pollution, physical and cultural segregation, materialism, violence, mediocrity, despair, intolerance, xenophobia.

In order to become a persuasive instrument, Arcosanti must grow into its own critical mass. That means to go from its present population below one hundred to a population above one thousand. If this becomes possible, the alternative of the lean society will have an important testing ground that has performed in a lean economy for over thirty years. The implications are many and more than just worth considering.

Within ten years, society may find itself on an exhausting incline. We think that an Arcosanti critical mass might be an important mooring for the assessment of the cyberspace-virtual, superaffluent culture.

The fact is, the website is shattering boundaries, national borders included, and the augmenting power of the noosphere is undergirded by multiplying unknowns, a frailty constitutional to all complex systems. We may need to divest ourselves of some of the "attraction" posted at every corner.

It is in view of this that the life of a lean nature might become optimal if not indispensable, and in view of this my appeal goes far beyond the idiosyncratic and self-promoting. We are seeking financial input from those financial-corporate centers that can well afford an investment. Even though, as

things are historically running, the investment could be viewed as a just-in-case eventuality. Many of us unbelievers go to mass, just in case.

2

There are evolutionary and revolutionary sides to AULLS.

Evolutionary if we accept the notion that the intensity and worth of life are proportional to the complexity of the experience and to its containment in ever more ephemeralizing minimal (physical bulk) containers. An indictment of materialism and its devolutionary stresses.

Revolutionary if we accept the notion that the "established" financial, productive, societal, and cultural agencies we developed in the last thousand years or so are no longer capable of keeping the door open to personal and collective fulfillment. The missing ingredient may be a better perception of the potentially noble construct of the human genome (revolution escalating into evolution).

We had a green revolution; we are in the midst of the silicon revolution; we are in need of a transcendence revolution. A transcendence firmly anchored to the physicality of the real.

The fact is, of the many present conditions keeping us within the hyperconsumption mode, the exurban habitat and its indispensable automobile logistics are the two emblematic agencies that together might do in our civilization as we know it. We are told that cyberspace will come to the rescue and the planet will enjoy the Garden of Eden made of 3 billion or so ("family") hermitages. A delusion in grand scale and paradoxically, a delusion where materialism and "virtuality"—that is, ephemeralizations—will be in a neat paradoxical and squalid embrace.

The awareness of widespread inequity nibbles or bites at the freewheeling of our hedonistic incline. We are victimized by our "happiness" and it isn't just guilt; it's also fear. Fear of the senseless, of the meaningless, of the transient, of futility charged with anguish . . . and we want to be "practical" about the whole thing! But the practical thing has a fractal and two-dimensional governor. It keeps cloning itself over and over again.

AULLS does not want to be another of those glamorizations of wrongness. The orthodoxy of the marketplace is routinely challenged. AULLS could be a very unorthodox and fruitful challenge.

As an alternative, AULLS should not adopt the ways of that which it is intent at finding alternatives to. A new territory ceases to be new when it is hemmed or hammered down into an old territory.

AULLS IS NOT A MONEY-MAKING ENTERPRISE.

If reality (the becoming reality) is reconfiguring space, M of the triad MCD, it is at the very center of the evolutionary tide because Miniaturi-zation refers to "physical" size, the domain of space par excellence, the physical size of a system, subatomic, atomic, molecular, cellular . . . urban, etc., and the impact that a possible reduction in size might have on the fitness and performance of the system. (5/18/98)

We can and we are obliterating space in terms of information, global instant communication; we cannot obliterate space in terms of logistics, and that is the key to the necessity of leanness. Only reduced space (distance, etc.) can deliver swiftness, vitality, and possibly transcendence. (12/20/99)

If incorrectly developed and applied, the silicon virtual reality may add to the animistic cloud as it comes to develop enormous capitalistic wealth—buying power, hyperconsumption—the opposite of the ephemeralization it pursues technologically. (6/8/98)

Edutainment, the formula for a playboy-girl culture, a non-grown-up culture. Young people will go after the most fun information, the entertaining amoral "knowledge." (2/15/00)

IT IS A FINANCIAL INVESTMENT THAT IN A "LABORATORY" MODE SEEKS TO GENERATE PROCEDURES AND UNDERSTANDING ABOUT THE ARGUABLE "LEAN ART OF LIVING" DEMANDED BY A LIMITED BIOSPHERE, BY A POPULATION OF 8 TO 12 BILLION PEOPLE, AND FOR A MODICUM OF DIGNITY, EQUITY, EXCELLENCE, AND HOPE.

If the American Dream turns out to be obese, mediocre, and inconsistent in the biosphere-human boundaries, the experience of a lean commitment in tune with some of the Founding Fathers' ethics might be essential if not providential.

The Frugality Initiative proposes that once above the subsistence level, cushioned by a reasonable and desirable level of physical comfort, human drive ought to be guided by the interiorization beacon: develop intensity at the expense of extensivity, the unlimited drive for worldly possessions. (10/5/98)

To really partake in the "project," one needs a conversion to the lean mindset. Short of that, it is a case of marginal participation that even when effective remains on the border of significance. It remains instrumental and out of the "existential." A useful fence sitter. The "not being with it" syndrome. (4/18/00)

3

Arcosanti refers to the residences and to the many resources the town intends to develop as its normal infrastructure: learning, industry, services, health, culture, entertainment, horticulture, sports.

The project does not offer financial returns for the first ten or more years. It offers a laboratory, a concrete foundation for learning, experience, knowledge, methodologies, experimentation, discoveries, applicable norms, know-how, etc.

The "instrument" in its laboratory prototyping is a three-dimensional landscape in construction, exonerated from the usual consensus (part of the alternative process).

The Residents (very tentative)

1. The planning, managerial crew	50
2. The maintenance and construction crew	100
3. The programmers of classes, seminars, etc.	100
4. The resident (six months to a year or more)	400
5. The transient "under" classes (weeks or so)	150
6. The patron (and experiencing) group (days–months)	200
	1,000 persons

The patrons and benefactors (a corporate alliance initiative) provide the financial resources that will maintain the process as an urban laboratory.

The residents pay for their stay. That is, they cover a percentage of the running costs of the project. The transient "under" class is "central" to the project, and their cost to the project is covered by patrons and benefactors (see "The Brief Encounter Initiative" below).

4

Frugality is not just a behavioral attitude. It is an ethical imperative. (4/20/94)

For about 35 years (the Cosanti Foundation was established in 1965), we have been practicing within the "lean economy" boundaries. In the meantime, Cosanti and Arcosanti, a frag-

ment of it, have been constructed, which suggests that a dignified, convivial, and often fulfilling life can be pursued, even in this country, on an economic base that may be more in tune with the condition of man and the status of the biosphere.

But frugality is not just a necessity, it is also the virtue of interiorization, which in turn is the essence of life: reality made into persona. Let's remember that each person is a superb example of matter (space) organizing itself into astonishingly complex patterns, the whole 100–200 pounds of it, of immense economy and interiority.

From some of the experiences lived at Arcosanti, we can move on by expanding the "instrument" into a tangible place of life and all the operations life is made of. With the assistance of academia and of the marketplace, we may surprise ourselves with a pattern of life of great richness but lean, and approximating an equity applicable to society at large, the have-not societies included.

Drops of wealth, tiny drops, soliciting human presence in the urban effect that might also help rejuvenate the biosphere, the lean alternative in its first laboratory.

5

The Brief Encounter Initiative

Perhaps we are not targeting in racism the most important enemy. The enemy in the family of man is theological dogmatism. Hinduism, Christianity, Islam, and all the variations of them are now joined by capitalism and by the possible corruption of cyberspace into a new form of theocracy. In this scenario, I would introduce the notion of "man under one roof habitat": dozens of them somehow reminiscent of the (medieval) centers where kings, popes, and merchants would combine in one—study, science, documentation, and transmission of knowledge, health, charity, and celebration. The patronage of the powerful would grant the life of those urban centers—the Bill Gates, the Steve Jobs, etc., of those times.

Given that "belief," more than skin color, might be the bloody divider of the future, to have a human mix under one roof even for only a few days may be an all-important experience about our common humanity. Brief Encounters might be born, and if so, it better be born in a lean society mode, not only because the lean society is the survival society, but because it is the most capable of interiorizing, that is, proceeding in the conversion of the "mineral" into the mindful (not just the mineral into the most fun mineral as proposed by consumerism-materialism).

A 365-day-a-year play intended as the incubator for the development of personal relationships between persons of

We need to build the theater to set the stage for the play, life's play. Analogically, arcology is the theater, Arcosanti the stage, the people are the players, the life will be the music-poetry of the art of living for what its worth will be. (6/28/99)

What would it take for Arcosanti to adopt ten babies? Tie in with the Brief Encounters!? Ten infants rescued is less than a tiny drop in the ocean. It would have to work as a resonator. (4/23/00)

Clothing worldly possessions in imaginative but mostly deceiving garments, like access to a more rewarding world, plays mostly into the hands of hedonism, if not crass materialism: self-gratification as the meaning of life. A society bubbling with intellect and introspection, and at the same time aware of the untamable beast of inequity, ever present and ugly, could emerge in a new domain of lived compassion and moments of exhilarating grace, a golden age of sorts. (10/5/98)

very different backgrounds, have and have-not, for instance. The 500 paying guests match their "hotel bill" with a donation to Brief Encounters.

Universities and other institutions contribute as dragnets of the planet to discover and bring together the guest "population." (See the work of the MacArthur Foundation.) Brief Encounters is theater. It reaches for the "wealthy" and for the "poor" and matches them under one roof epitomizing in somewhat prestructured fashion the lean urban laboratory for a lean society. The encounter will generate in 5 to 10 percent of the participants permanent relationships. Some of those will be wake-up bells scattered throughout nations.

The "Mother Teresa" people, the "genius" people, the "Donald Trumps" coming together in the Treasure 600 Hotel-Cathedral. The entrepreneurial acumen of the new hoteliers could make the Treasure 600 into an instant "cosmopolitan" sensation. The moment is now. Time is ripe for major new vistas in the conflagration have/have-not. Defuse or explode. (10/4/99)

Idiosyncrasies are not the saviors of the world . . . (3/16/99)

The baseball players' greed (and atonement): Have players and owners "volunteer" to work in Rwanda as a Peace Corps—type back-to-reality group, for one season at Peace Corps wages. (7/31/94)

Brief Encounters, the right instrument for the specific music, the music a modest achievement of personae toward a lean society. From the human tidal wave, few, very few, and for few days converge together in the lean urban play, away from their habitual train of life to which they then return enriched by the experiential immersion.

Get to a point in planning Brief Encounters where the 500 hosts feel it an honor and privilege to be one of them. To honor the obscure heroes and the disenfranchised victims, but to honor them with the yeast of interactive presence, a first step toward reciprocal appreciation.

Racism, intolerance, xenophobia, and elitism will have to be deposited at the front desk. The possible cleansing effect of the experience would be one of the gifts of persona to persona. A gift of unforeseeable consequences. Eccentricity would be a presence, not an asset. It will likely be displayed (through flagrant and intentional bad manners) but not imposed on others.

As suggested before, many times in history there have been hybrid institutions that one way or another seem to fill gaps in the development of sociocultural economic systems in process. Hybrids because they uncommonly mixed heterogeneities: power, learning, health, science, agriculture, architecture, influence, notoriety, and philanthropy. Nobility, clergy, warriors, and merchants were in grand part heading those hybrids. The labels in consonance with the politically correct of the times were caravansaries, academies, monasteries, bastions of learning and orthodoxy, hospices, etc.

In contemporary terms, it is a sort of coming together of universities, churches, and hostelries. Timid attempts at a sort of holistic concoction responding to some not entirely satisfying institutions and catering to disparate domains: learning, well-being, religiosity, economy, philanthropy, and "tourism."

Brief Encounters is a variation on the described theme with a sharp focus on the nature of habitat and the lean imperative it embodies.

No delusional fantasies but tête-à-tête encounters, with

facilitators and translators "keeping things going." National boundaries, financial boundaries, cultural boundaries "set aside" in the play. Silicon Valley, Wall Street, favela, Pentagon, the Andean and the Londoner, Africans and Asians under one roof.

The encounters justify the contrivance of the play, a dramaturgy. This is also to be the task of the theater and literature community called upon. So the dramaturgy and Brief Encounters generating the interactive, participatory theater by definition: the human condition. Brief Encounters will not be a moral play, not an indoctrination center, not a normative injunction. It will be a brief interface of different worlds present by way of their inhabitants. The participants will be persona experiencing the uniqueness of living in a unique environ.

Playwrights, choreographers, directors, actors, technicians, and "social scientists" will be active in developing the "condition of man" ongoing play (365 days per year) experience.

The insertion of Brief Encounters into the critical mass of Arcosanti seems to me an example of the music, intense and focused (the inhabitants or players of the instrument) generating the instrument itself, Arcosanti.

The elements of pause and cohesiveness find a place for them in the distinction between Arcosanti residents and Arcosanti guests. For the one, it is the normalcy of belonging to place and community. For the other, it is the exception and somewhat a crowding of diversification and changed routine with the awareness of the brief experience. The sudden and the surprising, the conviviality and the choreography.

"From outside looking in," the common "wrong attitude," bad habit, poor judgment and mischief maker. We are insiders because there isn't an outside (the containment of the organism by bark or skin). One of the most general cases of false duality. The persona is part of its own surrounding, reality at large. (11/9/98)

To avoid a tasteless life, stay away from the "optimum." It smudges all the asperities and all the corners. It is a desensitizing, creeping kind of attractor. Nothing more delightful than the cool breeze on the perspiring skin . . . (4/16/00)

6

The "music" could turn out to be "excellent." In which case, Brief Encounter siblings crop up on all continents. To hit it right is the critical element. I would choose as a guiding drive the human condition play, an uninterrupted development of experiences calling into question the status of our financial, economic, ethical, circumstantial, global, and esthetic givens.

But the calling into question would not be judgmental but factual, not abstract but personified. The encounter and the reciprocal recognition of personae of the most disparate backgrounds, experiences, and anticipations.

This laboratory could become a guidance in the development of a new urbanism, if it is true that the city is primarily factual experienced intensity faceted with the avalanche of conditions-situations and the dynamics they generate and that they are the causation-consequence of.

The Brief Encounter arcology will remain committed to the open-city physiology, the climate, the sun, etc., as active participants in the life of Brief Encounters. The place expresses

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elegance, sophistication, and also an austere perception of the human condition. The guests (all 600) feel the presence and the tension of the play, the positive intensity of seeking a transparency of persona vis-à-vis persona.

As for planners and architects, an international body with the power of selection and implementation for each country, a Brief Encounter hosting a kind of body-mind nomadism in our anxious world.

Society would be dealing with a new animal, a participatory urban dramaturgy. A UNIFIER in disguise. An offering to mind's creative faculties. A new Techne, by the way, displaying the power of Howness. A sort of distillation knocking at the gates of equity and esthetics, the art of living, from the ordinary to the transordinary, reaching into the extraordinary. The medieval church (the building) evokes an almost palpable awe and an imploration made into an esthetic object, the building and its content, toward the God of animism, God the father. Brief Encounters, places of intense tranquility? The anti-Utopia gathering places. A sort of polarizer in the brief encounter of the other. The persona and the other.

Earlier notes on Brief Encounters then labeled:

Treasures 600: A Place for Religio *(Binding)*

("The Hotel-Cathedrals" was written in 1995 as a section of a more detailed paper. Recently, it has evolved into the "Brief Encounters Initiative." I think Arcosanti is a fitting stage for the proposal.)

- It seems that ours are cultures of clustering, the "neutral" recognition of what otherwise is called segregation, negative clustering. The gaps between clusterings are enlarging and isolation sets in. Such is the case of the isolation of the very poor and the very wealthy, the southern societies from the northern, the blacks and whites, the body sets and the mind sets, the young and the old, the believers—themselves of diverse shades—and the nonbelievers, the environmentalists and the technocrats, the "freedom" lovers and the bureaucrats . . . the violent and the nonviolent, the nomadic and the settled.
- One unifying activity, a most unfortunate exception, is gambling, now redefined as gaming. Gambling, an equalizer of sorts, is becoming extremely pernicious.
- Short of a heroic effort and a truly honest commitment to seek and implement resolutions, the trend will probably intensify and exacerbate the cluster's adversary, litigation, confrontational positions and behaviors.

In this millennium's end, one could identify five great

My proposition about the architectural planning as a brew of order and spontaneity is akin to the notion of the membrane separating-connecting order and chaos, especially now that I identify the present, all presents, as such membrane separating or foiling beingness, the past, necessarily "ordered" to nonbeingness, that is, chaos, the future, the nonbeingness. The present, the tense membrane, containing the creational twist is then the place of anxiety, expectation, urgency, contemplation, exhilaration, fear, fury, impatience . . . the condition of man at its naked best. (1/3/95)

There is only one legitimate Utopia. The successful end of space reconfiguration into the obliteration of space itself, the opposite of ancestry, the spaceless being of Duration. At the "end of time," as we say. (2/12/99)

Why Treasure? Human dignity being brushed upon the few days of intense participatory experiences. A paradoxical situation if ever there were one. The very poor and the very rich acknowledging each other, persona to persona for a few days. (10/5/99)

negative trends: theocracy, technocracy, mediocracy, xenophobia, and injustice-inequity. It would seem that they must complete their run before a "new beginning" might be in sight.

But some enclaves of coherence might be needed here and there to keep the future open to better drives. This anticipates a sort of constructive collision with the correspondent negatives:

- the encounter between the have and the have-not (injustice)
- the encounter between persons of different or no creed (theocracy)
- the encounter between people of different technological skills (technocracy)
- the encounter between people of different ethnicities and races (xenophobia)
- the encounter among different cultural and excellence levels (mediocracy)
- the young against the old and vice versa, another frightening prospect

If a way, a mechanism, were to be found capable of generating and financing such encounters, then the road would be open for important and perhaps momentous experiences.

- One approach that might generate such a countercurrent is a kind of unusual contact among "clusters" with a process blatantly market based but not market oriented.
- This could be pursued via the activation of centers where hedonism mingles with humanitas. More precisely, a chain of hotels-academies with three kinds of guests:
  - the large group of (paying) guests is made up of 500 "tourists": *the nomads of means* (paying something like $1,000 per day);
  - the second group composed of 50 (nonpaying) guests with *extraordinary minds*;
  - the third group composed of 50 (nonpaying) guests who lead *extraordinary lives*.
- In a super-refined and austere habitat with 600 suite-rooms and the best supporting hotel facilities, 500 "hedonist guests" mingle with 100 humanitas treasures, many if not most of them from nonaffluent lives. All guests from all countries and all disciplines.
- A cosmopolitan atmosphere would be spontaneous, as spontaneous as the kinds of contacts and new relationships would be, with truly surprising if not exotic ties developing from the diverse kinds of temperaments, experiences, insights, and passions.
- In a way, the power of money would come face to face with the power of mind and with the power of com-

passion. The guests empowered by money would underwrite the cost for the other guests (for one or two weeks each) in a year-round activity.

- It is not a simple or plain philanthropic transaction cast in a moneymaking enterprise but instead a bartering for all to gain from and most of all for society to be able to take a peek into different human conditions in a setting that far from being bland and neutral would want to be powerful and beautiful. One could anticipate some momentous breakthroughs with some of the most surprising mechanisms: social, economic, integrative, cultural . . .
- No impositions with overbearing programs, encounters, seminars, conferences, classes. Just a group of facilitators-translators to cope with the babel of tongues and mores.
- Academia's presence would be mainly as a facilitator and as a source for the choice of the 100 treasures guests. Foundations the likes of MacArthur could also be involved in searching and listing potential guests.

Another way of putting it:

Put Las Vegas in a retort and light the fire under it. Two beakers would collect two kinds of fumes-spirit:

1. The fume-spirit of hedonism unlimited.
2. The fume-spirit of anxiety unlimited.

This latter is the fume-spirit to cultivate in the Brief Encounters. A chain of them, one per nation.

This fume-spirit of anxiety unlimited is cultivated via the urban effect, author of civilization.

- 500 extraordinary anxiety-prone nomads of means. Paying guests.
- 50 extraordinary anxiety-transcending minds. Nonpaying guests.
- 50 extraordinary anxiety-coping lives. Nonpaying guests.

The hotel-cathedrals themselves to be extraordinary "greenhouses" for bodies and minds, for staples and people. Those hotel-cathedrals would physically generate what I call the third environment between the indoor spaces and the outdoors. The in-out environment with a modified climate, light, and adapting to the seasonal changes.

The "fame" of such places would run fast and hot: a seminal, refined habitat where three separate body- and mindsets come together in a tête-à-tête: THE BON VIVANT, THE BON PENSANT, AND THE BON "AMANT."

Among the "nomads of means," tens of millions of them,

there are those who travel to go places and there are those who travel to get away from places. One place to get away from is the persona place. To get away from themselves. Brief Encounters is a place to go for a percentage of both groups. Perhaps more from the second group, those running away from themselves.

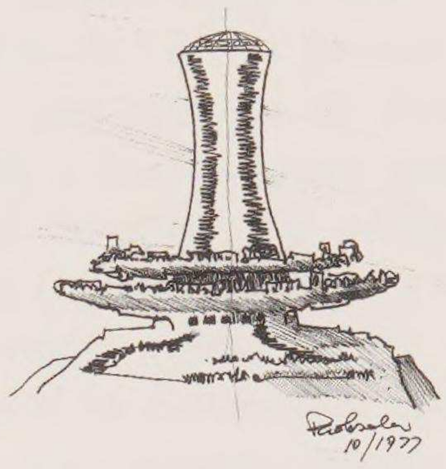
A literature would have to be developed presenting the year-round theater of Brief Encounters, the human-condition play staged in the lean urban locos dotting the continents.

Playwrights, directors, actors, and theater-movie, TV, and cyber-spacers, the market, engaging actors and Brief Encounters participants in the "perennial" play supported by academia and the local policy makers.

The Brief Encounters focusing mind would generate numerous programs capable of spreading information about the initiative and emphasizing the necessity of a human and civilizing binding if we do not want to be overwhelmed by the violence of intolerance, bigotry, greed, and mediocrity.

PART 3

Hoppers



Animism

12/5/94

The more I read (glance at) the literature of "What and Why," the more it seems to become clearer to my thinking that the *creational process* is not given its due. We do not really believe in the originality of newness since at last we propose that the cast of characters is generated at the origin and that the term *unfolding* is the right word. Nothing is creation in process, since everything is printed a priori in the pergamene unfolding before our eyes, the eyes of all times, eyes, by the way, quite unnecessary, if not useless, since the pergamene of reality is unfolding regardless of any or no witnesses.

So here we are seeking meaning to avoid despair and endorsing in the same breath the nemesis of any meaning whatsoever, since this unfolding is, at best, a vain game of the pergamene generator having nothing better to do than unrolling what? An a priori blood-stained paper roll?

What escapes us is the possible fact that a process that is meaningless at its origin might generate via its Becoming a meaning that, if rightly guided, a horrendously grave and possibly impossible task, would become the radiance of knowledge and of its retroactivity (of its evolutionary reason).

How noble, how excruciatingly beautiful, the remote possibility that *meaning* might throw its radiance back in time, to the beginning of space-time. The meaninglessness of the origin (Big Bang) Being made a posteriori full of meaning to the past, remote ancestry!

There is a "What" at the very beginning, the Being-Becoming eclat, but there is not a Whyness to its outside unless the mere operational reality is more than a self-coherence in action, but is also a normative (learning and discriminating) operation. There is not even a potential for Whyness. Only a presence, Becoming, that, as it is, is incapable of inhibiting, or better, of rendering impossible, a remote emergence of the normative and then of the "Why" itself.

The Why *could* appear, could be creation, within a protracted creational process, of a Why-deprived ancestral enactment (such as the Big Bang). That is why the tragic sense of life is not a metaphorical expression but a contextual, real condition: chances are that meaninglessness has been, is, and will be the immensely, if not infinitely, "empty" core of the whole fireworks.

"God" would be the impotent witness of the eons-long agony; therefore, "it" would be tantamount to nothing, the existence of the nonexistent.

The animistic model, even at its impressive best, remains a cozy cocoon because it presupposes that, given the animated nature of reality, there will always be salvation even if its form

and its inner working may still be undetectable, inscrutable (but, the big but, the cause prima by definition).

The animist says, it will never be for . . . naught.

The realist says, it could very well be for . . . naught.

The animist is, therefore, a determinist in disguise: an angelic disguise to the smartest of them.

The materialist at last negates the Why as its genius works at defining the What with the Hows necessary to its "discovery."

The realist is desperately clinging to a remote possibility for a splendor beyond conception and imagination (not *determined*, i.e., imposed a priori).

As a realist, I am, therefore, as distant from the materialist as I am from the animist.

The animist puts the Why in front and untouchable because its Why is fatally so; the rest of the play is the unfolding that has no avenues into failure, defaults, or death, only the surprises that a future no longer future has in store (one and all prestored at the origin).

4/1/96

I am for the demise of all theologies from Hinduism to Capitalism. They all promise paradise around the corner under one or more divinities, the guidance of their injunctions. Eventually religion (*religio*) will relegate them to the "museum" of curiosity.

6/5/97

The animistic reality and the animating reality. Poles apart. For an open universe, the animistic mode might be the indispensable crutch to keep despair at bay. For the closed universe of an animating reality, the animistic mode is the betrayal of evolution and of the concreteness, tangibility, and presence of the unending novelty of reality and the possibility of an astonishing closure.

7/11/97

The False Dialectics:
Particles/Waves
Matter/Spirit
Space/Time
Present/Future
Brain/Mind

Staying for the moment with the duality brain/Mind and mindful of the chronological precedence of brain above Mind, an epochal precedence, then one might be right to propose that it isn't that the Mind causes the brain to reconfigure, but the brain that causes the "Mind" to change (to have a new thought, for instance). The cause-effect is for real; who is the

boss?

A thought comes about because the brain changes? Or the brain changes because a thought comes about? The change is the thought in any case.

Put in other words: Could it be the case that the so-called instrument, the How, the brain mechanism, generates the so-called performance, the What, the Mind (?), and would be another clear strike against and trace left of animism? Not the spirit, Mind, dictating to the flesh, brain, but the flesh "dictating" to the spirit?

This ripples out, so to speak, into space as the Thing and further puts Miniaturization as an effective space domain and as a sine qua non for Complexity and Complexity as the sine qua non for Duration . . . the goal, so to speak?

If we were to get rid of the dialectic brain/Mind, we might be able to engage in a more coherent search for the inner working of reality (the domain of self-consciousness and ultimately, self-revelation). As things are now, we tend to exchange insults more than knowledge.

Reductionist and animist are enemies to life. The thinking brain has the right to expect more, and the thinking brain is a dance of reconfiguring space.

. . . . .

The greatest evil of animism is to make the conjecture, the hypothesis, into certainty, the true, and use it as such. From such presumption the whole cascade of intolerance invests the human condition with the most horrendous episode of mayhem, cruelty, violence, hatred, and vengeance the resourceful Mind can come up with. And it always does sooner or later.

9/4/97

To hope for "salvation" from within is as delusory as the Grand Delusion itself. Animism has made us the automatons of God. Each one of us believers, irrespective of the reason for our conversion from healthy intelligent animals into freaked-out paranoids, is in no condition for a coherent take on reality.

10/2/97

As long as you hide behind God, any god-goddesses, you are out of touch with reality.

8/6/98

By animating designs, Walt Disney opened a new Pandora's Box of animism. When a teapot speaks to a spoon and the dialogue is synchronous with the imagery, the whole world becomes captive to this new tide of animism. The child no longer needs Moses and his God, the speaking mountain

needs only a few tools, a good technician, some graphic skills, and a piped-in voice, and the mountain speaks—far more convincingly, by the way, than the anguished prophets of the desert.

(By the way, I am not prophetizing, I am proposing a more realistic—that is, more creative—way of building the past.)

Then the Muppets cometh . . . the Cookie Monster, a rag with a voice, is an animistic emblem of the first order and achieving so much with so little, with the backing of a "mir-acles" -making brain.

Then the microchip comes and the gates of magic are sprung open. The child has no way of distinguishing between reality, animation, animism . . . a ghostlike, brain-concocted reality. A virtual reality.

Walt Disney is one of the saints in the iconography of animism.

The animistic doodler says, "Yeah, you are mixing simulation with reality to fool me to believe in your hypothesis!" I say, "that shows how saturated your brain is with animistic patterns as to be unable to see that your theologies are pure simulations as the Cookie Monster is."

And if you don't think we need clarifications look around and observe the evil of prejudice, superstition, intolerance, bigotry, ignorance . . . plaguing our actions: "smite the unbeliever," Ireland, Congo, Oklahoma, Holocausts, thirty-year religious wars, on and on and on the bibles of horrors . . . the Bible at the helm.

3/21/98

My call for the demise of animism is straightforward. If one tries to expunge the spatial "component" from anything—quark, galaxy, emotion—nothing is there. The component is not a component; it is the thing.

What is utterly unimaginable is the variety of space configurations that come into play from state "zero," at Big Bang singularity, on. My presence, in the recent proximity of Becoming, is retraceable step by step to such a Big Bang. If animistically disposed, I would have to say that (or accept), the blueprint that in the animistic bosom had to be there, immensely detailed, because any slight deviance or any even tenuous ambiguity in it would clearly mean that I would, could, never come about. I and the "infinite" number of events disgorged by the animistic "force" had to be strictly premeditated and utterly detailed at that first singularity. That means that the blueprint is a misnomer. The real thing had to be there. Adieu time, adieu creation, adieu evolution . . . adieu self-determination.

A meaningless delusion all the way through, a delusion constructed by phantoms!

1/23/99

Biosphere and Noosphere

Perhaps the animistic quest has been all along the quest for a noosphere. The fundamental error has been in seeking it in the past. A monumental error. A tragedy that could eventually become cosmic. Confined as it is now to a puny planet Earth, it could migrate via planet Earth as rats and other species travel via ships and spaceships to yet distant (?) worlds.

In this solar system, the past glories of the noosphere are the fragments of it generating from man's brain. One of those fragments, the unfortunate one, and the one to which we are in servitude, is the noosphere false and pernicious of gods and spirits.

Simulative and anticipatory as in many ways it is, the invented noosphere, the paradise of Eden, the Lord's domain is a grievous backpack that causes mankind to be under a spell he is not able to shake off. It is a curse nested in man's brain, infecting and affecting all of its doing and thinking. A self-inflicted punishment, the grand "religion" of the animistic grand delusion.

2/7/99

Animism, the Grand Delusion, will eventually and fatally stunt man's transcendence.

2/17/99

Without physics, there is no reality. Without reality, there is no information-knowledge. The poor little (or big) gods are out of work. There is nothing to do in the absence of any presence (the physical). And the glory of the physical! From galaxies to passion!

Better Kind of Wrongness (BKW)

APRIL FOOL'S DAY 1995

The theologians: The suburban "planner" is in the same pit as the theological thinker. They both come along with a given. For the theologian, the given is God; for the suburban planner, the given is suburbia.

Two theologians engaged in an "improbable" task. The theology of God has to try to understand her, him, it, better so as to ingratiate herself/himself to her, him, it. The theology of suburbia does the same, with suburbia in the place of God. The tragedy for both (or fostered by both) is that they work on the wrong premises. All the improvement on their technology results in developing a better kind of wrongness . . . a catastrophic development.

There is a space-time gap between the pace of production-consumption and the ability of science and technology

to develop the Hows and the means to keep up with such a pace. One problem is that knowing about something is not like doing what the knowing proposes. The reason being that our knowledge is pseudo-knowledge, and it will remain so "to the end of time."

Virtual reality is a good test of this. Virtual reality is in the theater of simulation all the way, like theology is in the theater of simulation all the way.

If we knew more, we could look at the planet with different eyes. The planet is the main resource for life (sun permitting). We are troubled by the poor use of that very small part of the planet we call the biosphere. With greater knowledge we could produce biospheres many, many times larger than the one now evolving, and do so by just "mining" the mass of the planet in the fashion capable of predisposing the condition for additional biospheres.

5/26/95

(To Santa Barbara) Just about the worst thing one can ever do is to do the wrong thing better, better in the realm of design, organization, production, planning, packaging, advertising, selling, proselytizing. Some classic examples:

firearms
single homes (the suburbia model)
smoking products
some aspects of the automobile technology
violence advocacy
greed
xenophobia
intolerance
bigotry
racism
"Chosen People"

This is what I see as indulging in a *BKW*.

9/23/95

Synergy is not always commendable, see the synergy between the arms industry and war.

See the synergy between auto-speedways and suburbia.

See the synergy between patriotism and intolerance.

See the synergy between opportunism and greed.

Each feeds upon the other.

Gleeful cycles of dedication, efficiency, better kind of wrongness cycles.

7/18/96

Freeways by the busloads and heart bypass deadends.

Again, the wrong thing being better pursued will end

against the brick wall of intolerance (not toleration). The "bypass operations" cities are engaged in have their analogy in the surgical heart bypass so fashionable today.

Both are supposed to bring more blood (traffic) to the heart (city). For both the trick is to leave out (bypass) something: tissues for the organism, neighborhoods for the urban "organism." A dubious intervention that eventually means the demise of the organism and the city.

8/21/96

The automobile. In a lifetime, the American (male-female) buys and drives some ten cars. Fifty years of driving, one car per five years. He-she is mostly the only user of the machine. If half the population of the Earth, at the 10 billion mark, the "adult" population, were to do likewise, 5 billion people would, in the span of fifty years, "consume" 25 billion automobiles.

Naturally this is only the tip of the iceberg.

First, the production and the disposal of the machines themselves. Second, the caring, feeding, repairing, buying, and selling of each. Third, the parking, storing, delivering, and recycling of each. Fourth, the roads, network inclusive of overpasses, bridges, and tunnels, for each item an enormous commitment in production, minerals, energy, fuels, organization, administration, marketing . . . perhaps one-fourth of the adult population dedicated to it. When you marry sprawl you automatically marry the automobile, therefrom the pathetic battle for "mass transit" to serve sprawl.

By the present statistics, there would also be carnage plus crippling by the millions, etc., etc.: 1.6 million killed every year x 50 years = 80 million people killed. The betterment of the wrong is calamitous.

1/10/97

The ethics of wrongness. The surest way to self-destruction for Americans is to sell the American Dream (AD). We want to see the products of the AD, the Coca-Cola, the Chevrolet, etc. If we sold the AD successfully, we would mesmerize the minds and "destroy" the biosphere. (The biosphere cannot be destroyed by mankind, but it can be drastically transformed by his actions.)

The AD is an imposing example of a BKW. All theologies are pernicious examples of a BKW.

To participate, to design, to build the suburban sprawl is to go by the ethics of wrongness. To live in it forgoes any honest pretense of environmentalism. I am an environmentalist or I am a suburbanite. I must choose; I cannot be both.

3/27/97

Moving in the wrong alley means that the more sophistica-

tion, scholarship, and vision is poured in, the worse the situation becomes. It is the BKW law.

Think of the breakup of the city. We chose the metastasis of the sub-exurbia. The initial dreariness of Levittown incarnate was picked up by Frank Lloyd Wright and glamorized in his Broadacre City. Fifty or so years later a BKW is engulfing peoples and environments at a gargantuan rate.

To improve the wrong thing is to lose more and more ground and means sinking ever deeper into incoherence vis-à-vis the *evolutionary coherence* that might have to routinely supersede *historical fitness* and *political correctness*. To work for the wrong god, and all gods are automatically wrong in my hypothesis, is to do the work of the devil, as if the poor devil ever existed!

1/11/98

If one is even vaguely aware of the so-called good-and-evil conflict staged on this single speck of the cosmos, one may want to contemplate the enormity of such conflict when it reaches into the cosmos at large.

On that road, a BKW could reach truly monstrous proportions. A cosmos drowning in madder and madder self-awareness. The Hell of the Bible like a minute smudge of suffering on the skin of the monster.

Come to think of it, our whole Star Wars culture is a preview of this. It says "you do not deal with the dragon, you destroy it and do the same with the rest and to the last of them." Since we are constitutionally ignorant, we tend to put the best of our efforts into the BKW "culture."

8/6/98

The hundred years progression of bettering wrongness: the automobile, the hard irony is that conceived and brilliantly developed, the car, viewed at the beginning as the connective machine, turned out to be the most effective device of isolation, alienation, unfriendliness, segregation.

The driver is the unknown among the unknown 100 million of us, the unfriendly adversary in the use and control on the never sufficiently large, capacious road.

4/26/99

Some of the financial-economic activities, among the lucrative ones: cars, tobacco, guns, housing are dedicated to improving wrongness. They make them appealing, "efficient," glamorous . . . The depressing thing is that they are dedicated to better kinds of wrongness. And we all pay dearly for this.

We wouldn't dare make cancer, a growth industry of the cells, more glamorous. We go at it with the whole arsenal of our medical know-how. But we pamper our guns, cars, ciga-

rettes, and building industry, and we bask in the dividends they dole out.

Of all of the four wrongnesses considered, the habitat-improving wrongness is the most damaging. Even the planet will "suffer" from it. In fact, it is "suffering" from it.

Habitat, with all of its subagencies, from land surveying to pink pillows, is becoming a blatant demonstration of where a BKW is taking "modern man" . . . to perdition.

6/21/99

AULLS (Arcosanti is an Urban Laboratory for a Lean Society)

Nothing shows the gap opulence-leanness gap more than the question: "What is in it for me, person or corporation, that makes me wealthier and more powerful?"

That is, what is the alternative to wealth and power that will make me better at it? Dear me, the alternative is not more of the same; the alternative to more wealth is more life. And the segregation of wealth and power is a diminution of life. So we are back to point zero! There isn't an alternative; there is just the pursuit of an even better kind of wrongness. By the way, animism has been a BKW for 3 million years!

6/24/99

The city gone cancerous has been metastasizing for over thirty years. Now things are critical. Exurban cells are spreading vigorously in the best of BKW modality.

7/3/99

It is a curse that so much of the intelligence we carry on is dedicated to improving wrongness, a curse and an addiction. We are in love with our mistakes. A question of habits?

1/24/00

The Bucket Brigade (analogy)

In a landscape where a lake (the city) is surrounded by large and small ponds (towns and villages), fish farming (people's culture) has developed. For an efficient process, fish are transferred from one water basin to others in a daily routine (commuting). For obscure reasons, this indispensable transference is made via buckets (automobiles). Brigades of buckets crowd on top of another (gridlock) at the expense of everything, fish (us) included, and included necessarily are their aspirations (pollutants).

Then a "brilliant" technician comes up with the "collective lubricant notion" in the nature of brooks, rivulets, torrents, streams, canals, and rivers, and a network of fluidity is established (maglev). The bucket brigade is "suddenly" silly

and obsolete. Unfortunately, since the medium (the car) has become through the years the message (the status that the car confers to the driver), the bucket brigade, with all of its dinosaur tradition, is here to stay for a while longer.

Five billion motorized and glamorized buckets might eventually work as a slow-motion lethal asteroid swarm. For the moment there is where the American Dream gone planetary is poised.

By the way, organisms run on the lubricant flow Techne, not on bucket-brigade logistics. Look at our artery-vein network. The bucket brigade is okay in a quantum world. It is in the Coca-Cola, compukitchen, soccer mom, garbage can, nonvirtualities.

. . . . .

A computer for each student. It may fit well the vast (unintended) design of persona desensitization that will be a cornerstone of postsilicon intellection. In such a perspective, a wicked way of moving intellection into the cosmos at large.

2/4/00

Muda and Hypermuda

A weapons industry twice efficient via the reduction of muda (waste) in its production cycle is working in the BKW domain. A housing industry twice efficient in producing single homes is working in the BKW domain.

A doubled efficiency in poppies and hemp processing will flood the drug market with more products. BKW in action. Cheaper cars will mean more affordability of the machine, etc. It seems that *muda* can easily migrate into a hypermuda kingdom where it might wreak havoc while being applauded by the masses of happy users and consumers. Efficiency transformed into deficiency. Think of a twice-as-efficient death camp for Nazis and "Cambodians." Moreover, if the Nazi war machine had been afflicted by only half of its muda, it would have succeeded in developing the A- and H-bombs before the USA, with the sure consequence that most of Europe, England included, most of Russia, and then part of the USA would have been reduced to radioactive graveyards.

The muda in this case was not only fortunate but providential.

2/20/00

The know-how of wrongdoing is doubly pernicious. It accelerates the power of the wrong (hypermuda) and it subtracts intelligence and resources from the right-doing.

The Feminine

5/20/93

The nonexpedient reason why we need to abandon the American Dream is that life is a congregational (gathering), implosive phenomenon, not a dispersive, segregative, explosive one. Therefrom the greatness of the second invention, the city. The two greatest inventions of our species, besides speech, are love and the city.

The apple of the Garden of Eden was the apple of reflection, that is, the inception of knowledge. But the truly human content of the apple-knowledge is love.

Love is absent in the food chain, which is revved up by opportunism, and definitely absent in the mineral reality, which grapples with probabilism-determinism. Love is the new dimension reality contains as it moves from probabilism, determinism, and opportunism into reflection-knowledge.

Skyscrapers are an example of the impotence of misdirected potency. What we must spew into space is not naked half-semen, not sperm, but placenta and eggs.

The multiple exedra is a morphological archetype, unlike the tower or the slab. Both towers and slabs define shapes but not forms. The multiple exedra is a matrix of sorts, a flexible three-dimensional grid.

The discipline intrinsic to the geo-exedra morphology is the one that is mindful of the sun's cycles and of the climate. And it wants to be alert to the "passage" of the sun: how it can be viewed, framed, walked in, etc.

This sensitization to a sun/climate environment distinguishes the exedra archetype and its apse effect from the tower or the slab that disdain both sun and climate.

One instance of sensitization: Shades are avoidable, just as towers and slabs can be avoided. They must, however, be "desired or avoided or designed" consciously. The sun rights are paramount. Shades can be used within the many-faceted sides of climate and can generate performance—physical, economic, social, and cultural performances.

The multiple geo-exedra has no connection with the world of symbols and metaphor, or with the questionable animistic world so dear to the Aquarian communities. If anything, it clearly presents itself as a rational or coherent response to a reality that is all but loving and nurturing. It is a dialogue with and a recognition of Mother Nature and her indifferent, when not harsh, ways.

Every city worth its name wants to have an erection, multiple in space, frozen in time. So every city worth its name tries to. The critical element of the city, the nurturing presence, is thus relegated to a sideshow presence.

It is difficult to find nurturing among predators. The male

of the species well knows that, notwithstanding the new role humans are eagerly forcing upon themselves. So nature witnesses the predator reaching for the sky. It is a somewhat pathetic spectacle as long as the feminine nurturing side of life is kept in the dungeon. Then comes the exedra morphology, an application of the apse effect, the nurturing form.

5/11/97

The Generational Chain

From parthenogenesis (cells) to fabrication (microchip) . . .

In the chain of parthenogenesis-estrus-eros marching at the tune of Miniaturization-Complexity-Duration, there is now potentially a new station: fabrication. Are we at the beginning of this revolutionary (evolutionary) stage, and are there premonitions, anticipations, to it?

One "premonition" could be nested in the narcissistic flavor of homosexuality. Homosexuality has the sort of mirror pleasure component that masturbation clearly offers. The "I do it myself" reaching for orgasm. Biologically the two homosexual parties are identical and the coupling is sterile. The unimaginable richness of the genetic reshuffling of eros becomes a mute domain. Homosexuality is a sort of cloning limbo, if there is any interest left for reproduction.

It is an androgyny with two components that happens to be made of two morphologically identical parts, the homosexual partners. This seems to be a step closer to asexuality. Then:

parthenogenesis-estrus-eros-androgyny (sort of maladroit parthenogenesis)-asexuality. That is, fabrication as reproduction. The Asexual Silicon Persona (ASP) fabricating other ASPs via its own defined blueprinting. With the erasing of the male-female chromosome mix, for better or for worse, the richness without end of the human stock is no longer accessible. The variations must become willfully designed for good or for evil or by default.

If the female egg can be vacuumed from the mother's chromosomes and either the male or the female partner's chromosome can be injected into the preempted egg and the offspring developed, then lineages of male-male and female-female can be developed. The potential for "GODS the mothers" and/or the "GODS the fathers"!?!? and the carriers of the lineages? All sterilized mothers of the gods.

11/15/98

There where the parthenogenic phenomenon comes up with the new reproductive invention of sexuality female-male genders, there at that very start polygamy is "born."

One of the gender (the male) is charged with the task of

bringing the one half of the new life to the other half, the female. The other gender (the female) is charged with gestating, mothering, nurturing the newly composed individual.

The male, "free as a bird," develops his domain with all the strategies he comes up with: attack, retreat, advances, stalemates, breakthrough, dominion, predation, power, absolutism, genocide, etc.

The female, the carrier of life, the nurturer, has to cope with it all, and coping she has been now for 400 million years.

No capriciousness or malevolence in the bisexual invention and its success, not until the emergence of mankind. With this species, opportunism starts to drift from the well-being of the species to the well-being of the individual. That is a breakthrough in the two opposite directions (of the same life thrust) of good and evil.

The pseudomale that some of the feminists seem sometimes to propose is no "solution," if solution is what we are after. The pseudofemale that guilty male seems also to propose is as "artificial" as the pseudomale.

The silicon cycle of intelligence production might be the answer, but what impoverishment that might be!? Life has been equipped with bisexuality. Intellection must pursue the best device it can to make such eros-marked phenomenon the best, beyond the victimizer-victim threshold. It has been difficult and hard. Pleasure, joy, suffering, rapture and tragedy commingle "ab eternum."

11/16/98

The feminine agenda could be extensive, and it could include a revision of the evolutionary-genetic agenda. For one, the progression of capitalism could be made to take a turn in the direction of internalization. A sort of incubation in a less self-gratifying environment. The womb of self-giving.

The feminine movement could well be the feminine revolution: the inception of a novel Becoming in which the genesis of a new individual admonishes us of the dangers of abstraction, inventiveness, anticipation virtualities, all male "prerogatives" (he specializes in them) that are in desperate need of feminization—that is, in need of the love potion the male has a hard time focusing on.

The violence endemic to history, all of history, will not abate, let alone crash, unless the feminine intervenes "in force" and sterility vetoes the tyranny of the male, genetically imprinted despotism. But femininity cannot put on the warrior armor, a male invention, to combat and subdue the male adversary. She does not have the physiological wherewithal for that and fortunately not even the taste for it. To offer, she has instead the profound attachment to the antideath arousal of life and of all the equipment to make life triumph over the

male machinations and violence.

For the whole history of the species the male has pushed for the powerhouse of Howness, science and technology included, but has miserably failed in fairness, equity, and wisdom.

He must be made aware of his own black hole of compassion (the absence of it), and nurturing of creativity must be the task of the feminine. The feminine can do it if she does not give in to the notion of hypermanliness, to be a better male than the male.

Space and the Feminine

11/24/98

The female is an interiorizing organism by definition. Gestation takes from the environment, the chemicals, oxygen and water included, the proteins, the enzymes, the vitamins, etc. And, good space magician that she is, the female organizes all those space configurations into another interiorizing organism. Space interiorizing space interiorizing space . . .

Within the carbon cycle, the female is and still remains the indispensable hinge where the printing and minting of life occurs. The female is a singularity of interiorization.

When it comes to the spatialization of emotion and reflection, from the feminine emerges the female. One creation of this emergence is maternal self-giving and love. A most singular of all singularities. A singularity never attainable by a silicon genetic. The key singularity of the feminine "movement."

The Feminine and Frugality, the Feminine and Love

12/1/98

The making of a new life has no match in the whole of reality in terms of economy of means and richness of ends. A pregnant Rwandan woman on the edge of starvation and death carries on and gives birth to a baby with nothing in her and her baby but just a few ounces a day of nutrients and water. That is the miracle of the feminine within the miracle of life.

But that is not even half of the picture. While gestating, the feminine comes on her own: a true explosion of altruism: maternal love. A "seepage" of unconditional love reaches out to surround the new life with the growth of self-giving and self-giving . . . It manifests itself in the most mundane of all endeavors, feeding, diapers, hugging and guiding, playing and training, caring and caring and caring . . .

The poor macho man is a pale shadow in this whole feast of love. He doesn't even get it, he does not endorse it, he resents it, he submits to it. Femininity triumphant but also femininity "enslaved" by it and by macho man opportunism.

In the makeup of the "weaker sex," cultivated in millions

of years of male opportunism (survival of the species?), is the gift and the curse of woman, and the answer is not there because at most it reaches into the cultural. It does not reach the genetic. Males and females are two different events in living reality. But they need each other.

If all the things attending to males' actions were to come even remotely close to the feminine frugality, we for one would not have an environmental crisis, and with an abatement of waste and greed our lives would have a better chance to move in the interiorized domain. The male has to develop a cultural-mental womb to equal the life-giving and loving universe of the feminine, the feminine womb.

The brain-mind of the cosmos will be, if ever or anything, the "collection" of the brain-mind of all the creatures that the feminine will have generated. The feminine is also a call for the demise of animism. Can one imagine the gods lined up anxious and ready to slap a soul on the fertilized egg or the embryo or the fetus or the near-to-be-delivered baby? . . . and then in the blink of a (godly) eye abandon mother and child to the harsh reality of nature and culture? No Lord is better than any absentee Lord. The absentee Lord of famine, genocide, cruelty, terror, de-reliction, devastation, deception, impotence . . . What a gorgeous Nirvana!

Femininity and cyberspace in their own domains call for the rescue of woman from the delusionary and the hypnosis of all bucolic paradises. To animate the inanimate is an immense and hard task. Reality as we experience in this solar system has no clue of what began three and a half eons or so ago. And surprise of surprises, even the living had no clue about the gestating of self-awareness some millions of years ago.

12/5/98

The feminine encountering cyberspace could "plot" with it and lure greedy man toward the ephemeralization that cyberspace by its very nature offers anyhow. I am pointing to the domain of frugality and interiorization exactly in opposition to the toys, confrontations, and war games that so intensely occupy macho man.

It would have to be a determined, intense, and protracted effort for the alliance feminine-cyberspace to succeed. The fruits would be a more gentle and more profoundly engaged human condition. And a good home for the rescue of the biosphere. A biosphere-noosphere reconciliation with materialism as the loser. A tough sell to capitalism and to license in general.

3/17/99

The female is inclined by her own gender-nature to be

engaged in the affairs of life-gestation and life-creation of the content within. The inventive male is inclined by his own gender to speculate about what might happen in life's end and almost automatically speculate about the envelope containing life, the life that the female, engaged in fleshing out, is responsible for. The female is engaged in the fleshing out of life from minerality. The male is engaged in exploring the nature of the mineral-biological envelope of life. The illiterate societies made goddesses out of the mystery of the flesh. The literate societies made gods out of the mystery of the cosmos.

In early times, producing progeny occupied the best part of the mother's life. Within a thirty- or forty-year life span, the most mature and vigorous ten to fifteen years were for mothering. In the same earlier times, the life of the male afforded him the leisure of litigation, war, and abstractional occupations.

The one-minute impregnation and the nine-month pregnancy and years of nurturing were destined to generate two different brain geometries. The geometries that are primarily responsible for gods, genders, and domestic conflicts.

Feminine and masculine are now on the verge of generating androgynous "life," or at least a cocktail of bisexual-androgynous reproduction cycles. "Goddesses and gods unite," and since you are in the process of con-fusing your two selves, go one step further: dispose of yourselves in a momentous autodisposal.

11/29/99

As a blip on the cosmic scale, we are in life the contemporary of the initial living ocean scum of our dear dinosaur neighbors of Confucius, Plato, Jesus, Spinoza, etc., etc.

WE ARE IN IT TOGETHER FOREVER.

The question is to see how such a tiny blip of territorial life will be willing and able to "extrude" throughout reality and in probable conjunction with other noospheres to become the conscious consciences of the brutish immensity of the cosmos.

The feminist movement is invested in the corporate world self-righteously and relatively successfully. But the corporate world is the masculine world of cunning and aggression. Love and care for the losers? The loser for society and for personae? The feminine movement has to face this and attempt the impossible. Tame capitalism by letting loose upon it the light of committed compassion.

Frugality

Crime and Suburbia

3/24/94

The dereliction of the city caused by the suburban exodus is cause one for the lawlessness-vandalism-intolerance-revenge fueling the "urban" violence. The ex-urbanite and the para-urbanite are not new frugality converts. They want it all but in inflated measure. The structure of suburbia makes sure of that.

3/31/94

The isolation of the family in the suburban or agricultural home demands a compensation for the social disassociation and the consequent loneliness. The compensation takes the form of new social beings, the children, so as to experience interaction. The demographic pressure is directly proportional to the social and cultural isolation of peoples and families.

Cities tend to be "biologically frugal," and biological frugality is now an imperative. Although they have genuine love for one another, the farmer couple, isolated and cut away from the social nexus, goes on to produce social beings with whom to relate. Eros-centered and the body count contribute to farmer fertility in action.

4/7/94

The central and critical position of *greed* as the worst enemy of ecological health. Because *greed is the engine* of transformation, acquisition, and accumulation, the consumption-gratification unlimited of today's American Dream.

Catastrophe as the unavoidable nemesis.

The odds for a prevailing of "Mind" as the evolution of "matter" are infinitesimally small, *therefore the imperative on oneness. Greed and democracy, poor bedfellows . . .*

Simulation as space-time-less substitute for reality, that is, an instrument by proxy of frugality, contributing to the salvation-restoration of ecology.

Three main tasks for virtual reality:

1. an instrument for research, design, and testing in many specific, technical, and other fields, medicine, for instance, via simulation;
2. an instrument capable of offering experiences of the nonbodily kind, so to speak, by way of the same simulative procedure;
3. as an information magic van. By being a simulation instrument by definition, it has enormous versatility, and because of such versatility it can play havoc with our makeup.

Virtual reality (VR) is a brain-to-brain avenue. And the exclusion of the body, in fact, the exclusion of all bodies, biological and not, is its great virtue, also potentially its curse—unless we constantly remind ourselves that such exclusion is ultimately a willed deception (we are getting something in place of something else), that is, we are in the simulation domain, but then such is religion and, in some special ways, the esthetic.

I am an advocate of the city, of what I call the Urban Effect, and I think that virtual reality can be the most effective and frugal additive to the urban experience: complementarily as a pre-experiential and postassessment/assessor of actual, contextual experiences of events. VR can assist in developing the richest social and cultural milieu and, as a large dividend, can provide relief to the overused natural and cultural resources of the planet.

With 10 billion or so affluent people, the tourist trade would be all but deadly for the environment; for instance, imagine 50 million people visiting the Grand Canyon yearly (now approximately 5 million do so). The same thing goes for all centers of tourist attractions, natural and manmade.

In general, the ephemeralization of reality proposed by the Urban Effect is in agreement with the ephemeralization offered by the VR simulation.

A well-balanced combination of Urban Effect and virtual reality is a prospect to desire and encourage. How to tone down the irrelevant and the sleazy, the opiate, etc., from the VR magic machines ——> super instrument for consumption?

4/20/94

The instrumentation for human development, supported as it has to be by technological-technocratic agencies, is on the verge of overwhelming us and them and all.

Frugality is not just a behavioral attitude. It is an ethical imperative. The two alternatives:

1. To do more with less
2. To do less with more.

We are in the grip of #2, notwithstanding the many technological miracles.

Perhaps there is a virtue in virtual reality via the simulation value. We cannot all have all those things and experiences. Let's have the next best thing to those: a simulation of them. Part of what we lose in tangibility and space-time immersion we might gain via the "artistry" and selectivity and focusing and overwhelming of the simulation process.

The collectivized hermitage of the techno-freak. I must (I ought to) do the most with the little I have.

9/19/94

Millionaires of Armageddon

The young millionaires cropping up in ever larger numbers are the Armageddon procurers, since the focus common to most, if not all of them, is the strengthening and fostering of hyperconsumption: per capita hyperconsumption here and everywhere.

Financial wizards, economists, entrepreneurs, investors, bankers, conglomerate magicians . . . all have one thing in common, their fortunes are tied to hyperconsumption.

Greed and glory are framed on their desks or consoles, probably also in their bedrooms . . . the smell of money. Eros as this most scented (power) best. *Greed, glory, and eros, the Armageddon flowers procurer.*

3/21/96

I believe that the hyperproduction-hyperconsumption of the Western people, USA culprit #1, is close to the malignant border. See the 20-planets projection—SINGLE HOME. See the "shopping center phenomenon."

Mineral-Organic-Mental: In this progression, materialism, hedonism, and self-gratification are entropically oriented.

FRUGALITY MIGHT BE THE ONLY COUNTER-MEDICINE.

The degree of Complexity present in a process defines the degree of liveliness. The intelligence and self-awareness the processes reach in the complex is not the complicated (e.g., the canary vs. jumbo jet), and the complex is utterly tied to Miniaturization. The two (MC) always in tandem generate life, intellection, Mind, and a possibly meaningful conclusion, the memory of things.

MCD is in function of where-when = space-time.

Implosive = life; explosive = death.

3.5 eons of MCD via flesh, now 20-year MCD via silicon.

There isn't such a thing as events and phenomena coming to be in space-time. Those events and phenomena are space-time engaged in mass-energy transformations.

6/19/97

A Movement to Frugalize the American Dream into a Planetary Reality

The planet is a tiny fragment of the solar system, in turn, a tiny fragment of the cosmos. The unavoidable curse of intolerance at the core of all animistic drives: My god is more godlike than your god . . . makes the planet the laughing stock of the cosmos at large!? It would if it were not for the fact that the cosmos is incapable of laughter, joy, sufferance, love, etc. As we like to say, we found the enemy and the enemy is us. This may

suffice to point out the fundamentally flawed notion of a nation, any nation, under God.

Part of the frugalization of the American Dream is to unburden it of the animistic delusions in parallel to unburdening it of the materialistic, self-gratifying delusions of the naked Homo faber imprint.

After a long taste of "the plenty" we are still aware and are confirming the fact that true grand felicity is not of this world (an old saying). The old Nirvana delusion is there to testify. Mistaken identity, by the way, reprimanding a delusion (felicity) with another delusion (Nirvana). But the profound elation of Being and Becoming and being responsible beings is a privilege with no equals. In this at last is the nobility of the species, and in this we must probe deeper and seek harder for a perhaps unending transcendence, the intensity and grace of which escape us.

But if probing and seeking remain outside of the equitable, compassionate, and esthetic domain, no technological and scientific triumph will fill the void of a reality indifferent to our presence.

But for equity and grace to really prevail, aside from their necessary presence across the planet, it is imperative to reexamine and eventually abandon the excesses of consumerism—hedonism, self-gratification, and the limitless exploitation of the planet itself with terribly shallow ethics and value-wanting behaviors.

Biomassive and Biofrugal

10/30/97

At equal brain capacity, the biomassives are or might be on the wrong side of the evolutionary road.

The market slowly adapts to the biomassive demands. Things, appliances, spaces grow in bulk of raw materials with energy demands proportionately increasing. An example is the so-called sport-utility vehicle: "You can't stuff 4–5 biomassive people in an economy car and keep their dignity intact!"

Greater longevity, biomassive people, and the pet population upgraded, the servo-systems of insurance, hospitals, surgery, gymnasiums, schools, clubs, beauty salons, homes, cemeteries, etc., add another 3–4 billion people equivalent to the 10 billion predicted by 2050.

The Frugal Alternative (FA): An Urban Laboratory Initiative

10/5/98

The very core of the initiative is that, evolutionarily speaking, life seeks to find the utmost economy in order to carry on agile and unburdened by the dead weight (entropy) of

"worldly possessions." Worldly possessions move on a scale that starts at survival and ends in utter futility (stupidity?): I am a rich man/woman among the richest!

The game of escalation: making ends meet. Affluent, rich, hyperrich, etc., do not resonate with either equity or coherence. Equity: We know the statistics.

Coherence: Would 100 bulls dominating the whole mammalian species promise any sort of better paradise? Money is power, power corrupts, ergo money corrupts. As always is the case, the formula needs to fit the rules of proportionality and context and ultimately coherence. More wealth in the hands of better people might generate more equity than the same wealth in the hands of worse people.

The Frugality Initiative proposes that, once above the subsistence level, cushioned by a reasonable and desirable level of physical comfort, the human drive ought to be guided by the interiorization beacon: develop intensity at the expense of extensivity, the unlimited drive for worldly possessions.

Clothing worldly possessions in imaginative but mostly deceiving garments, like access to a more rewarding world, plays mostly into the hands of hedonism, or even crass materialism: self-gratification as the meaning of life. A society bubbling with intellect, introspection, and, at the same time, aware of the untamable beast of inequity, ever present and ugly, could emerge in a new domain of lived compassion and moments of exhilarating grace, a golden age of sorts.

The contention that since we are all "created unequal" we all have our personal threshold of comfort is quite logical, though dangerously open to all sorts of excesses. We should know that, evolutionarily speaking, the opportunism of population (ants, bees, etc.), as gray as it appears to Homo sapiens, has the virtue of not purposelessly dismissing its citizens, while the opportunism of the individual, typical of Homo sapiens, does not necessarily bode well for the well-being of Homo sapiens species. Social Darwinism has seen its apogee, but unfortunately its most telling incarnation: Capitalism is alive and well and Homo sapiens desperately needs the humanized version of it.

Those are some observations about the thinking at the core of the Frugality Alternative.

5/11/99

A sort of destiny seems to be coming about on the winding up of the consumerism-materialism breakdown. More and more the pursuit of happiness on such an incline seems to move the hyperconsumer into the corner of dissatisfaction, redundancy, shallowness, guilt, loss of meaning. There must not be too many ways to avoid the often violent void of materialism: one is the quest for a lean society, a lean society also pursuing equity and excellence.

5/15/99

The elixir of Complexity is a lean, elegant dynamic. Self-aware "simplicity." The progeny of a lean society, nature tells us is the "city of light." If each organism is an "urban complex" to the power of two, the urban invention produced by the Mind is an urban complex to the power of *x*, *x* being the degree of Complexity made reachable by the lean nature (Miniaturization) of the system: experience and express more with less. The self-organizing (living) system is a lean presence. It wants (and needs) a surrounding that best reflects its nature: a lean habitat.

5/24/99

Contextually and metaphorically, to transgress is in the nature of prototyping. The paradox of the auto industry: on the verge of flooding the biosphere with 2 to 3 or more billion cars, it could be financing an alternative technology of planetary logistics based on the regrouping of habitat along the transportation channels afforded by such technology.

There would be a liberating scent of alertness touching on generosity, putting financial power behind an alternative way of life, the lean way of life that would be promoted by alternative logistics.

Asia, Africa, the Americas colonized by the automobile is sure catastrophe (a car for every two persons means 5 billion or so automobiles). The structuring and restructuring of habitat for 10 billion people is an immense task and unavoidable if we want to move in more promising landscapes. Two hundred million dollars invested in an even modest laboratory working on the alternative is a fraction of the cost of a Las Vegas extravaganza, a Getty museum, a superhighway to nowhere, one less diet pill a day, and less than half an Eisner bonus from Disney in 1998 ($500 million plus!).

6/24/99

Alternatives

Arcosanti is an Urban Laboratory for a Lean Society (AULLS).
AULLS is an alternative to segregation.
AULLS is an alternative to materialism.
AULLS is an alternative to sprawl.
AULLS is an alternative to pollution.
AULLS is an alternative to 4 billion automobiles prowling (or trying to prowl) the planet.
AULLS is an alternative to waste.
AULLS is an alternative to isolation.
AULLS is an alternative to environmental destruction.
AULLS is an alternative to mediocritization.
AULLS is an alternative to agricultural dilemmas.

7/22/99

The Lean Society Movement is "moving people." It does it in discrete, measurable bites. It seems to be effective (based on the number of returnees) and offers to the Arcosanti residents new experiences and help in generating "conversions."

The Internet should be the main facilitator once we deliver a message to it, and the Lean Alternative proposition is that.

The conversion from the profligate to the lean:

The crucible of living nature squanders her activism to the point of achieving one success hidden among one thousand failures. Nature is 95 percent abortion, 5 percent success.

That seems to cover just about the whole spectrum of the vegetable and animal food chain species. But then for each successful species what triumphs is frugality. The coral reefs, the Amazonian forests, the termite "cities," the worm societies, wildebeest herds, the human settlements. They all are lean sisterhoods. They survive, reproduce, and prosper on a hyperlean diet of sunlight and spare minerals.

The whole interiorization of the cosmos, the mineral becoming the self-conscious is a celebration of (potential) leanness. *It is the Lean Alternative*, cause for endless celebration.

11/2/99

The choice might have to be between the opulent and the lean, naturally under the dousing of the good-bad constantly battering at the gate of consciousness. Even with all of its redundancy and waste, the living seems to be on the lean side.

12/12/99

The intensity of space.

Making space the one and only agent of reality Becoming is, among other consequences, to propose a Lean Hypothesis on the nature of reality in its agenda of Becoming. As Becoming pours unremittingly into Being, the past, the leanness of the hypothesis holds true if the many facets of Becoming are concurrent with the Lean Alternative. (The Lean Hypothesis touches on the cosmos in toto, its own nature. The Lean Alternative touches upon habitat, the sheltering of mankind.)

12/22/99

Alternative to the ongoing? I think I am told that since I like coffee I should drink and enjoy Coke because it has caffeine in it.

We've got to sell the Lean Alternative or we can sell out. To adapt to and to adopt the market is to forgo the very notion of laboratory, the place where things that are not common and not proven are tested. A learning process by definition.

It is not, it wants not to be, an adversarial position. It wants

to be an illuminating position. Instead of one domain, the market domain, there are then two domains. The market domain, with its own imperative of hyperconsumption, and the alternative domain of a leanness reaching for a better compatibility with the real. We, Western societies, are in the process of testing the hyperconsumptive, in its triumphal but possibly unwise anarchy. Plunging, smartly if not deviously, in its "irresistible" current might make the alternative a success and the hyperdollar a failure.

There are moments in history when the black and white have to face each other and, in the laboratory, have to avoid the gray zones, and that is for the sake of both. After the black and white laboratory experience comes the possible fusion into the new and possibly the better.

Howness

11/18/93

Folding-Unfolding

One of those semantic misfortunes: life is a folding phenomenon, a genentropic event. It is thus that elemental entities get involved with each other and generate the folded-over genetic segments. Folding is the most common geometry of the living. The history of the living is the history of folding upon folding. The history of the dying is the history of unfolding. Like a rose in its densely folded bud begins to unfurl and radiate its scent, so life is in its densely folded organism. Radiating acknowledgment of self and other, life begins to unfurl from its very beginning. The unfurling or unfolding is the signal of death slowly catching up in the innards of life, the organism.

As the petals of the rose begin to fall and the scent becomes pungent, so the folded makeup of the organism more and more radiates its presence while advancing toward death. The unfolding is death coming on the forefront, the entropic phase of reality folding in its multitudes, organism after organism.

10/10/94

Tange's Yokio Building

An elegant type of segregation (of functions). One cause is the cost. To live in the tower would be for millionaires.

The tower is the closest to a Gothic cathedral we have built in this century. This is not to criticize but to flatter. Shapes and textures are exemplars and sophisticated, though a massive expression of wealth (i.e., exploitation). The esthetic is a redemption of sorts.

10/30/94

Garment Architecture

The sailor of the tall ships changes the garments of his ship many times a day to stay in the best synergy with the wind and the destination. The "sailor" of garment architecture limits his intervention mostly, if not exclusively, to twice a year: spring equinox and fall equinox.

The technology of fastening, tying, binding, securing, and stretching in the tall ships should be translated for the garments of large dimensions to be displayed on such occasions. Membranes, fibers, and the metal works necessary are a fresh challenge in the process of giving the habitat a "new face" every six months.

In tall ships, the wind is the energizer, the form-giver. In garment architecture, the sun is the energizer and the form-giver. In the tall ships there is the mobility of the vessel that works in conjunction with the wind. Thwarted?

As for the greening of architecture, I am definitely against transforming buildings into a sort of in-and-out pincushion for greenery. The in-greenery has the depressing taste of mortuaries. The out-greenery is a sort of herbaceous mound a la nest, run by ill-disposed little green people.

I'd rather run up an orchard blanket on the dorsal convexity of a structure whose concavities are open to the south-hitting sun. In combination with this orchard envelope is the deployment of large "sails," all disposed in the best possible manner, to define a sunny and greenhouse condition for the cool-cold months of the year and a shady and cool condition for the warm-hot months of the year. That makes the two equinoxes as pivots from transparent-translucent to opaque membranes, the winter garment, mounted at the fall equinox (21–22 September) to the shading large membranes, the summer garments, mounted on the spring equinox (21–22 March).

The morphology of the architecture and its orientation must be up to this task of receiving those garments and making the best use of them. All of this is feasible now that technology is producing membranes of diverse properties and because of its "reasonable" cost.

12/2/94

About "Organic Architecture"

As a starter and strictly speaking, architecture as a mind-defined manufacturing of structures is of necessity nonorganic. One could more appropriately call it mineral architecture to distinguish it from the organic nature of nests, the architecture constructed by organizing without the filtering of Mind. This seems to suggest that the whole debate about organic

architecture is in fact an inquiry about metaphors, with all the ambiguities the metaphorical world is engaged and entangled in. In this light and as a further distinction from the so-called organic architecture, I quote myself (Copenhagen, Site): Perhaps *coherent architecture*, though less romantic sounding, is more on target, the target that perhaps *organic architecture* is shooting at.

The original (Frank Lloyd Wright) notion tied *organic* to *abstraction* wisely, to get the underbrush out of the way. Abstraction meant the action of Mind that, rooted in the organic world, 3.5 eons of it, would reach out into the mineral and into the no-longer living organism (lumber, for instance) to generate the sheltering equipment needed by Homo faber-Homo sapiens. What happened then was unfortunate. The underbrush remained, the trees were let to die, therefrom the virulence of buildings simulating organisms instead of building "*inspired*" by the living reality.

1/3/95

My proposition about architectural planning as a brew of order and spontaneity is akin to the notion of the membrane separating-connecting order and chaos, especially now that I identify the present, all presents, as such a membrane separating or foiling Beingness, the past, necessarily "ordered" to non-Beingness, that is, chaos, the future, the non-Beingness.

The present, the tense membrane, containing the creational twist is then the place of anxiety, expectation, urgency, contemplation, exhilaration, fear, fury, impatience . . . the condition of man at its naked best.

3/16/95

The Three Environments and the Urban Effect

1. The Inside Environment
2. The Outside Environment
3. The In-Out Environment or the Out-In Environment

The in-out environment is by technological determination a young environment. Only the mass manufacturing of glass and plastic membranes makes it possible to bubble up large swaths of air and under favorable conditions use such air volume as a climate modification medium.

Payton's crystal palace was a precursor of the technological possibilities of glazing. But it tended to be indifferent to climate and orientation, and it remains anyhow an *in-environment*.

With the introduction of light membranes and with the use of some energy running a range of equipment, the in-space can now become an *in-out space* according to seasonal changes, day changes, and weather vagaries.

The third environment is therefore the novelty whose

virtue is all but ignored. Not so in the third-generation arcologies. Opening and closing like flowers. Blinking like animals.

9/23/95

Buckle Up

It seems to be, at bottom, a question of form. Form fitting another form goes for the synergy of the event. Form not fitting another form goes for the refusal of interdependence.

The virus locks onto the chromosome and the organism is infected. If the virus cannot lock onto the chromosome, the organism is immune to the virus. The survival and the quality of life of the organism depend on how things buckle up or do not in the organism.

3/19/96 (STOCKHOLM)

The What-Why-How-Where-When of things. Meaning technology space-time.

Homo erectus via wood, fibers, bones, clay, and fire has the first taste of becoming Homo faber.

Via hundreds of thousands of years of experience, hands and brains (and vocal chords) in synergy evolve into Homo sapiens. With it, the How begins to show its magic, which eventually explodes with the technological "revolution." Now the How is our magic tool and magic kingdom, including Walt Disney's Magic Kingdom with all its simulations.

Homo sapiens is now in "control," and Howness spills from flesh into mineral, which seems on the threshold of responding in kind: "artificial" intelligence, a misnomer!? The virtue of virtual reality still in question, we can, though, well see how far *mani*-pulation of matter has gone.

The *How* more than ever is working on generating the *What* and consequently the *Why*. Crucial in this evolution of things is the where-when—that is, space-time. For instance, a bare-handed single man cannot build a pyramid; space-time will not let him (yet nanotechnology will eventually do it for him).

But space-time is the maker of each present cluttered or uncluttered now, on this planet, by the doings of Homo faber sapiens. The knowing elicited by the driving force of the How makes for the cream of the noosphere.

6/6/96

The next few generations will witness the tearing apart of the two-man agency of Homo sapiens. Body and mind. The intruder sotto species silicon or other mineral compounds. We are already living in presents in which young people feel the call of all things virtual reality lures their minds into.

One of the things this does is to break, theoretically for now, the planetary confinement of life or, more appropriately, consciousness, leaving behind that which might turn out to be a no longer indispensable garment, the flesh (carbon cycle).

Taking the pleasure of opening a window as a clue to the joy of life in the flesh and considering that for silicon man that kind of pleasure (any pleasure?) is no longer there, the window itself is not more there for lack of meaning-function. Then is a purely mathematical reality the conclusion? Or could it be that, window by window, reality itself shuts away its bearing and its contest?

Could the alternative be that the "reduction" of reality into a formula would be the indispensable and providential gate to resurrection, the revelation of reality to itself?

8/7/96

Problem-Solving and Wisdom

Problems always carry in themselves an evaluation component: slavery versus master's "well-being." One solution to slavery uncertainties is to genetically specialize the race in elected and servo to the elected. Harmony will ensue, not too different from the harmony between the loved master and his eager-to-please pets.

Is cyber a virtue of the problem-solving kind? Is it viscerally capable of ethicizing the problems before embarking on a "logical" solution? Remember the logic-solution of the gun development: at each solution the human misery grows . . . and the H-bomb success and nemesis are attached to it.

1/10/97

Via the reconfiguration of space, we get the quark, the dolphin, the bulldozer, the piano sonata, the virtual reality . . . reality. Architecture as self-evident reconfiguration of space. Geometry is what it is all about!? The architecture of the universe: timeless?! The universe is timeless.

What about the unifying theory: geometry? Pythagoras revisited!? Because time as such does not exist, neither does empty space. Mass-energy is the "space filler." Mass energy as reconfiguration of space ——> reality.

Future planning: it shows its vacuousness, since mass-energy is not of the future; in "the future" there is nothing, no reconfiguration. The future time is made of two nonexistences, nonentities, nonrealities. We do not plan futures. We simulate that which does not exist (the task of simulation) by anticipating its incarnation.

Can artificial intelligence (AI) generate within itself the passion, the anguish, the love, the generosity that are the trademarks of the flesh on its journey from opportunism of the

species to the compassion of Homo sapiens? If there is an intrinsic capacity in the silicon species to generate those "fantasies" then the very nature and the very conquest of conscious life are in question.

As or if naked intelligence has no access to pain and suffering, it might not have access to the reality of good and evil. Are the alternatives harshness or dullness?

1/28/97
AI

In the manner of a trained animal? Or in the manner of a willful, self-driven body-brain? The kinky wisdom of cyberporn —it keeps the webian mind anchored to the body.

2/18/97
Some Characteristics of the ASP (Asexual Silicon Persona)

The "darkness at noon" milieu paradox: Although based on the hyper-Miniaturization afforded by the speed of light via photon-fiber optics, etc., ASP is indifferent to the marvels experienced by CIP (carbon intelligence persona): the endless play of light encountering (crashing on) the physical world. From a drop of shiny water to a sunset, from a silly squirming plankton cell to a lovely face, from the scribbling of an infant to the sublime "architecture" of Piero della Francesca.

The ability of ASP to exist and operate in environmental conditions deadly for CIP—pressures, radiation, etc.—is an ideal asset for space conditions, the darkness, the eternal night of space included . . .

The asexual makeup of ASP, that is, its total indifference to the immense bulk of evolutionary travail represented by the postparthenogenetic behavior of living organisms, vegetal sexuality, estrus, eros, love, would signify the withering of passion. A black hole of desensitization?!

The temptation is to label ASP a monster! A monster capable of pervading the cosmic space and transfiguring reality . . . Perhaps an angel (of darkness), perhaps a god in the making, perhaps an agent for the remote revelation of reality to itself.

5/10/97
We are not children of light. We are the children of penumbra. Look at all the windows made opaque by shades, curtains, shutters, etc., 60–70–80 percent of them.

. . . . .

Seventy-five trillion parts in the human body.

7/24/97
The Green Domain: The vegetal kingdom has only rudimentary eyes, and yet is the creature of light. One of the paradoxes of space reconfiguration.

8/18/97
Presence

Perhaps presence as the "refusal" of absence is the fundamental nature of space. Since space (reconfiguring) is all, it might not be possible to "define" it (autodefinition). Space is self-defining ad infinitum in all of its manifestations, from galaxies to emotions.

The metamorphosis and the incarnations of space are all that Becoming is. By subtracting the incarnations, what is left is not pure space; it is nothingness, it is absence (Nirvana). The same goes for the How. All the Hows are figments of Mind as long as they are not the operation itself of space metamorphosing, the presence.

But space remains space.

The magic of Duration is that the constructs space made, all consigned to the past, are "purged" of it. The past is the nonspace domain of evolution (space reconfiguration). Space and its Howness are the indefatigable "fabricators" of Being, the spaceless domain.

9/1/97
On the face of it, a spider web is more complex than a Gothic cathedral. Why is it a wrong face?

Out of context, the fibers making the web are more complex than the stones making the cathedral, but on the truer face of it, the brain-maker of the web is, Complexity-wise, far, far behind the brain-maker of the cathedral. That is why spiders do not build space probes or compose quartets and why Complexity is the stuff of transcendence.

One activity of Complexity is to get to the bottom of it, to the elementary stuff of reality (stone for the cathedral), and via Howness compose the cathedral, the space probe, the quartet.

12/16/97
Parenthetically, architecture is the most single-minded and direct space reconfiguration.

2/6/98
Will that which started with a bang, the Big Bang, end up in a whimper? The diffused whimper of the cold death of entropy?

Is the open universe (one of the many?) really carrying on

forever, or will it be that a cold corpse will forever be the burial ground of reality? If such is the case, the large tragedy that is 16 billion years old and expanding will be of immense futility, the senselessness of it being the tragedy of it.

Could the Space Hypothesis tear an escape breach in the formidable fabric of the third law of thermodynamics?

At the Big Bang singular point, the Techne of space reconfiguration began, and it has been so ever since.

3/1/98

The How, Techne

Sears and Roebuck is as good a compendium as any about the American genius for the making of this into that. The whole phenomenon lubricated with the sweat and tears of the multitude of people single-mindedly dedicated to generating the Whats of a whole branch of human reality. How, How, How all the way.

Space.

Speaking of miracles: the enormous latitude separating the space-making of a galaxy, energies included, and the space-making of a prosciutto sandwich and the space-making of the gusto for it are instances of space versatility and the know-how it takes to make reality.

One can be sure that the first fusion bomb devices looked downright silly compared to the How of the succeeding ones. Again space reconfiguring itself in ever more sophisticated ways, the geometry of the brain of scientist and technician included.

The notion of reality as pure space in metamorphosis changes nothing and changes everything. It changes nothing in the enjoyment of a beautiful morning. It changes everything when I want to put a bit into my understanding of both the joyfulness of the occasion, a very specific configuration of my brain-d, and the nature of the event perceived, the succession of specific space configurations.

Life is and remains tragic. Unless a resolution might eventually come about, life giveth and life taketh away is the essence of the tragic nature of life and without a transfiguring resolution, Nirvana might be the only answer: the repository of all delusions.

And all of this and all of its meaning included is probably meaninglessness—is space, and only space, dancing away.

If in what speculatively is called 15 billion years, space has been able to do so much, think of what it can do in the next 15 billion years and in the next 15 billion years and the next . . . The building blocks of reality themselves might get hold of themselves (Know thyself), and eventually such knowledge,

becoming universal, will also become resurrectional in the light and the grace of self-revelation, the Omega Seed.

7/27/98

Electricity

Of all things, electricity seems indifferent to everything but itself. There are waters (bottled) from many countries that (mostly) pretend originality. There are coals and oils carrying the mark of their countries' origin, that is, differing geobiological pasts. Even gasoline may carry traces of such distinctions. So it goes with minerals and biospecies. But there isn't such a thing as Swedish or Far Eastern electricity. It comes as pure as an abstraction, as unstigmatized as an angel. It is there or it isn't there, no marks of origin perceptible in its "genes." It has none.

Pure, hyperpure space capable of splendid to miserable things, uncorrupted, incorruptible, and perhaps for those reasons difficult to horde or hide. It is "born" for self-deliverance on the spot. Watch out.

And it is a pure, the purest, consumer good leaving no trace, no pollution, no waste (of itself) behind. An angel energizer of the positive and of the negative with no fingerprints left behind.

A pretty exotic space self-configuration, peripatetic, elusive, invisible, and a killer. Just hordes of electrons at different kinds of configurations traveling at sister light speed, the electromagnetic domain. The noosphere, the passionate sister of the indifferent electromagnetic sphere, comes to naught if the elder sister vanishes. (Electrified) space vanishing there is passion vanished here. God, angels, spirits, etc., stand aside. Your impotence (existence) is a pathetic delusion.

When man was able to distill electricity from the inchoate reservoirs of energy, his world changed practically overnight.

11/8/98

Could Howness go astray in the Web domain? Experience, the platform of knowledge, is all but absent on the Web. Children are defining a (virtual) "reality" that has no connection with reality. The connection is with a technology that they don't even have to master.

The car is a technology that the driver has no need to master, but the car has no pretenses going beyond the isolation of persons deluded into the notion of better-connectedness. Willy-nilly our society is nurturing culture-deprived children, if by culture we mean knowledge as prelude to wisdom or grace. A grace-deprived society may be the "output." It would be an additional symptom of materialization.

12/7/98

The hard drive of self-interest that has flooded the marketplace is a true conquest that Howness can be proud of. It lacks as yet the imprint of the hardest of Howness-es: How to emerge from the physical into the mental in the full awareness of the tight boundaries of technocracy. Since we are not created equal, eventually we have to find the key to equity and the dignity of the human condition that only equity may be able to engender. For the time Being, the chronic discrepancies between the have-not and the have-too-much are brutally operating all over the world and they make our species into a shameful enterprise.

12/29/98

We are transferring information and knowledge from paper to photon, a feat of ephemeralization. But the mere fact of the exponential increase of information and knowledge results in mountains of paper. We are deforesting the planet for our packaging of things and information, including the packaging of ourselves in our wooden houses.

Photons may not be able to keep at bay the bureaucratizing of the societal fabric. We are told that any initiative—withdrawing cash from the bank, delivering sausages to the table, buying an education or an automobile—is expedited and simplified via Internet and cyberspace technologies, but we hear that frustration is on the rise, because, in its totality, life is becoming more intricate and the rewards shift from inner satisfaction to outer control of such innerness.

It seems that the fabric of society is materializing instead of ephemeralizing, and photons may be the culprit. Stroking our egos with ever increasing "rights" is tearing the fabric apart, and we make spectacles out of such tearings. We praise privacy and we are in a tide of exhibitionism, and every exhibit has its own monetary rewards. In fact, greed is the good companion in all of our enterprises . . . and the paperstide flow robust and enlarging.

We are receiving a beating from Howness, the hypertechnology of manipulation, in part because our innerness (reality ephemeralizing itself) is beaten to the punch by our meandering technology of greed with all of its physical paraphernalia. The exurban hoarding at the head of all. The planetary hermitage so dear a dream of environmentalist and cyberian will eventually stand as a nemesis of intellection, the ephemeralization of reality (the cosmos).

A shopping center is a clear instance of the rematerialization of Homo sapiens. We better believe it. It is a transitional phase made necessary by the indiscriminate power of Howness and the aura of magic it is broadcasting.

For every apple, every egg, every detergent bottle, every

gadget there is a long line of processing, handling, packaging, storing, transporting, pricing, competing, exhibiting, purchasing that sends shivers of pride and fear through our spines. How long will it last and how more complicated can the process become?

Eventually, Howness has to develop an ethics compass. I call it the Howness of the desirable. But what is the desirable if we persist in our delusional grand parade of animism, in our abdication to the grassroots principle of democracy? The universal dictat of God, and God is corrosive, history shows.

1/2/99

Take space away and you haven't got any moons. Take space away and you haven't got any chopsticks.

Take space away and you haven't got any feathers.
Take space away and you haven't got any sound.
Take space away and you haven't got any energy.
Take space away and you haven't got any sunsets.
Take space away and you haven't got any fleas.
Take space away and you haven't got any passions.
Geo-metry from top to bottom.
Why should all those things happen *in* space?
Why shouldn't it be that all of those things are *of* space?
Why shouldn't all those things *be* space?

3/21/99

If one, we were able to speak to the brain, and two, we knew what to tell it, then its architecture could be reconfigured and its messages (spatial also) could take better care of the body's well-being. As yet, we have little power in terms of either because the brain lacks the skill to cope with the proofs reality in its own indifference litters the "vicinity" with (from the kitchen sinks to galaxies). Self-teaching is grand and most times grandly off target.

3/22/99

Building Factors

Structure
Function
Light, natural and artificial
Volume
Comfort
The thermal factor
Esthetics
The environment
Materials
Compatibility

There will never be a building that will be able to factor-

ize itself to the compatibility factor, and perhaps rightfully so. What some buildings have and express is the magical factor, where resolution takes the tangible shape of transcendence. For a reality on the road to self-sensitization, the magic factor is significant.

In those buildings, intelligent or not, the space they are made of has reconfigured itself into an esthetic objectification (not an object, but a performing presence) with beaches and valleys of coherence, sighing, grumbling, silent, resting and arresting, disquieting, comforting . . .

With all the modalities implicit in all those factors, formulas have poor performance rates. Among the formulas visiting are the well-worn "form follows function" and its quarantined twin, "function follows form."

5/20/99

In the crescents of the Arcosanti critical mass, the residences have an "inner public" part oriented to the south "gardens" and a "private outer part" facing the north open landscape. The orchard trees are "dividers" among the units . . .

. . . . .

None of the imagining machines, us, could exist outside of space; they are space in "motion." Without the imagining, there is no image hallucinatory or for real.

6/14/99

Drop a pebble in the pond and the geological geometry of the 90-degree angle jumps at you, full force. The angle of all angles courtesy of gravity! Architects and engineers, geometricians as they are, fancy themselves the poetic or functional rule breakers. The wisest of them stay within the "gravitational" rules.

But then get away from gravity and the gravitas of the 90-degree phantoms goes away. It might remain the embarrassment of molecules and cells designed for gravity and tossed around within free-falling bodies.

6/25/99

Reality is the Howness of space, the Techne generating the Becoming.

8/4/99

Complex Adaptive Systems (CAS) defines all operational "platforms." It reminds me a little (and unjustly) of the stewardship dogma.

Why do organisms adapt? To be able to cope.

Why to cope? For the "more of the same dream":

Permanency, that is, reproduction, as the aim?

Self-stewardship. A flat land of elusive rewards, not much room, none, for the Spinoza, the Dante, the Einstein. Organisms adapt not only to procreate and conserve but also to create, at least in the Homo sapiens sphere.

9/29/99

Transarchitecture . . . the power off (fields of energy) and my liquid house vanishes. I am sitting on my transtoilet at the mercy of weather and of my neighbors. A transtoilet is a trans-disaster.

12/6/99

The alchemists of the Middle Ages were the apostles of Howness, but their profound ignorance of physics and chemistry swayed into animism and all the magic fraudulence it affords.

When the brain comes up with a notion, you can make gold out of a brew of heterogeneous things. You got it right but you have to know the right way. It is like making margarine out of petroleum but "even more so." The nanotechnology magician will show us how and "nothing will ever be the same."

We have been pursuing the Walt Disney version of life: eternal youth, fun, hodgepodge, simulation, hedonism, instant obsolescence, life as an ascetic zoo.

The lean alternative could be a sort of liberation, cathartic, if I could stomach the word. For the urban laboratory, the distinction should be outlined and maintained so as to truly present an alternative.

1/24/00

The virtues and pleasures of self-discipline. Self-discipline tends to clear the underbrush or to put some order to it. Animals are rigidly "self-disciplined" by the demands of the environment and their survival in it. They are traditionalists, and their tradition is genetically disciplined.

Contrary to the butterfly thinking of the Aquarians, discipline is in the nature of the organism, and naturally, the roboticization of all organisms is the key. It seems to be in the cards that any advancement into the intellection domain entails an increment of roboticization. We are now in the chaotic frenzy phase of robotizing the noosphere, a daunting task. The noosphere will have made the transition when it finds its self-discipline ground.

In our personal world, we find a modicum of self-discipline by way of routine, habits, order, repetitiveness, and also a pinch of dullness.

3/30/00

I chose a certain path. I might as well work at shoring its structure with as many poles as I can find. That entails repetition. The shoring is made of posts and beams and bracings, a combination of compression, tension, and torsion in which stresses travel . . . It is a long viaduct: repetitiveness in progress.

4/23/00

Serializing: the notion that a "concept-theme" is valid if it is amenable to variations.

I serialized some of the Mesa City context.
serialized the First-Generation Arcology.
serialized the Second-Generation Arcology.
serialized the Third-Generation Arcology.
serialized at intervals (3–4) bridges.
serialized the bells.
serialized the bells for a cause.
serialized the special assemblies bells.
serialized the lost styrofoam bells links.

4/24/00

The plasticity of a "theory" is a sign of its vitality. The plasticity of space is its own validation.

MCD

2/4/94

At this very moment while your brain-mind works at voiding my words, you are the radiant demonstration of the utter certainty of MC. Your gray matter is an astonishing fireworks of MC in action. And our brain-minds are probably only the crude forerunners of immensely more lively and radiant things to come.

Why can't a brain be as big and as heavy as a city block? Because space-time is the blocker of the information response. No Miniaturization, no brain; no brain, no mind; no mind, no consciousness; no consciousness, no Love Project. Zero space-time is needed for mass energy to fully "display" itself, to act. And there is the ultimate dilemma. And ultimate tragedy.

All this points at the imperative of the Urban Effect, that which suburbia is undoing.

I have you notice that the biosphere is totally indifferent to our joys and sorrows to our mental constructions to our hang ups—political, religious, philosophical, judiciary—to our sense of equity.

What impacts the biosphere is the technological know-how and the transformism feeding production-consumption.

It couldn't be otherwise. Nature is probabilistic and deter-

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ministic. Living nature is a *missa mundi* of pure opportunism. The Love Project is our own invention, obscurely proposed perhaps in some mammalian and oviparity species.

So is all of our melodramaturgy about the mother of us all. The benevolent reality and the gods and goddesses are for naught. But the price we have been and are paying for this endless pageantry is frightfully cruel, as all pervasive deceptions have to be.

The nobility of our invention, love, has no reciprocity within the immense opacity of reality. Therefore its tangibility, substance, is abysmally fragile, and suffering is constitutional to it. Where one is, the other is also. That is the cosmic nature of our Becoming. Beware of the merchants of happiness; they are imbued in fraudulence. Look around you, near and far . . .

But love is a reality for Homo sapiens *because* for four or so eons on this planet the MC paradigm has been at work. And what a masterpiece! What sparks out and radiates out of such masterpiece is consciousness and Mind, that which I call Duration. Thus the triad of MCD.

9/5/94 (LABOR DAY)
Noon in the pool.

All non-self-sufficient systems make contributions to entropy, and all systems are not self-sufficient. If reality evolves and interiorizes—that is, interiorizes via consciousness and self-revelation while evolving—then it might possibly "phase out" the need for energy, that same energy the noninteriorized reality has to count on to work out its own metamorphosis (evolutionary shifts).

Thus the cosmos in the whole could become self-sufficient, in no need of causa prima or "causa ultima" (which becomes causa prima a posteriori). In such case, entropy would dwindle away the closer the space-time-less moment becomes via MCD, remembering that space-time is a consumer of energy, thus a producer of entropy. The exhaustion of space-time reached by utter (infinite?) MC, this point of pure Duration (self-revelation) is no longer an energy (radiation) reality, it is a mental radiance: reality.

2/19/95
Not "God" the creator but
"God" the (hoped for) creature.
At the end will be the verb?
That, in a nutshell, is MCD Religion (religio).

6/20/95
Perhaps we are living the consequences of death. The death of an earlier cosmos that was unable to make itself into pure

Mind, and consequently had to end in a Big Crunch.

This expansionist phase of the universe would be the explosion characteristic of any death. The implosive phase, if it will follow, would be the space-time phase when "reality comes alive" groping for the Omega Seed final condition.

For Complexity to explode, add radiance to its power, the canister must implode; that is, Miniaturization must increase.

12/4/95

The planet itself is an MCD product coming, as it seems to be, from an ancestry whose first state was one of hydrogen haze. In one stroke, MCD gets rid of nostalgia, of melancholy, of all the Gardens of Eden once and for all.

We individuals are preponderantly biological processing plants and inner-motivated agents. With the bioprocessing comes the exotic creation we call the mind. Medicine shows that in unfortunate occasions the body can survive the loss of the mind. The opposite is not true: no body, no mind. That is, if the body is necessary but not sufficient, the mind, strictly speaking, is not necessary for the body to carry on the processing plant function. The brain, though, remains necessary as the indispensable center for biological operations.

Why, of all agencies, pick Complexification as the most normative and creative? Because Complexification offers more feasible alternatives, but also because it offers the richer, unique instrumentation to implement those alternatives.

4/17/96

If reality had a mind, and it doesn't, she would rejoice at the elegant circularity of her endeavors: Her mineral construction saw that life and Mind would eventually spring forth courtesy of MCD and her carbon cycle.

Now with Mind well established, her royal matter "gets" the mind to go directly at her constitution to elicit more Mind, now via silicon. "Think," she says, "of the practically inexhaustible reservoir of silicon! How much Mind can I generate, courtesy of MCD!?!?"

Of all the alchemical prodigies attempted by "carbon reality," this takes the cake. Singularly so, if one sees the sacrifice inherent in the renunciation of the flesh that is implied in the metamorphosis.

8/7/96

Silicon intelligence, user of photon conveyers, has its own home in darkness. But then, perhaps my "beholding the light" will turn into "I am the light" courtesy of this very same silicon "darkness," since the very conveyance, the photon dance (the media), may become the "thing" (the message), an MCD absolute domain and triumph, "drained," as the documents of

past events are, of any semblance of mass-energy-space-time.

8/11/96

From the carbon-genetic to the photon-genetic consciousness.

This gigantic step is an MCD triumph, and it is impregnated with frightful possibilities.

The Nazi mode has been with the carbon reality from its very inception. The green genetic is quasi-exempt from it as it feeds on the mineral. The red genetic has it built into its own nature. It has to cannibalize in order to survive. The degree of intelligence applied to cannibalization places consciousness into differing degrees of joy and suffering. Without the invention of love-compassion, the Nazi mode would be the mode: I dispose of you, the other, as I please because you are one of the instruments of my deification.

In a photon genetic evolution all of this might be irrelevant, but that it might include also compassion-love!!!! In a reality debuckled from suffering, love and compassion are old empty shells to be discarded, the sooner the better. In order to carry MCD to its astonishing conclusion, the photon genetic evolution is indispensable. Carbon and silicon genetics are not up to the task, and carbon much sooner than silicon.

Carbon is bacterial base stuff.

Silicon is atomic base stuff.

Photon is "angels" stuff.

How strange it is that in order to emerge into the light (photon), into the angel stuff, the carbon reality so indebted to light, photosynthesis and beholding, has to "traverse" the kingdom of a dark age of silicon!

Are electromagnetic impulses as purely angelic as the photon journey? The fate of Mind/MCD depends on the implications of the question (not that I know what I am talking about).

2/3/97

MC Explained to Children (?)

The baseball field

M Both voice contact and body contact are dependent on proximity. The game has to take place in an optimal space. That is Miniaturization, more contact more Miniaturization. Superfluous space is detrimental to the vitality of the game.

C The number of children via communication (voice, etc.) and body contact defines the intensity of the game. That is Complexity: more intensity, more Complexity.

The baseball is a message carrier. The right size of the field

is concern number one for a rewarding game. For millions of simultaneous ball messages the field needs to contract and not to expand.

The life game is as if one million games were going on contemporaneously on the same field. Let's say all the baseball games that were ever played on this planet are going on in the next hour in one single field and all of them are interconnected in some sure way. Only M and C can conceivably pull it off.

Life is a ballgame where trillions of ball messages cross, collide, speak, learn, and generate things in very tiny (baseball) fields. Think of the brain as an unbelievably small field with billions of games going on and on and on and on.

Cyberspace is made of virtual balls like the voice, but has no balls for the physical contact of the player. It has to simulate such a bodily event; it belongs to the virtual domain, the "as if" domain. Life pulls it off here, there, everywhere, one split second after another. It has done it on this planet for more than 3,000 million years!

10/2/97

A taut argument for Miniaturization: If the universe will eventually close upon itself via the Big Bang—Big Crunch sequence, if the universe is space reconfiguring itself, space will have to find the way of "stuffing" into a diminishing self the whole of itself. Space is the only—that is, the most precious—commodity around. It wants to do the most with itself.

Both propositions make Miniaturization the indispensable domain of Becoming. But this can only be if reality, the universe, will eventually be "guided" by "Mind" and thus eventually seek self-revelation.

Complexification is the twin sister of Miniaturization in a relationship reminiscent of container, Miniaturization, M, and content, Complexity, C.

The twins' handiwork makes for Duration, D, the reality of Being . . . the past, generated by Becoming, by space reconfiguring itself, Being eventually revealing itself to itself. The "Know thyself" of total knowledge.

12/13/98

The overdue wedding of Miniaturization and Complexity has its own preeminent seat in the *Elan Vital* scenario of Henri Bergson, the complexity of Teilhard de Chardin undressed of all animisms in the Omega Seed hypothesized by Paolo Soleri.

4/26/99

Stardust, as we are, we are miniatures of reality. Miniaturiza-

tions of that which is there. But as the "compression" of that which is there we contain an immensity of information made operational; we are complex. Space is capable of doing that, the same space that acts out stars and galaxies. The space we Become and are memorized in: the past, the past no longer captive of its creator, space itself.

8/4/99

The eternal-youth syndrome has to be sought at first in the hybrid of carbon, silicon, virus, photon, graphite, quantum, and quantum computers with the carbon cycle slowly giving way to cycles more adept at generating intellection and "eternity."

Progressively, hybrids of flesh and nanotechnological organs will walk the planet. A whole arsenal of interchangeability will dot the landscape by which the flesh "slowly" gives way to a progeny of stored up "information" (and will) in vanishing spaces. MCD at work.

Reality made in, at first, isolated bundles of trembling intensity will abandon the flesh as a medium for transcendence. Intellection transcending the flesh, on its way to the cosmos's self-awareness, its own self-revelation.

9/23/99

The hold that Complexity has on life, consciousness, and intellection has been a firm mooring in my annotations. Possibly my familiarity with space, an architectural key, made clear to me that Complexity is dependent upon spatial arrangements and particularly, specifically, on minimal spatial arrangements. Putting two and two together, I come to the "conclusion" that Complexity and Miniaturization are bound to each other in the prodigious exploits of life, consciousness, and intellection. Duration is what Complexity and Miniaturization "extrude," the fundamental domain of memory.

The hypothesis that reality is space in metamorphosis pleases no one, but taken as one of the many nonsatisfying hypotheses, the immediate question is then: What is space?

A self-making process is a self-defining process. In fact, the process is one, though the interpretation of it can be many. I say the self-making is the process of self-defining and it is self-creating. That points to the fact that only at the conclusion of self-creation, definition of that which has created life, is it possible.

To my thinking, only one thing is for sure, that space will no longer "be there" at such a conclusive singularity of self-definition. It will be Duration, and no longer space, that will be there: the Duration that space has created out of itself.

The absence of presence is unspeakable because to "speak of" denounces presence, it is presence.

10/29/99

Thirty years ago, the Arcology book opened with "This book is about Miniaturization." Now, if the Space-as-Reality Hypothesis were to hold, it is no longer "this book" that is about Miniaturization, but "life" that is about Miniaturization. Space in all of its immeasurable vastness is seeking in life its own Miniaturization, that is, to compress its own metamorphosis in ever diminishing parcels of itself.

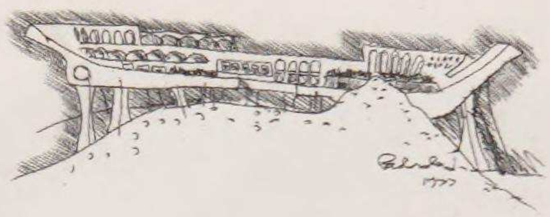
Living space (organisms) is coming to realize that the more it is "self-denying" the more intelligent it is Becoming. The more space miniaturizes its performances, the more powerful the intellection becomes. In other words, the more complex it becomes, the more intensely sensitized it becomes.

"From the other side," the Becoming generates the past, which is a nonspatial domain. The past as the faultless memory of the Becoming is pulling the trick of Being a nonspatial reality, which seems to be a sort of "Utopian dream" of the Miniaturizing process. If there is a convergence it is where Miniaturization, Complexity, and the past memory come together. It could happen that at the coincidence singularity, where the two become one, Duration is (could be) the self-revelatory singularity. The complete nemesis of grace and not an angel in sight. Just the exulting, consummated space. Just space resolving its own predicaments (the predicaments it makes for itself). (Language molds us, and we mold the language.)

The ultimate goal of space is its own effacement, its own reflective effacement within the spaceless Beingness of the past. The whole proposition takes the shape of an enigmatic bundle. The Mistero Tremendo of things (Be)coming.

PART 4

Bubbles



BUBBLE DIAGRAM

- **POLITICAL CORRECTNESS** BUBBLE AS BIG AS THE U.S.A. TODAY
- **HISTORICAL FITNESS** BUBBLE AS BIG AS THE SUMMATION OF HUMAN HISTORY
- **EVOLUTIONARY COHERENCE** BUBBLE AS BIG AS THE SUMMATION OF ALL BIOSPHERES PEPPERING THE COSMOS UP TO DATE
- **COSMIC RELEVANCE** BUBBLE AS BIG AS THE COSMOS UP TO DATE

Proportionally (scale) if the Political Bubble is the size of an atom, the Historical Bubble is the size of molecule, the Evolutionary Bubble is the size of a seed, and the Cosmic Bubble is the size of a solar system.

[2002©Paolo Soleri]

The four bubbles are expedient ways of setting one's own compass within reality so as to be able to operate with a slightly less "lost in the fog" position we seem to be chronically afflicted by.

Bubbles: virtual "membranes" approximating boundaries of different domains. The domain embracing the immediate past and the present I label the Political Correctness Bubble (PCB). The domain embracing a past reaching back into human history I label the Historical Fitness Bubble (HFB). The domain embracing (reaching) a past reaching back into the 3.5 eons of evolutionary history of life on Earth I label the Evolutionary Coherence Bubble (ECB). The domain that encompasses the cosmos at large, reality, I label the Cosmic Relevance Bubble (CRB).

All the bubbles have one and only one point in common: the present, ever changing, as it consigns itself instantly, instant after instant, to the past.

One's assessment of things "present," and consequently her course of action, is influenced if not defined by the position in the bubbles domain where the person is "located."

For instance, the behavior promoted in the PCB is more than often devoid of meaning for the behavior that the ECB would promote. The discrepancy denotes an incoherence ill-fitting the evolutionary drift. Therefore, an incoherence if prolonged might conclude in the death of the evolutionary drift itself.

The bubble expedient can help to find the appropriate, coherent compass in occasions big and small if we never forget (as we habitually do) that we, as stardust, will find relevance—that is, grace—*only* in the conclusive act of *total* knowledge, that is, in the resurrectional conclusion. No conclusion and a very specific conclusion, no grace or meaning. Only a fatal endless unraveling via an endless chain of lost occasions. Feasibility deprived of desirability.

2/17/99

The Historical Fitness Bubble (HFB)

Waste, pollution, environmental disruption, and segregation have been the shadow projected by our presence in search of food, shelter, and dominion. But for most of our presence on the planet, let's say 3 million years, the impact has been absorbed by the vastness of its biosphere.

No longer and mainly because of two agencies: population and Howness. Population growth has been the direct consequence of Howness: How to make something into something else in gender and in size. The scientific and technological revolutions have been nothing short of magic, putting to shame the shaman and the witch doctors of animism.

What has emerged at the very beginning of the creational process of reality is Howness. With the quasi-miraculous tools of depth vision, larynx sound-making, and the versatility of the hand (from tool-making to caressing to piano-playing) in their double task of executing the brain direction and as maker of the brain itself, our species has opened the safe of the universe to find in it the dim but indispensably rich ancestry of our presence.

In terms of historical fitness, we should carefully calibrate our endeavors in ways that seem to work for and not against the progression of more Mind being extruded from matter, a theotechnology of sorts. (Technology is present at the very beginning of things, of the universe itself, that is.)

The price of civilization and of the extraordinary fruits it has generated, science and technology, as we regard them now, has been too high, especially if we now think of plunging into the rematerialization of life promised by hyperconsumption. The historical fit we may be seeking seems to relate more to the not so noble drives history has showered upon civilization and culture. Personal opportunism, greed, hypocrisy, envy, ill will, hatred, the enemy at every crossroads, etc., and in the past two centuries or so, racism and xenophobia.

Civilization was the invention of cities in an almost runaway mouth-to-tail cartwheeling of the mind and the toil of generations succeeding generations. The Urban Effect is not really the invention of man from point zero. All organisms are Urban Effects, the unbelievable coming together of the miniaturized and the complex. Man as a hyperorganism is the coming together of trillions of events, all spatial events, by the way. Without an implosive miracle of such an extravagant nature, no organism would exist in the biosphere. (The microchip is now accomplishing a similar feat on the silicon matrix.)

Getting away from the city is not only counter-culture and counter-civilization, it is counter-life. One has only to imagine what the global hermitage generated by unleashed cyberspace would deliver. Three billion enclaves (fragments of families) "served" by 3 billion rubber-wheeled stock. Self-segregation "served" by impossible logistical grid in perpetual gridlock. Suburban and exurban sprawl are promising the Garden of Eden and are in the process of delivering despair: physical absurdity and mental anguish. We must halt the folly.

3/10/99

The Evolutionary Coherence Bubble (ECB)

It was with the first sparks of consciousness millions of years ago when tiny flakes of the noosphere began to manifest an utterly new presence on the planet. Pierre Teilhard de Chardin was the first to use the term "noosphere," and the electronic

envelope now being knitted around the globe is a powerful presence.

Cyberspace produces not only a great wealth of information but also great financial wealth. Now this new source of wealth put to use will greatly influence the destiny of the species and of the planet. What is going on now is paradoxical. The computer, an ephemeralizing instrument by definition (that is, in its ability to generate intellection via Miniaturization), is on the side, so to speak, generating a new powerful wave of materialization. A large chunk of it is poured into the form of habitat that shamelessly blankets our "beloved" nature with what I call the global hermitage skin. This exurban metastasis taxes life, human and not, greatly. It is a devolution into the sink of materialism that might turn out to be fatal for body and mind.

Eventually, the sooner the better, we must turn to the city, one of the most crucial inventions of Homo sapiens, and seek in it the guidance toward a transcendence of the hedonistic dream constructed on the delusion of the Garden of Eden. A Garden of Eden stuffed with all the magic gadgetries the super shopping mall, virtual or not, throws relentlessly at us from infancy to death.

A congested civilization is, by physical laws, a civilization of gigantism, as our so-called cities testify. The one million or so Phoenicians' metastasis is occupying 400 square miles of desert and "growing." Such gigantic pseudo-structures are logistical nightmares, wasteful, polluting, and segregational.

There is no evolutionary coherence to be found there. There is delusional "well-being" draining away the core of the best gift we are in the process of creating for ourselves and for the reality from where we come: the animation of matter.

The Evolutionary Coherence Bubble shows wrinkles. Its pressurization is defeated by the hole we might punch in it, in our hyperproduction-hyperconsumption drive. Slow down and ponder could be a good slogan for the first steps into the millennium.

The Cosmic Relevance Bubble (CRB)

With the gusto we exhibit in improving the wrong thing, that is, encouraging and improving wrongness, we are digging for ourselves personal and "luxurious" graves, and the cosmos couldn't care less. In fact, closer to us, the biosphere itself wouldn't care less. Mindlessness has no cares as it has no aims unless we define as aim the population opportunism of the species. Absurd as it might sound, only reality filtered by the brain-mind might eventually give aim and meaning to a reality foreign to even the notion of them.

If ever brain-mind reaches that point, the cosmos will be

infected by the bug of transcendence. From there on is the *Mistero Tremendo.* Only the Urban Effect can take us from here to there, the singularity of intellection becoming a cosmic event. The cosmos could be transfigured by such intrusion.

1/26/99

Arcology and Bubbles

In the PCB, arcology is politically incorrect. It goes against the American Dream and its bucolico-nostalgico images necessarily based on hyperconsumption.

In the HFB, the call is for the urbanization of populations for many reasons. Produce more wealth and financial flux, generate a sense of belonging and of sweaty defense, and maximally, to take Homo erectus into the domain of Homo sapiens, starting with a written alphabet and reaching into cyberspace. The homosphere taking shape courtesy of MCD.

In the ECB, the coherence is in the carrying on and transposing the Urban Effect emblematic of any and all organisms and/or populations of them, to the habitat of man, a hyper-organism of sorts, more than ever dependent on Miniaturization-Complexification-Duration to develop its own inventive, imaginative, anticipatory, and, now and then, creative assets. All things that only the urban presence is able to generate. The tribal mode is a static mode even when, out of environmental graciousness or because of it, it becomes a hedonistic way of existence.

In the CRB, the track biosphere-noosphere could or ought to see an exponential ephemeralization of reality to the benefit of a remotely possible revelation of the ephemeralizing reality to itself.

4/5/99

Cyberspace and Bubbles

A clear instance of Howness coinciding with Techne, and in the extreme, is cosmos technology, the ultimate bubble, the triumph of Howness.

The PCB

In a high pitch of transformation, silicon Techne is the Pandora's Box of information being mined explosively for "fractalized" understanding. In the PC mode, we give in, no questions asked, to the new ephemeralizing tide, and a lot of detritus is foaming at the very crest of it. The excitement is contagious and understandably so. The Techne is nothing short of "magic." Even the corporate giants are giggling while fracturing. We are in the anything-goes phase, grace will come later?!

The HFB

The alphabet and the book are the vociferous ancestry of silicon. It is hard to imagine civilization without them, at least the technoscientific civilization of the last part of the ending millennium.

European-American history is the history of Howness coming of age in exobiological terms from the water wheel on, naturally boning up on the extravagantly complex cradle offered by the technobiology of the flesh, the protracted, blind food-chain venture.

That we now toil around attempting to go from mineral to consciousness "directly," leaving brain and flesh out, is a sufficiently incredible leap of know-how and faith. Never too soon if this feat were to succeed and all the animistic constructs of 4 million years of human history were to fall, falling angels, and eventually become historical curios.

The ECB

If it turns out that the backbone of evolution is to bring the mineral up to the mental, which possibly makes the mental no longer the actors in the evolutionary progression but the author of what comes next, then anything that fuels the powerhouse matter-Mind fits the coherent postulate, that is, that Mind might "absentmindedly" leapfrog from mineral to Mind—dangerous, but if it is possible, it is desirable. The flesh is too tender for the monstrous challenge of cosmic space. It might have to surrender its primacy to that which cyberspace seems to offer in a crude, oh so crude, way at present.

The CRB

It is where the initiation to noncarbon-based intellection has or could have a field day, a cosmic field day. I call this "initiative" the animation of reality, to which ought to follow the revelation of such animated reality to itself.

The slow apprehension of itself (reality) transforming into self-knowledge and in a possible acceleration of the process out of its own incremental will to access the condition where knowing is Being, the self-revealed reality of a conclusive act (the Omega Seed).

4/30/99

Outer Space and the Cosmic Bubble

The cowboy theology has infected outer space via the Lucases and the Spielbergs. It is the one single and singular malignancy that eventually will have to be quarantined. We, the species, are the lone cowboy facing the adversary, the cosmos, but we will have to leave the gun and its progeny in the dead-man

corral of political correctness and historical fitness.

The ECB has to find immunizing ways before we step into the CRB. Our bullets and our missiles have to metamorphose in the space habitat, small cities of light moving in the endless darkness of cosmic space.

We will probably not find enough glamour in the quest for an "equitable planet." Part of the human family will have to exit it. An unarmed cowboy galloping into the Mistero Tremendo of space, heroic in its technological splendor, to find the neonoospheres and to ignite the cosmos itself with intellection.

Then from there looking back to the planet cry our eyes out at its own beauty and utter loneliness. A speck of green and blue light drifting away from an eventually dying sun. As long as the male is at the controls, the gun-toting judge of the peace will prevail as it is prevailing in the USA 2000. Equity and excellence will also be out of bounds. The corral keeps them out, the corral of coercion.

By going out into space, the cowboy might find in the glamour of the ventures the dimension he now is deprived of. The dimension of religio surrounded as he will be by the indifference and deadliness of reality at large. The feminine will then have a better chance. The male toy gun made feckless.

The cost of the space "adventure" would put a dent in the plutocratic binge we seem to be in favor of, in favor of the lean civilization we might want to enter for the grace of equity and excellence: the art of living.

We would "escape" into space to cleanse our act and from there proceed, "back to nature," the planet and us in it, and forward to make the cosmos live and eventually conscious. Glamorizing mayhem and blood-spilling will not be taken out of our system by the meek and the saintly. It will take the menace of the raw, immense space to siphon away the cowardice of the gun from the fabric of the macho man entropy.

The loneliness of space may prevail on the aloneness of violent man and his killing by proxy (gun) power. To remain a coward or to break out and find companionship in peoples and stars. Religio is not for boys and guns. Feminine! We need your gentleness and compassion.

Addressing the wrongness plaguing Homo sapiens now is a noble task. But unfortunately the addressing is just about marginal, and it is oriented by political correctness and also by historical fitness toward the worsening of the present condition. Hyperconsumption is one of the best indicators of that. Its perniciousness is exemplified in the automobile frenzy we live by. Two hundred and twenty-two million private vehicles for 260 million people is a tragic condition that the rest of mankind wants to emulate. It is incoherent, and the ECB is in

a state akin to consternation. It would be if its task were the well-being of the human genome. In fact, if it could care, it still wouldn't care less.

5/8/99

It is delusional to think that the hyperlean frugality of Homo sapiens' engines can metastasize with impunity on the relatively vast landscape of the planet's skin. The hyperconsumption tide is on a collision course with the emergent, lean phenomenon of consciousness, give or take 3 million years.

This is more or less the rationale from the evolutionary coherence nested in the CRB.

5/28/99

If informing becomes unimaginably fast, decisionmaking will not accommodate the biotechnology, the flesh, not for long anyway. The light of consciousness will outshine itself, but its loco will not be in the turtle speed of anthropos but in the lightning speed of a new "chemistry." The reconfiguration of space, that is, the Becoming will, MCD gone critical, create a universe where equity will have no significance that we, creatures of "carbon," can conceive. The whole 4.5 eons of life's evolution becoming overnight a small museum piece. The "overnight" itself an archaic saying that our interpretational turtle concocted.

The "triumph" of MCD would make D passionately transparent!? Or will the information machine incarnate a new dimension of frustration, the bully machine in the china shop of the ingenious, nostalgic, sentimental, molding-away human world? Pity, a charitable attitude, novel to the bullying around, will have to tend to the transition.

The PCB would turn to dust. The HFB would lose its mooring. The ECB would have to revise its tempo. The CRB would perhaps have a giggle, a happy sign of compassion gone cosmic, a modest exorcism of MCD gracious about its own genesis: the dance of space.

So "informatique" the computing monster will turn out to be a loving monster? The answer may have to come from the esthetic, the esthetogenesis of reality, knowing grace?

7/30/99

Millenniums and Bubbles

Within the PCB, the Y2K phenomenon is emblematic of the Western-generated punctuation of the Becoming. "Even" computers are getting into the act.

The urgency of the before and after—before millennium, BM, after millennium, AM—puts the animistic imprimatur on what to do and what not to do. The injunction presented by

the dust-to-dust predicament forced underground by the manipulative power of Homo technological has a rebirth of phoenician size with the Y2K crisis. Somehow the slogan comes back in new garments from dust to flesh to silicon (and its progeny, the PCB fancy-fashionable garment).

The silicon and progeny shakeup is a sort of revarnishing of the Historical Fitness Bubble, its indispensable precursor. The scientific-technological revolution accelerated in the North American continent by the exiled European colonizers.

Historians, the a posteriori wise men and wise women, pinpoint the Protestant ethic: Labor and love thy God. Nurture and fit man to "God's love," to the age of the automaton and the birth of the thinking machine.

In the ECB, the whole machinery of evolution might get the shock of its life, or at least an intimation of things to come, like the taking over of evolution itself, first by the Howness of the carbon-cycle magic, then by the silicon and progeny magic. "The play goes on," says brave evolution. The actors are changing roles and the whole hierarchy of values and their personae. There will be a "tearing apart" before the emergence into the new epoch if animism accepts a grand finale, as Y2K might be the anticipatory bell of troubles inside the house.

"I am young," says the machine. "I make mistakes," she says. "But look," she adds, "knowledge and wisdom might be inched further; if you embrace me, you carbon little sissy will gratefully oblige."

The CRB may be pulled into the act almost precipitously if the silicon and progeny youngsters are up to their unanticipated task.

The millennium and all of its Catholic-Protestant arrogance clothing a purely expedient new beginning resonate through the cosmos. If, if, if . . .

8/2/99

Arcosanti (Is an Urban Laboratory for a Lean Society [AULLS]) and Bubbles

In the PCB, it is a sort of anachronism. Here we are, Westerners all bent on buffeting and pampering ourselves into the new millennium. We are in a hurry. We even dismiss the end of this one by robbing it of a full year (the year 2000). So proposing leanness is as popular as proposing a wood stove in a shining kitchen.

Besides, marrying AULLS with the free-enterprise credo might mean a loss for democracy and a possible breakdown of the ecofinancial miracle we are experiencing (for a small minority yet). For the time being, AULLS is like swimming against the flow. It is not politically correct.

In the HFB can be found all the pros and cons of distrib-

uting limited resources to large groups of people. Ego and ignorance constantly and effectively put up obstacles to the march toward Utopia. The "extremes" of socialism and communism, the second in particular, committed suicide at the hands of unscrupulous and cruel leaders.

On a broader take, the animistic entrapment has vigorously exorcised the equitable for the sake of parochial and pretty capricious gods. Capitalism, the least capricious of them all, should have the chance of turning evolutionary if it could find the way to become worthy of the Love Project still in its troubled infancy.

AULLS in HFB is more of a form(ality) than a contextual imperative. Leanness remains for millennia more of a necessity than a virtue. Better to light the candle to God the thrifty than die of envy, destitution, and hunger.

In the ECB, the lean becomes the thing. In it, the profligate is not the end product, the lean is. In living reality, the extravagant expenditure of all sorts of resources to produce nonabortive results seems to be almost a sacrificial constant for the sake of progenies that are the miracle of thrift and leanness. "Dust" made into life and consciousness via reconfigurations of ounces or pounds of "simple" compounds. Micro-organisms, nuts, bread, rice, flesh . . . It seems to be saying that if ever there were a future, the future belongs to the lean up to the exotic singularity of the nothingness of space containing all of its own astonishing history.

That is why and where AULLS can be found in the CRB. In its loose infinitesimality, it might broadcast the right sound, the sound of premonition and grace.

The lean is the bestness of Howness in which the superfluous is "personified" entropy. And the esthetic is there in the eye of the essential, the most "effect" with the least means. The formula holds true for both the beauty of nature and the esthetic of brain-d.

12/4/99

The Lean Hypothesis

Becoming reality is space, the unknown agency, in metamorphosis.

Space is unknown to us as it is unknown to itself. Unknown to itself because it is self-creating. For a possible if remote aim, space could (eventually) know itself (and us in it). Until then, space has not the wherewithal to define itself. It knows not. As reality is space, space knows not. The Mistero Tremendo of self-creation.

A CRB initiative.

4/14/99

To have an impact in the CRB, most of our sphere of influence has to be automated, that is, no longer controlled and constrained by the will. It has to carry itself on and on with no external mandate. The only master it has to observe is the self-imposed stop sign.

Only an automated intellection can pervade the cosmos at large, and only an automated intellection can find the ways into transcendence (i.e., the next step into automation) and by it, keep the door open to the next automation and on and on.

10/18/99

An organism's orchestration is on automatic pilot. It seems to be one of the virtues of innerness. If the noosphere were ever to become an organism, then it would have to run on automatic, an awe-full thing to contemplate. A fearsome beast with the makings of an angel. A space-made automaton ready for space, the cosmos. CRB had better be on alert. Things may never be the same again, not at least before Duration, full Duration, I mean.

If ever the Cosmic Relevance Bubble were to contract, infinity itself would be out of business. But it was never in business in the first place anyhow. That is one of the self-limitations of space after all, of the plenum of space.

10/22/99

First we must rid ourselves of the notion that space is a sort of universal container. Space is the plenum of reality. It is primeval and the only stuff of reality. Reality is the ever changing geometry of space.

From the animistic prospect (the belief that the cosmos had an intent that is at the core of its origin), the whole process of development is a process of specialization that in turn is the expedient way by which Howness creates reality. The bubbles, as part of the same, segregate in such a development process the Political Correctness Bubble, the Historical Fitness Bubble, and the Evolutionary Coherence Bubble. But from the original intelligence point of view, the view from the Cosmic Relevance Bubble, those other bubbles and their content are expedience, not substance.

If we drop the animistic bias and dismiss the "creator," superfluous and therefore pretentious, just a fruit like many others of the expediency of Howness, then specialization is the bootstrap methodology of a cosmo-democracy. The noble opponent of theocracy and its vested interests.

As expedient (devices) the bubbles can be judgmental: The PCB says, "I am the center of the universe." For everything will be ordained by the PC source. The other bubbles can operate similarly. The HFB mandates a history of reality total-

ly determined on anthropos terms. The ECB would ordain the greening of the universe. Reality as a cosmic mold, CRB, could be the expression of the "anxiety of transcendence" via a slow germination of the self-awareness reality is in the process of creating.

1/8/00

Minimalism and Reductionism

Minimalism is the posture that wants to do the most with the least. In the cosmic relevance bubble, this may turn out to be the only way to get at the revelational conclusion, space (exponentially) transmuting itself into Duration while shrinking into naught: The less (space) becomes less-er to produce more and more (the Big Crunch scenario).

Reductionism is the posture that proposes the idleness of more than what is strictly necessary without being preoccupied about the meaning of the aim of such leanness.

In terms of Howness, minimalism and reductionism agree. In terms of desirability, minimalism is the song of songs. Reductionism is mute.

It is as if most of space in its tiny bits, quarks, muons, etc., were reciting mindlessly the mantra "Be Thyself" that makes for the operational constancy of reality. The laws of nature are mantra imprinted.

But that recitation does not stop at particles and subparticles. It is a habit carried on throughout reality, throughout the cavorting of space; and the Becoming depends on the power of the mantra that allows for the appearance of the new, the Becoming in action. The joy and the anguish to become different on a mantra of conservatism. Life is the battlefield where conservatism (mantra operational) and animation are face to face.

So it is that you and I are brothers and sisters of the "original" hydrogen cloud. We are made of it and of its mantra, "Be thyself," and of all the escapades space has devised to produce the Becoming. The countermantra is "Becoming Other." Mutually complementary or adversarial.

9/17/99

Since in my hypothesis space is both the content and the container, love, as the rest of reality, is not a manifestation of space or an emergence from space, but simply space at its exotic best.

Enter the bubbles: the CRB of love. For water, the indispensable space configuration, for life to be present there is the *attraction* of two drops of it on a marble top so strong that, space permitting, they fuse "instantly" into one, and the *distraction* of running and running away from itself to moisten

anything in sight that is not its own constitution or impervious to its invasiveness, rubber for instance.

A remote hint of what the Capulets and Montagues as legitimate space manifest would do in medieval Verona. A lot of work for space to move from the watery to the bloody and, needless to say, from the bloody to the passionate-compassionate.

If the water-carbon cycle is anticipating the vaster cosmic cycle of self-awareness with the eventual triumph of attraction over distraction, then love and religiosity con-fuse into each other. It would turn out to be universal and compounding knowledge, the bubble of self-revelation, the cosmic bubble of resurrection.

Naturally, the journey through Verona would be just a flick of fire spent by (bloody) love on its way to the spaceless plerome of its successful holding onto itself fully and finally.

Now we experience love personally, locally, parochially. *Then* love would be experienced (in Omega Seed) catholically, cosmically, conclusively, that is, at the exhaustion of space in the "Know thyself" of the cosmos (the geometry to end all geometries).

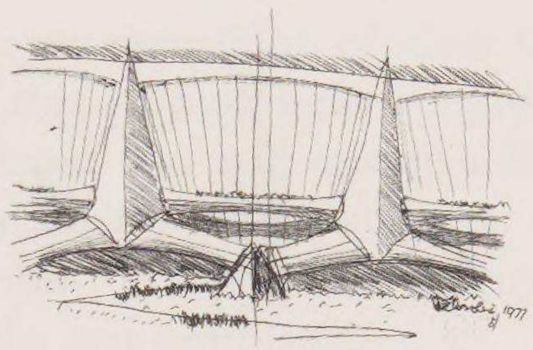
BOOK
TRACK

BOOK TWO

LAND
BOOK

PART 1

Esthequity: A Transecological Project



FEBRUARY 1990

The Premise

The whole thing will be judged as simple-minded and uninformed. For me it is worth the risk. Articulating these ideas makes space, both in my own thinking and in the larger body of thought that exists on these topics, for so much that is unexpressed or kept in limbo is badly deformed.

In the thirties, Mussolini, "Il Duce," declared the autarchy of the new Italian Empire. Bananas and dates moved swiftly onto the black market, a small but telling consequence of the regime, one that made an impact on the mind of a young Italian boy at the time.

Autarchy is one of my problems. I do reject the autarchy paradigm, but I tend to apply it! Because of circumstances, and my own temperament and tendency to distraction, I tend to "go my own way."

I am sometimes repetitive in my expression of ideas. One explanation for this tendency is that I am seeking a degree of familiarity with the subject at hand that will ensure a loose back-and-forth play with propositions, paradigms, and hypotheses, to the point where most of the resulting affirmations take the authority of axioms and postulates.

This way of handling thoughts is open to the most preposterous rationalizations and flaws. But one can only work with the tools one has, and these are my tools. And yet it is clear that the reasonable thing to do is to acquire more and better tools.

The brevity of this exposition is not the fruit of a splendid capacity for synthesis on my part. To the contrary, it exposes my "sinful" ignorance. But perhaps there is something to a proposition or allusion made in "blessed ignorance," *benedetta ignoranza*, as one would say in Italian. If in any sense or form Esthequity turns out to be deceptive in its intent or conducive to intolerance, then the *benedetta*, the holy, would turn out to be *maladetta*, unholy.

How can ignorance be a blessing? As innocence, perhaps. Or as anguished ignorance, as a tabula rasa of sorts. Or maybe because it encourages a predisposition to engage in a sort of hunting game unencumbered by strictures and, a priori, a hunting game for which the stakes are life and meaning.

Since for me, meaning and sanity, humanity's and my own, have become entwined with these nine-plus-one propositions and this hypothesis, presented in the largest of all possible contexts, or so I think, I have the gall to say and believe that I am putting down the premises for a new religion—an eschatology to be more precise. I ask for the reader's forbearance and suggest that he or she take the position of an observer of

models. That is to say, consider this project a modeling exercise. Consider it as one model of reality, then let your mind go along as if in a sort of laugh-and-cry game and see where that leads.

Equity and esthetics are my priorities. I think that ultimately they ought to come together in a conclusive and comprehensive reality, which I call the Omega Seed. To emphasize this convergence, I use the term "Esthequity." Omega Seed is Esthequity. The two terms are interchangeable since they name the same reality. They define esthetogenesis and make this undertaking a transecological project.

I see a double task for humanity:

1. Understand the nature of grace, mystery number one, knowing that such understanding is not a purely intellectual exercise.
2. Transform reality, mystery number two, in the direction of grace, even if and when reality says "no."

The nature of grace is hidden in a double sense. First, it is unfathomable by its very nature. It is also hidden to us since it is part of a reality that is a process, a Becoming perennially in the making. This is one of the reasons why Esthequity is not in the realm of the feasible in the same sense that we consider other products of today's knowledge feasible. However, if Esthequity is desirable, and our knowledge is diligently applied and the results passionately nurtured in its pursuit, we might be able to take reality to Omega Seed.

I maintain that if Esthequity is sufficiently desirable, reality ought to be guided in a way that could make this desirable aim into a feasible event. Therefore, what follows is not constrained by the confines of feasibility, but solicited by the pressure of desirability.

Since the Omega Seed can be viewed as highly desirable because it is a point where the equitable and the esthetic are the two faces of the same medal, the same but not quite the same, the whole project, this Omega Seed Hypothesis, is not feasibility-defined, but desirability-driven. So, as I have written on another occasion, I am not trying to tell myself what reality might be as much as I am telling reality what it ought to become, a nice bit of hubris if there ever was one, with Bouleversement Theology as a necessary starter.

Bouleversement Theology

Let us engage in a preposterous little word game: On Peter and Paul the foundation of Christianity was laid. Two thousand years later, Pierre (Teilhard de Chardin) and Paolo propose the bouleversement of Christianity into a sort of mirror image of itself, as if time were made to run in reverse.

Peter and Paul constructed the simulation of a reality generating from a hypothetical divine agency. Pierre and Paolo offer a hypothesis that puts the construction on its head, so to speak, by proposing that it is reality itself that has the "potential" of becoming divinity: reality creating itself into divinity, creating itself into God via the long process of evolution spanning from the Big Bang to the Big Crunch. If so, "God" is not at the beginning; "God" could be at the end. So then, it is not "First was the Verb," but instead, "Last ought to be the Verb."

As long as space-time continues to operate, divinity could be in the making, though the process is fully open to failure. This Becoming automatically excludes God's full existence until the end of space-time. As long as space-time is operational, God is nowhere to be found. As long as God exists, space-time does not operate. "God" is the most creation can ever hope for. Thus, a God-creator is a self-contradiction. A self-creating God is a possibility, though not a certainty.

To put it differently, God as creator can only add imperfection to perfection. Since God and only God is perfection, and "total" perfection as such, then the God-creator is a God diminished, a ghost of a God. And so many, if not all, theologies are ultimately afflicted with a ghostly, useless God.

In the Omega Seed Hypothesis, an original and originating divine agency is not only superfluous; it is also disruptive, aside from being purely conjectural. Such a God, however, is still needed by Pierre in his hypothesis. In my own hypothesis, reality doesn't need an operational creator. Reality is creation itself with no mandate, no predefinition, predestination or predetermination, and no initial grand design. Reality is just space-time generating an interplay in which the warping of space (matter) is ordered chronologically and synchronized by the progression of Becoming (space-time).

But the game is changed by life's inception. The more improbable and sophisticated the space-time warping, the greater the sensitization of reality, a possible step toward grace, toward the divine. The living kingdom of planet Earth is one imposing example of such a process, a process that must become universal, unless the Earth is a privileged, hermetic gold nugget!!

The greater the progressive Complexification afforded by the food chain, the more articulations imbue the atomic-molecular architecture of the food-chain actors, not only the organisms themselves, but their opportunistic and cooperative associations and actions. With the emergence of the human mind (and whatever other minds are operating throughout the cosmos), a transcending project begins to outline itself: "The Love Project." A tide of normative and compassionate injunctions are born in the religious and secular milieu. In

theologies they crystallize in the powerful simulations and unintended inversion of the time vector, the Peter and Paul syndrome.

It is interesting to see how the epigones of two of the most popular theologies, Hinduism and Christianity, go on opposing binges. In Christendom, Homo sapiens has dominion on the living world, whereas in Hinduism it is as brutal or sinful to squash a fly as it is to kill a person.

The food chain, cleverly blind to such nonsense, goes about its opportunistic ways for its own perpetuation and development. It goes without saying that the food chain with all its brutality is the most descriptive demonstration that benevolence should not be a presumed attribute of God. At its best, opportunism is a marvelous instigator; at its worst, a ruthless schemer. The food chain is awash in opportunism.

The Omega Seed Project as Introduction and Core of Arcology

The Omega Seed Project is based on the Omega Seed Hypothesis, one of nine-plus-one propositions. The Omega Seed is the last and is comprehensive. The worth of the construct these propositions define depends on the validity of all nine-plus-one propositions and on the coherence that ties them together. Because inclusion presupposes exclusion, the nine-plus-one propositions are at the expense of other propositions that address the same issues. Five instances:

- The Big Bang–Big Crunch Hypothesis excludes the possibility of an open-ended reality.
- The Omega Seed Hypothesis excludes the possibility of a creator. Omega Seed is about the self-creation of the "creator."
- The irreversibility of time excludes circular or reversible time.
- The imperative of a fully retroactive equity excludes a Utopian equity, historically reachable at a point in space-time.
- Omega Seed is a transecological hypothesis in that it anticipates the "time" of Mind, the durational Being beyond the end of space-time, born from the conclusion of the evolutionary process of reality. It excludes and consumes an endless succession of ecological variations.

The Nine-Plus-One Propositions

1. Desirable-Feasible
2. Big Bang–Big Crunch
3. Determinism, Probabilism, Opportunism, Will-Grace
4. Self-Sufficiency–Utopia

5. Reality Is the Past
6. "Foreverness"
7. Complexity, Miniaturization, Duration (CMD)
8. Urban Effect
9. Genesis Is No Mandate
(9 + 1) Omega Seed/Esthequity

Synopsis of the Nine-Plus-One Propositions

1. *Desirable-Feasible* is about the possibly unbridgeable gap between the pursuit of a meaningful end and the fatally flawed path of an unforgiving "call of nature."
2. *Big Bang–Big Crunch* is about an astonishing, desirable, and remote possibility: the resolution attainable in a finite reality guided into the radiance of Omega Seed.
3. *Determinism, Probabilism, Opportunism, Will-Grace* is about the perhaps indispensable sequence of agencies generating from pure chance and resolving into pure esthetic-equity in Omega Seed.
4. *Self-Sufficiency–Utopia* is about the only condition under which the only possible, if immensely remote, "Utopia" is in the realm of the coherent and the desirable.
5. *Reality Is the Past* is about the well-hidden secret that the only reality is a past reality, the "has been," and about the indelible nature of this "deep-frozen reality."
6. *"Foreverness"* is about finality as a legitimate imperative expressing itself in the unabatable anguish of life, an anguish intrinsic to the makeup of Homo sapiens, and about the paradoxically durational nature of such foreverness.
7. *Complexity-Miniaturization-Duration (CMD)* is about the inevitability of being true to these three agencies, an inevitability built into the living reality, and how these agencies are equipping life with the wherewithal for transcendence and possibly for Omega.
8. *Urban Effect* is about the power of CMD to generate consciousness. Here, the abstractness of the Complexity-Miniaturization-Duration paradigm is incarnated into the tangibility of the "urban" phenomenon.
9. *Genesis Is No Mandate* is about the nature of a true creational process and the imperative need for a grass-roots, inner-generating evolution-metamorphosis in opposition to the mandate-from-above hypothesis.

(9 + 1). *Omega Seed/Esthequity* is about the remote possibility of a prodigious reality generating within itself the gene of itself. It is the all-comprehending recollection of reality's own genesis, all contained within the spaceless, timeless stuff of Duration: the concluded Esthequity genesis in a postecological realm.

1. Desirable-Feasible

Science is not the agency of the desirable. It is the agency of the "True" and of the feasible with which such truth can work.

Besides the desirables that are feasible, such things as putting a roof over one's own head, there are feasibles that are not desirable, such as the gun and the "theology" that has grown up around it. Given the size of the territory we are working within, the cosmos, is there a way by which one can dogmatically propose the limits of either the feasible or the desirable?

In large measure, "freedom" is pursued within the realm of the desirable, and nothing in the conflict between the given and the hypothetical is more freedom-loaded than that which draws feasibility out of "infeasibility." This is the way novelty is generated: novelty, the boundary-breaker so peculiar to life, the phenomenon of high improbability and, at last, of will against all odds.

We will colonize the moon, we will make it unrecognizable. This is quasi-feasible now, while in the depth of eons past, before life, man and will emerged from the lunar landscape of a proto-living planet, such feasibility would have been inconceivable . . . infeasible.

I propose that the living, and the human in particular, has introduced into reality the desirability agency by first "disposing" of probabilism as a fiat, then of opportunism as a sort of amoral desirable. I also propose that the limits imposed upon the desirable by the "natural laws" might have to be broken or at least reconfigured. A truly creative task . . .

2. Big Bang–Big Crunch

The Big Bang to Big Crunch process implies or symbolizes a closed universe or one cycle of a pulsating universe, a closed universe with the Big Bang first moment and a Big Crunch conclusion.

While the Big Bang beginning seems to be based on proven facts, the Big Crunch conclusion is hypothetical and predicated on the existence throughout the cosmos of matter in such an amount as to cause the expansion generated by the Big Bang to slow down via gravitational actions, coming to a halt and then entering into an implosive phase of the pulsating cycle. Reality, which at its zero-moment was nondimensional and nontemporal, a very special point outside of space-time, could find itself at the end of time also at the "end" of space; a time-less, space-less, ultra-special point. What would become of entropy in such a neat diagram?

One could perhaps suggest that the Big Bang is the "liberation" of matter by space-time. Space-time would then have a shot at transfiguring matter (energy) into Mind. It would be

a "shot" lasting 15 to 20 or more eons.

There is no provable answer to the question of whether such a phenomenon might need a causal impulse, a creator, or if it might just happen to come about as an alternative between "to be or not to be." The choice of one or the other possibilities might have to be based not so much on an act of faith but on the usefulness, an empowering usefulness, that the desirable choice might promise.

The causal impulse from a creator is in the mode of a mandate from above, a dictat. To be or not to be is the unending "choice" in the mode of a grassroots emergence from below.

The Big Bang–Big Crunch Hypothesis is then: That which began as a point of mineral light will end in a point of radiance of unknown "nature." The nature of such a point of radiance can only be defined by the Becoming, the genesis interposed between the two extremes of Big Bang and Big Crunch. Anthropocentrically and perhaps cosmically, it might be desirable that the nature of the end be purely "mental" in the mode of Omega Seed.

3. Determinism, Probabilism, Opportunism, Will-Grace

The Big Bang–Big Crunch Hypothesis implies a vectorality. Space-time manipulates the past so as to generate a constantly "growing" reality. Such growth sees time adding to itself from Big Bang to Big Crunch. But space, its twin, goes from the first phase of enlargement, explosion, to the second phase of reduction, implosion.

Space-time, born from the Big Bang, is the operator throughout the evolutionary process moving to its own dissipation at the Big Crunch. That original point of reality becomes an expanding "sphere," which at mid-point becomes a shrinking sphere via implosion, eventually closing upon itself into the conclusive point. The pulsating reality, pulsating at a frequency of 20 to innumerable eons, seems to generate within itself diverse "behaviors," all generated by space-time alterations.

Some of the "behaviors": the mega phenomenon of reality, the cosmic, is cast in a quasi-deterministic mold; the micro phenomenon of the "mineral" reality is under the spell of probabilism; the macro phenomenon of the original reality is "controlled" and manipulated by the irritant of unpredictability and probabilism, soon mutating into the exotic novelty of opportunism and its food chain, spelling survival and reproduction. And last, the SELF-CONSCIOUS branch of the organic reality is under the dominion of will, which eventually might see as its task and imperative the genesis of mind and its intrusion into ever larger spheres of reality.

Mind, as the self-beholding of reality that mind itself is actively transforming, can truly achieve such privileged status if and when its influence is fueled by the will to "foreverness," with the remote hope of seeing all the anticipating mediums and all the technologies applied becoming integral parts of the end "product." This is the universal Omega gene, the seed of reality made into pure self-recognition or, better, into self-revelation. This is the self-accounting, equitable in general and in its particulars, and thus "Becoming" the ultimate, durational, esthetic radiance.

4. Self-Sufficiency–Utopia

One thing scientists, philosophers, and theologians might agree upon is that the nature of reality is such as to be "indivisible" at last. The impact of one or all events has no space-time boundaries, since any and all events are in the proximity of others, thus generating an unbreakable network under the aegis of the cause-effect rules loosely thrown upon the prodigious turmoil of things. Among such things are the deterministic, the probabilistic, the improbabilistic, the opportunistic, mental constructs, and chaos agencies. What this means is that there is neither a true Becoming nor an explanation of such Becoming if not within the context of the whole. Nothing but reality itself in toto can have claim to self-sufficiency.

A. Understanding and action proceed from the segregation of fragments of reality, which are never self-sufficient. Therefore there are limits to both our understanding and our action.
B. The complete genesis of reality demands the input of all of reality, a tautology. In reverse, there is no endeavor with a pretense of universality that can pick and choose that which is included or that which is excluded.

Determinism and probabilism, battered by the insurgence of improbabilism, which perforce generates opportunism or survival behavior and which in its own evolution generates mindfulness and evidences the unbreakable nature of reality. To put it emblematically, the insect crawling in the grass, and the grass itself, are because the Big Bang was and evolved the way it did.

This speaks clearly of the mindlessness of Utopias. Segregation and Utopia are mutually exclusive. The only legitimate Utopia is the "Divine Utopia." How remote!

5. Reality Is the Past

All that exists is the past; it exists as the past.

In truth, the "present," the Becoming, is nothing more than the builder of the past . . . of reality. The present looms

from nowhere, the future. It is deprived of the pleasure of possession. It cannot say of anything, "this belongs to me." The present can only join the past. It is a true magician's act where the magic is the self-obliteration of the magician itself, the present.

What one sees, hears, tastes, feels is the past, past, past . . . All those creations, by the fact of being created, by being part of the Becoming, are consigned on the spot to that "foreverness" which is the past. The past is the only repository of reality.

Imagine that reality is a growing sphere engrossed by the successive layers created by space-time. It grows in the manner of an onion. Each instant generates a new skin. Imagine the immense number of layers composing the body of this onion-reality, an unremittingly growing number of skins. Each skin is a thin mosaic of all facts, all events, all triumphs, all misfortunes, all joy and suffering, generated each instant. The outer "skins," one following another and followed by the next one. In such a reality is the novelty of creation generating unceasingly via the magic membrane of no space-time "thickness" of present after present.

Since by definition the future does not exist, the present cannot borrow or take its "materials" from it. It can only take them from the past, from minerals to ideas via recollection, via memory. Thus there must be a kind of reachable past into which we can quarry for the elusive, living present. So in an almost literal sense, reality goes on creating itself (in toto?) at each infinitesimal instant "where" space-time acts out the creation of reality itself . . . in the past.

What differentiates one of these creations from the next, one present from the next, are the changes that occur. Space-time coincides with those changes. The only viability of time is change. In fact, time is change. If at a certain special point-moment change were no longer occurring, at that very point, time would cease. With it, space would also cease to exist.

The present is the only tangibility. It is the incarnated Becoming. The past is the only reality, disincarnated and perhaps expectant. The future is the non-space-time "where" the Becoming, the present, is poured into the Being, the past.

Reality, the past, is thus hinged on a dance, the dance of creation always in Becoming, never in Being, the indefatigable dance-maker of reality. The dance is capricious, ribald, ferocious, cruel, compulsive, hermetic, prodigious. It is also forever mindless . . . or is it? That is up to Mind.

The future is a mental agency. It has no reality outside of our minds. Since reality is only in the past—it is the past—reality has to recreate itself endlessly, or vanish into pure inalterable Being. But the stopping of space-time short of the Omega conclusion might well be the cause or trigger of a Big Bang. Because the "terminal" station for a cosmic process that

has not built into itself any significance whatever might well be the state of total "revulsion," the disintegration that the Big Bang might well stand for.

Reality has to recreate itself at each moment, in each present of the space-time vector, and each recreation is the new layer each present adds to the creation. In the "last moment" reality will not recreate itself. Instead, it will be at the conclusion of its evolution and, possibly, be the radiance of Omega that will be the collective gene or memory. In such a collective, all the events that come into being in the process of composing reality, in the self-revelation of a "concluded" reality, will coexist as autonomous and distinct parts. The alternative is the "nth" Big Bang, with "nth" going from one to "infinity," the tragic eternal cycle of a mind despairing about the fate of consciousness . . . another failed cycle . . .

6. "Foreverness"

Things are forever.

Regardless of importance or size in space-time, all events construct the past and are all archived in this past. They cannot be withdrawn or even partially canceled from this archive.

In fact, reality is, and it is only, the "aggregate" of all the events that, present after present, come into being to be instantaneously part of the past. Thus the Becoming is that which, deprived of space-time per se, uninterruptedly is generated by and generates space-time, adding a new "skin" to the past, instant after instant, change after change. The Becoming is the space-less, time-less, creational and uninterrupted action generating the past. Change is the only reality of space-time. It coincides with it.

Since nothing created can "get lost," it is up to reality, if desirable, to develop the know-how that will make the past available to the Becoming. This is true even given the remote possibility that nature might be such as to require, as a sine qua non, the exhaustion of space-time. To put it another way, by an extreme extrapolation, one can conjecture a special "moment" in space-time when all the past, and therefore all of reality, becomes "available." The name of this special "moment" of total recall is self-revelation or resurrection. At this hypothetical point-moment, all the successive skins would fuse into Omega, and Esthequity would come to be in this moment of resurrection. Resurrection is "the last moment." Therefore, as the past becomes fully available, the Becoming ceases. Pure Being is then what reality is at the end.

For a long time we have had and we continue to acquire physiological and technical devices that in a very limited way bring back fragments of the "has been." They are a contrived and fragmented kind of resurrection. Memory is the most

compelling example. The scriptures, the costumes, the stories, the songs, the arts, the books, the cameras, the movie, the TV, the tape, etc., are all instruments of recall applied to tiny fragments of the "has been."

But the foreverness of things is a challenge to the sense of fair play, because it makes our laments of "too late" a riddance of responsibility for past events, at least theoretically implausible and at last less than foolproof and therefore damnable. Perhaps the single and the collective victims of all holocausts are not done-in ad eternum after all.

For a benevolent agency to speak of and spell equity, such an agent must see expunging suffering from any and all skins of the "onion-reality" as imperative. Short of that, such an agent speaks with a forked tongue.

The Imperative of Equity: Total Recall (Retroactivity)

Short of total recall, reality is at best split into a precedent represented by 99.9... percent of reality which is the instrument for the consequent 0.0000...9 percent. This minute product is the end. The immense precedent is saturated with violence and suffering; the puny consequent, in the most fortunate of circumstances, is a self-deceiving, self-deluding state of equity. It is a dimensionless moment of pseudo-equity rooted in an immense space-time shower of inequity saturating the frozen Being of the past, the 99.999. . . percent of reality.

A massive, layered reality, sensitized via the living, which has been in process for three to four eons, will then be fully acknowledged by the equity imperative. That in a remote future a condition of equity might be achieved is of no consolation. In this there is no redemption, and no acknowledgment of the numberless skins of the past, all of them stained with the blood of its countless victims.

Without a "retroactive redemption," the benevolent agency is prisoner of its own creational savagery. Theologies know this well and invent devices to obviate the inherent flaws of the "loving" reality. Reincarnation, the transmigration of souls, and resurrection are all good intentions mixed with cruel opportunism, opportunism of all colors. It is the well-kept secret of many priests, shamans, prophets, and gurus through the ages.

As long as equity is the goal, nothing will do but a kind of resurrection where all the layers "come to life" and all their components end themselves as full-fledged ENDS, are sacred, while maintaining their noble task as means to a "better reality." This is the retroactivity and the purpose congenital to Omega Seed. And this is why nothing but a full metamorphosis of reality into Mind is necessary for its advent.

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7. Complexity-Miniaturization-Duration Paradigm

The way space-time manipulates the past seems also to suggest vectorality. This vectorality translates into three inseparable factors, Complexity, Miniaturization, and Duration, in a kind of convergence. The vectorality of this paradigm proposes a relatively simple beginning moving toward an end of quasi-infinite Complexity. A super-dense concentration of "matter" is at the beginning; a super-Miniaturization of space-time is at the end, space-time "converted" into Duration. This implies a super-segregation of knowledge at the beginning and a super-transparency of reality in toto at the end. Thus the paradigm is:

> Complexity: Many events and processes cluster wherever a living process is going on. The makeup of the process is immensely complex and its effects are ever-intensifying.
>
> Miniaturization: The nature of Complexity demands the rigorous utilization of all resources—mass-energy/space-time, for example. Therefore, whenever Complexity is at work, Miniaturization is mandated and a part of the process.
>
> Duration: Process implies extension in time. Temporal extension is warped by living stuff into acts of Duration. A possible resolution of such "living time" is the metamorphosis of space-time into pure Duration, that is, the eventual "living outside of time."

Memory is an elementary type of Duration. In its imperfection and "arbitrary" selectivity, memory exemplifies Beingness disrobed of space-time. In fact, Being is typically that which is outside of space-time . . . the past is Being and the past is a post-space-time agency.

This is the magic of Complexity-Miniaturization-Duration taken as an indivisible triad or a trinity.

8. Urban Effect Paradigm

The Complexity-Miniaturization-Duration paradigm has a sort of magic bullet: the Urban Effect.

The Urban Effect is the highly original way that life has of arranging and rearranging matter to her peculiar aims. Organisms and associations of organisms are urbanizations of space-time (matter), the purposeful converging of "particles" into systems that can generate aims and projects within themselves. Trees and animals are Urban Effects; that is, they are inner-driven events, whereas a tool or a machine is an outer-driven technological device.

If the paradigm were to apply ad infinitum, space-time would wither to zero. The infinite radiance of Omega Seed

would or ought to reside in such "zero matter." The CMD paradigm is validated by the Big Bang–Big Crunch postulate. The paradigm's denouement is equivalent to the Urban Effect stretched to the outer limits: "The City of Light."

The optimal Urban Effect is the only true Utopia, the all-comprehending, all-understanding, true equity and supreme beauty, which can only be achieved when the instruments generating them, the space-time workhorses, reduce themselves to zero.

The hidden stress, the demonism of all life, is the Urban Effect quest, a quest that appears a posteriori when the probabilism of matter is challenged by the improbabilism of life to become conscious and vectoral in the Urban Effect of the Hominidae species. The city, a mind "product," is a crowding phenomenon, a CMD phenomenon.

The city is a life-maker.

Our towns and cities are crude, infantile, unwise, arrogant specimens of an Urban Effect with which a willed destiny could encompass the whole of reality. Omega Seed is the "ultimate city."

In architecture, purposeful spaces are the objectives and the consequences of matter made more orderly and more ephemeral: Gothic cathedrals, crystal palaces . . . that is, matter moving in the direction of Mind. We are told that matter must be the ever-changing and that the particular way in which space-time goes about creation is by "guided" warpages in and of itself.

In those circumstances, when forms reach thresholds of inevitability or irretrievability, the esthetic is generated as performing fragments and anticipations of the only true and legitimate Utopia: the end of the Becoming and the reality of a conclusive state of self-cognizant reality . . . the Omega Seed signal. Since the nature of consciousness is such as to seek ever higher levels of ephemeralization, the Urban Effect is the mandate intrinsic to the Complexity-Miniaturization-Duration paradigm.

9. Genesis Is No Mandate

The eight preceding propositions speak of genesis. It is the genesis that sees to it that the "mineral" reality of the first moment, the Big Bang, metamorphoses itself into the mental reality of the final moment, the Big Crunch. In order for such genesis to be free, that is, to be a true creational Becoming, it has to be self-generating and self-sustaining. It is the archetypal case of a bootstrap phenomenon. This means that no mandate from above is conceivable or acceptable—particularly the first of many such proposed mandates, the mandate from God or gods. So the pseudovectorality of determinism

and probabilism are slowly, age by age, constrained into a sort of vectorality roughly sculpted by the forces of life.

The self-consciousness endowing the human species, the fruit of a higher level of Complexity-Miniaturization-Duration, could be interpreted as the first clear symbol of aim. But it remains more like flares of inquietude and anxiety, which the bulk of the phenomenon of reality tends to ignore and dismiss. A consciousness developed enough and well supported by knowledge will tend to make vectorality into an axial stress. This is probably the case, among others, in those cultures where theology is or becomes central for every personal and collective anguish.

The tragic sense of life has a unique corner in the human psyche. It functions with the aimlessness chronically embedded in any phenomenon that has no outcome. The perpetual "unfolding" so prized in many quarters does nothing to obviate the profound anguish felt generation after generation, since no escape from suffering and inequity is foreseeable, Utopian claims notwithstanding. Reality has no mandate demanding that anguish be exorcised out of reality's evolution. Intent is not part of nature's vocabulary. Only the human mind and other nonterrestrial "minds" can introduce intent into the process. But eventually the intent must be "cosmically" engendered or the tragedy of irrelevance will remain the heaviest of the burdens taxing our anguished species. Omega Seed, Esthequity, attempts to respond to the tragedy of irrelevance and do it within the only sufficient and necessary context: Reality in toto. It is a true *religio* undertaking.

What I see in the cliff in front of me is the after-image of that which the cliff was just an instant ago. Cliff after cliff, they all make up the solidity that was always there because it is never there. The flux, the Becoming, is the image-producer for my brain-eye to perceive. And the flux is the chain of cliff-events creating themselves via small alterations that are the passing of space-time.

Space-Time as Change-Creation

Time does not "go by" while I contemplate the cliff. Space-time is what I see in its dynamic of creating more past, caught as I am in the same process! Space-time consigns its metamorphosis to the forever-reliable past. It is as if reality consisted of a special file where, one by one, unprocessed negatives are pulled out of nowhere, out of the past, and instantly, in the light of each present moment, the Becoming reveals the new picture authored by the informed present, a picture instantly archived in the files of the past. The "chemical" for such processing is space-time in its endless variety of "warping." Space-time is acting out an immense "learning" process, the end of which could well be the ultimate revelation of reality to itself.

Such a revelation is and can only be the last space-time instance. It is the instance of resurrection, since a total revelation is none other than Durational self-revealing of the past in toto. As they say, the only way to feel a poem is to read or hear it, and the only way to taste the flavor of an apple is to bite into it. So a fully realized reality is that reality for which each and every event is tasted twice. The first time it is in its parochial garment of the now at the very act of its creation, the second time it is in its catholic garment of the ever, the Omega Seed. The two garments are not commensurable. A reality tasted only once is a hopeless reality; in fact, it is a meaningless reality.

This is where the tragedy of irrelevance, the tragic sense of life, finds its explanation: Without the most vivid, indeed magical, recollection-recall, that second taste, the one that can only be outside of space-time in the Duration of Omega Seed, all events to which history and evolution are indebted are means to no end. Without the second taste, they have no meaning whatsoever since the cause-and-effect cloth of reality finds nowhere and nothing to envelop that which will justify and give substance to its endless weaving about. It is then merely an immense instrumentation with no use or purpose in sight.

(9 + 1). The Omega Seed Hypothesis

The nine preceding propositions, "chosen" perhaps at the very edge of randomness, nine among the possible many, give me some support in stating the tenth and coloring it in eschatological and nonteleological shades. The eschatology of the Omega Seed has no scientific pretenses, not only because I am deprived of the necessary knowledge, but also, and perhaps more important, because it is in the mode of the desirable and not in the mode of the feasible.

I believe that Omega Seed (Esthequity) is desirable in that it offers a resolution of suffering and the advent of the esthetic. The anguish with no end that consciousness is prey to will find solution in Omega Seed. Since the esthetic act or object is the local-temporal-individual resolution of anguish, Omega Seed is eminently the esthetic resolution of reality, an esthetogenesis, a reality, now as always, under siege by meaninglessness.

If entropy is in ascendance, the Omega Seed is stigmatized as axiomatically infeasible. If entropy can be diminished or can be made to disappear, the Omega Seed Hypothesis might have a chance.

I do not see any nonfatal alternative to Omega Seed/Esthequity. In what is perhaps a silly rebellion, I say: if this is so and reality seems impervious to Omega, then Mind must alter some or many of the physical "laws." Is this preposterous

to the limit, or is there a faint odor of feasibility emanating from a presumably immensely desirable conclusion? "Time" will tell.

Drawing from the nine propositions, Omega Seed stands as an affirmation that the call of secular religions is generated by the irrepressible need human consciousness has for a "foreverness" full of meaning, justice, and beauty. Esthequity does not stop there, because to validate such a design the secular religions must rid themselves of the notion that what we see ahead of us is an image of what is behind, an image reflected by the mirror of faith into which we gaze.

What we see ahead of us is a desirable object-image. In our search for tangibility and reassurance, we invest this wish with the powers of a simulation. Such a simulation has to be as tangible as possible and the only field of tangibility is the past. Therefore, that which we long for is nothing but that special and specific "reality" that each theology constructs as the best of the past, the meaningful part of it, the willed part of it.

Faith is thus born. The theological belief is the simulation of that which could come about, but for reasons of reassurance, in fact, of sanction and of "love presence," we must believe it already exists, in the sense of being a priori. God is the a priori we have difficulty renouncing. It is our most precious possession, our best creation . . . So the deception thrives.

Our invented gods, with all those attributes we treasure most, are revealing the way. One doesn't know whether to admire the humility of such an attitude or to curse such gullibility. It seems history proposes that both sentiments might be justifiable. Perhaps the good theologies have and do balance the suffering they have caused and are causing to poor wretched humanity. But in the long run, deception degenerates into bigotry and intolerance. With them, the hope for a resolution dims to a final deception: The Will of God . . .

Animism is at the very root of the deception. Animism does not acknowledge the deterministic-probabilistic nature of "nonliving" reality. It does not even acknowledge the opportunistic nature of the living reality. Consequently the "Esthequity" nature of the mental is declassed and thrown in the indiscriminate crucible of the benevolent realm of God. The fiction of all fictions.

Animism is a form of idolatry. It can be a mild or a virulent idolatry. In many cases it tends to be paralyzing, because while it embraces stewardship, it resists or rejects metamorphosis. Strangely enough, such rejection destroys the ground on which it pretends to stand—the "sacred" ground of metamorphosis itself, the past. Animism says: From the beginning until now metamorphosis was the name of the game. From now until the end metamorphosis is taboo.

There is a "providential" convergence of today's environmental movement's preoccupations and the possible mandate for what can be called the next evolutionary step, as well as its perhaps hidden imperative "imposed" by Omega Seed. That which the environmentalist sees as a necessity, the necessity of salvaging the planet's ecological balance, Omega Seed sees as part of the virtue of mind and its needs. At the crossing, the convergence point, is the Complexity-Miniaturization-Duration paradigm.

It points out that limitation, the finite planet's resources, is good because under life's pressure it generates more Complexity, Miniaturization, and Duration, a step further toward Mind. Therefore thrift and frugality are not agencies to be grudgingly taken into account, but are at the very core of transcendence.

This goes automatically for the dismissal of any nostalgic movement like the frenzy of the '60s with its "back-to-nature," "holy simplicity," "curse technology" and Aquarian vibratos like Deep Ecology. All of them are more or less a betrayal of life and its astonishing complexity. It goes without saying that unless we rid the environmental movement of such relics, the movement will turn out to be an endemic malignancy. The cost of such a malignancy to "Gaia" and man in it will be immeasurable.

Summary

Omega Seed/Esthequity does not come under the banner of the postulate of objectivity inasmuch as it is the fruit of creation endlessly incarnating itself by way of space-time, but perhaps it is generated "under its spell." Mona Lisa is objectively an engrossment of reality, but it is also the product of a highly subjective process attaining the universal, anguish made into the esthetic.

Raiding the Big Bang–Big Crunch savage beast, man, the love-burdened animal, iconizes desirability. Desirability must have "foreverness" as its target. The only coherent chance for this is in self-sufficiency. Self-sufficiency is nowhere but in the totality of reality.

Reality is in Being, the past, engrossed moment by moment by space-time, the present. The present is the author of Becoming. The Becoming is under the spell of a series of agencies, starting with determinism, ending in will, through the stages of probabilism, improbabilism, opportunism, and the Love Project.

The feasibility afforded to those agencies is increasingly dependent on Complexity, Miniaturization, and Duration. Duration is the self-beholding of reality. At a final moment, the Big Crunch, Duration is omniscient and defines the

Omega Seed stance, resurrectional, total recall.

The incrementalism of self-beholding afforded by the CMD paradigm is exemplary, if utterly fragmentary, in the Urban Effect as it has developed to the present. Ideally, the Urban Effect is the epitome of integral, active awareness, total recall, memory . . . "The City of Light," the Omega Seed in its "logical" denouement.

For all the above agencies, events, and projects, it is imperative that no mandate or predestination vitiate the labor they are engaged in, the creational evolution of reality. "True" novelty can suffer no injunctions from an exterior a priori agency or authority, God, and still be auto-generating.

As for "God within," it is only a euphemism for the never-abating novelty that space-time "conceives" and generates as living stuff in Becoming. As space-time becomes more and more, axiality is revealing itself via the will seeking Omega Seed, Esthequity.

Omega Seed/Esthequity is the "end product" of a transecological quest. It comprehends ecology, it is not comprehended by it. Ecology is proto–Omega Seed/Esthequity. Ecology is in the domain of probabilism-opportunism. Omega Seed/Esthequity is in the eschatological domain.

The "salvation" of the ecological reality is only available via eschatological transfiguration. Resurrection can only be found in total and complete recall, without exception in any detail, of all "ecologies" through such transfiguration. Tigers and lambs, ferns and maple trees, roses and whales, maggots and humans will "enjoy" resurrection or will forever be lost in the void of the meaningless.

1

For the Center for Respect of Life and Environment:

A Brief Elaboration on a Statement in "Policies"

APRIL 11, 1989

"The fate of humanity and the ultimate good of society are inseparable from the fate of the animal kingdom and the good of the environment or natural world."

"Fate" and "ultimate"!

I find it impossible to abstain from taking this statement seriously, so seriously as to take it at word value and try to understand the ultimate but perhaps not fatal consequences.

At such ultimate hypothetical point, lost in the most remote (and nonexistent) future, we might find ourselves, you and I, separated by an unbridgeable chasm.

You (but not the vegetal and animal kingdom!?) in the arms of a benevolent if absent-minded God and Father-Mother. "First is the verb," as it is said—or in the homogeneous, nondiscriminative Nirvana, melted, con-fused in it. The endless bliss of nonbeing, it is said.

I, equally repelled by either, find an alternative in one of two possible states:

- being (totally) disposed of as all the rest of the living, just a sniffed-out, inconsequential irritant, a teeny weeny rash on the skin of a ponderous but mindless reality; or
- finding myself and all other living, past, present, and future, as part and parcel of a grassroot, self-evolved, concluded, and therefore, divine reality. "Last is the verb," I would say.

Naturally, I go for this second hypothesis and for what it may entail as a process. The process, as far as I can deduce from the past and from the "prediction," is one of ephemeralization (the MCD paradigm). It is the slow, suffered, fulfilling process of the metamorphosis of "matter" into Mind, that is, all of matter into Mind, the 15 billion or so light-year stretch of the present universe imploded into a point light of mindfulness.

Last is the verb, as I said.

Taking this as a viable and desirable hypothesis, the only one for me, the notion of stewardship implied in the policy statement remains important but loses its axiality. It is nudged off by the imperative of metamorphosis (see the history of the cosmos).

Stewardship versus evolution . . . (7/21/93)

There has been nothing in the mind of God since God is a fiction. Therefore, the responsibility of the makeup of reality is unrelentingly the "responsibility" of the Becoming, the grassroots genesis of reality, since there is no determinism and/or mandate external to such Becoming. (8/10/93)

inevitability speaks of predefinition, predictability, a *fait accompli*, "move out of my way," original blueprint, determinism in its most insidious form. No novelty anywhere. The whole evolutionary prodigy totally without meaning, a cosmic farce made ugly by suffering . . . (6/1/97)

Why of all agencies to pick Complexi-fication as the most normative and creative? Because Complexification offers more alternatives as feasible but also because it offers the richer, unique, instrumentation to implement those alternatives. (12/4/95)

The imperative of metamorphosis must demand that the mineral, organic universe becomes Mind with its ultimate form as the truly living and vivid "memory" of itself, no detail ignored. The total recall of the totality of evolution, a state of resurrection.

But as stewardship steps aside it also "acquires everlastingness." The rearguard battle the environmentalist is engaged in now need not end in defeat with the end of the planet's existence.

No more because the disposal of the Earth by a sun grown old and tired will no longer necessarily mean the end of life, since long before then, life via Mind will have transmuted into hyperlife and will have remade the planet and the solar system into its own image and perhaps will have locked onto the galaxy and beyond to generate more and more Mind.

But if so, where is the peaceful landscape of our consciences and the longing for equity, felicity, and compassion? Again, not in stewardship but in the metamorphosing, or one could say the stewardship, of the process whose ultimate purpose is the conservation of all the past, not in a dusty, dead, immense archive, but in the prodigious, omniscient splendor of the conclusive moment: the Omega Point. But such a process is to make that which is into that which is not: a metamorphosis, endlessly operational.

A modest rehearsal for the ice age when 70–90 percent of the biomass may be disposed of . . . (8/16/93)

We will not persuade, that is, transfigure matter and eternalize every event and occasion of it as the meek, the contrite, the children of Cain. The lichen and the sequoia, the maggot and the lion would not stand for it.

Remember, if left to their own devices, they are doomed. They all (their genes) seek endlessness, that which our prodigious and miserable planet cannot provide, nor can the (our?) astonishing grand and beautiful universe. Only mind has the remote chance of delivering endlessness. What an excruciatingly sweet prospect for our environmentalists!

But Mind can do so only when all specks of matter (mass-energy) have become saturated with, in fact "disembodied" into, omniscient light. The light point of the end point, Omega. This is the denouement symmetrical to the mineral light point of Alpha, the Big Bang first moment.

Therefore no longer Plato's idea lichen, idea sequoia, idea maggot, idea lion, idea man, but the true entelechy of them all: Mind. The Mind that includes all of them in all their incarnations, that leaves all of them outside of space-time/mass-energy (all consumed in it).

For the compassionate and the meek, the food chain is a bitter pill to take (the Cain syndrome?). To assess and perhaps obviate at least in part the unease or the pain, I propose a crude characterization of specific sectors of reality.

The mineral is (quasi) deterministic. Better yet: probabilistic.

The organic is opportunistic.

The human is passionate-transrational.

We seem to know that the mineral reality does not fit the wound-up clock metaphor well. Yet there is a lot of predictability in mineral affairs. The living, man aside, is opportunistic, and the food chain is a shining, powerful, protracted instance of opportunism. The only one ended in our solar system.

The human-passionate feeds upon the organic-opportunistic with two aims:

1. The physiological and survival-perpetuation aim (food-chain membership).
2. The transcendental-eschatological aim, a uniquely human folly with possibly a uniquely prodigious conclusion.

A critical question is: Is transcendence and finality a purely ego-centered or species-centered, anthropocentric drive, or is it for the sake of life-Mind? Egocentrism or anthropocentrism is myopic—that is, self-defeating—since the transcendence that counts is only of one kind, the forever kind. The forever kind is accessible only if lichen and sequoia, maggots and lions are irresistibly and unavoidably caught in the sweep of Mindfulness, their true entelechy.

So the true passionate, transcendental, eschatological is by definition altruistic, since only by the involvement of the whole of reality does it have a shot at foreverness (come to think of it, the wisest of opportunism).

As long as Mind is lodged in organic mechanisms, such as brains and bodies, Mind needs to work within the food-chain structure wherefrom the need and legitimacy of feeding upon the opportunistic reality.

If this sounds very Western, in fact Christian churchlike, the dominion upon the Earth, so be it. The dominion of man upon nature has to be revisited in terms of a truly cosmic evolutionary model within which intellection may be able, via grassroots methodology, to devise the ways by which all that has lived is recalled at last into the last time-space-bound moment. This is the pre-Omega moment of conclusion, the moment that unlocks the total recall of that which has come before. That which came before is the past, all of it. The Omega hypermoment is resurrection by definition. Outside, or without resurrection, the total recall, the living memory, nothing comes out of conservationism but death, a dreadful anticipation for the environmentalist.

But the Omega moment is also and necessarily the moment of equity and grace because resurrection fills every nook and cranny of the eons-long stretch of evolutionary process with meaning. Since from those humble places, as from all the other places and times, the texture of reality (the

Love, absent in the food chain, which is revved up by opportunism, and definitely absent in the mineral reality, grapples with probabilism-determinism. Love is the new dimension reality contains as it moves from probabilism, determinism, and opportunism into reflection-knowledge. (5/20/93)

Goodness is not at the origin of things, nor is it the intrinsic nature of reality. But goodness could, in a remote future, become what the stuff of reality has been guided into becoming via the Becoming, not an automatic, predetermined (i.e., fatally) planned Becoming but an incrementally willed one.

But while will seems to target (a not-yet real) goodness, the perhaps hidden target is the esthetic reality: reality in toto as the esthetic in toto, the astonishing splendor of a Being in total awareness of itself, the Omega Seed. The "Know thyself" . . . the inconceivable journey into the sensitization of matter, one particle at a time. (2/11/97)

Mind, as the rare and fragile occasion where reality finds itself becoming conscious of itself. Mind, the unwanted offspring of matter, that very matter that space and time transform unceasingly (via Techne).

The only way to go beyond the expedient is to make the contingent into the universal. That is, by the way, what the esthetic is and does.
(11/22/95)

past) has taken shape and has at last generated (itself into) Omega.

The evolutionary process becomes thus an esthetogenesis because all the events and occasions that have generated it are at the same time means to something to which they belong and also, in full legitimacy and context, ends to themselves. That goes for the lichen, the sequoia, the maggot, the lion, the hominid.

But they are not rigid particles cast in a frozen beingness made up of all the past (always the only reality); they are instead and indeed the vibrant components of the purely durational (out of time) nature of Omega.

"The fate of humanity . . ." would then be a destiny that intellection would slowly, painfully, exhilaratingly carve out of the mineral reality, carrying in the process the whole living world in a succession of metamorphoses whose desirable conclusion would be Omega, the true ultimate gene of reality, the Omega Seed.

2

For Venice Biennale

Esthetogenesis

MAY 24, 1994

When the domain of ethics, with its subsets of religion, history, and politics is infected, so to speak, by a stubborn anxiety, what I used to call a residual nonreducible anguish, then in the best or most fruitful cases there is a sort of switch, a shift from ethics into esthetic. Anguish and its content transfigure into the esthetic object, that is, in the clearly outlined event—the poem, the score, the play, etc. This moving from means, let's say political activism, to an end, the Divina Commedia, is the most persistent and powerful molder of human reality.

Christianity, among other "great" religions is a momentous demonstration of anguish generating the esthetic, an ongoing process almost 2,000 years old. Christianity is part of this esthetogenesis, the evolution of consciousness generating fragments of an absolute, the esthetic reality.

The dense forest is a beautiful process working within probabilistic, deterministic, opportunistic rules.

The great cathedral is a powerful esthetic resolution of medieval man anguishing about his own meaning, any meaning.

The esthetic can come about only via the filtering of the mind. There is no esthetic outside of the mental domain.

It turns out that the esthetic is not a powerful instrument the church has magnificently used to her own end; but to the contrary, the powerful and persistent ethical-religious drive is the instrument for the nurturing and for the fruition in glorious esthetic objectivations. The many variations on the Fall and Redemption have generated, on all sorts of levels, the great works, from miniature to architecture.

One can voice skepticism about the perfectibility of man, about his significance within an enigmatic reality. No doubts are expressed, but astonishment, about the esthetic world consciousness is generating.

A Beijing woman pedaling through town burdened by material and intangible burdens has access to grace if and when her suffering and anguish trigger a mutation, an esthetic mutation at the center of her being. With her mournful invocation, she has exorcised her fate and made herself into an end while carrying her cross of not being more than a cog in the larger, indifferent mechanism of reality.

For an evolving reality, the esthetic denouement would be a conclusive self-revelation at the end of space-time. As farfetched as this all-inclusive esthetogenesis is, it may well turn out to be the only way an endless tide of MEANS, by which

To travel through life blind to some kind of anticipative territory, a territory that is not there because the future is a nonpresence, is to blunder from hopeless run to an even more dead-end road, the land of chance with pathetic candle lights of wills lost to darkness. (4/18/00)

The unabatable, residual anguish present in the condition of man, all men, is resolved in the esthetic event. (8/2/93)

The noble, though very rare, strands seeking expression made for the genesis of esthetic expressions: the esthetic patrimony of all theologies, the raison d'etre for them all at last. (4/4/96)

J. S. Bach comprehends the fractal; the fractal does not comprehend J. S. Bach. The Taj Mahal comprehends brick and lime; brick and lime do not comprehend the Taj Mahal. (12/17/97)

It is up to the Becoming to start from the bootstraps self-generating norms to seek meaning out of the meaningless via immense numbers of self-transcending moves, from the tiniest grunt to the Eureka moments, a never-stopping battering of creational drops, the sound and fury of creating God the creature. The Omega Seed. (1/6/00)

all of us as all of life, and with an immense load of inequity and suffering, can be transfigured into a graceful multitude of ENDS.

There is a universal language that may propose a resolution of the unresolvable. It is the domain of the esthetic. The esthetic is the transcendence of the particular (most of the time, idiosyncratic) into the universal. A true religious domain, the only true one we may eventually discover. (3/25/99)

Distinction between the natural and the esthetic. The qualifications of the brain as the lens-filter between the beautiful and the esthetic. (6/4/93)

Crying is a song in gestation yet far from the esthetic transcendence. Shakespeare had a long, long cry at par with Dante and Beethoven. The richer we are for their anguish made into grace. (7/7/98)

Stanley Kubrick's *2001: A Space Odyssey*. The two final sequences of the endless travel in the mineral universe with the now and then fixed human eye briefly present. And the final sequence in the neo—Piero Della Francesca in a neoclassic symmetry. Contrast the mineral beauty with the filtered reality, the esthetic of order and transcendence the mind is generating. (2/16/97)

3

In New Hampshire

North Country Chamber Players Summer Concerts

JUNE 1991

"The world is full of beauty."

This is naturally a pure, unadulterated, anthropocentric postulate. Beauty is in the eye of the beholder. The degree of sophistication attendant to the eye-brain-mind apparatus of the beholder determines the "amount" of beauty the object under observation may solicit.

The beautiful is an agency that casts upon the "natural object"—a flower, a maggot, a landscape—the perception-appreciation of consciousness that comes from the subject-observer.

Thus with a given, the object is "mixed with" a subjective but nontransformative element: the observer-listener. The mix is the appreciation of the subject, you and I, for the object.

I propose that you musicians are not dealing with the beautiful as such (what nature offers us with no intermediary); that is, you are not investing yourselves into an object which remains at last impenetrable, enigmatic, remote to you.

You are dealing instead with and acting within the esthetic realm. The esthetic comes to be only when the object turns out to be the making of the human agency.

The moon can be beautiful.

The Moonlight Sonata is esthetic, that is, of that kind of beauty that emerges from a (human) mind upon which the moonlit landscape and countless other perceptions-emotions may or may not have a hold and a say.

The esthetic occurs when a particularly "fortunate" filtering of reality is generated by the mind. The most "providential" of such filtering occurs when the residual anguish inescapably nested at the core of the human condition is transfigured into the esthetic event. In such a process, the residual anguish must "universalize" itself. Without such universalization, the product is unable to emerge from the idiosyncratic. The esthetic is beyond the clever, the anxious, the informed, the eclectic, the shocking, the surprising, the inventive, the charming, the raging, etc.

The appreciation of the landscape is not creating the landscape; at most it could be called an interpretation of it. The production of a sonata is a transfigurative, creational act, the doing in toto of a specific mind "suffering" a personal, existential condition. Then with the performer it is not the interpretation of a fundamentally foreign event—the landscape—

A reality constructed of emotionally charged entities—the gods, the spirits, the angels, the benevolent, the malevolent, the transitory, the sinful, the penitent, the possessed, the diabolical, the soulful, the pervasive good and evil—produces actors, us, imbued with all the destabilizing feelings and emotions one can generate. For such actors, a less-charged reality and a less-charged anima suggest coldness of heart (a pump, by the way). In fact, those charges are the emergence made feasible, invented by a much less animistic, cooler reality. The reality of probabilism, determinism, opportunism, and the late Love Project.

The Love Project is the culprit in the total anxiety of charged things up and down the spectrum of plus and minus, sensitive-insensitive, good and evil, oneness-otherness, temporal-eternal . . . (8/1/94)

Trying to nudge reality toward the generation of purpose. This would be reason for being (that is, Becoming). As things are now, reality is purposeless—that is, indifferent to "good and evil" as we anthropomorphically might define them. Without the "purpose dimension" saturating the whole of reality, justice, equity, love, compassion, etc., remain essentially and finally futile, and there lies "the tragic sense of life." Trying to nudge reality into purposefulness. (8/21/96)

but the interpretation of an event, "a landscape," which is one of the many utterly grafted to the human with all its triumphs and tragedies.

The Aquarian composer, unwilling to distinguish between beauty and esthetic, deals with this process by default. That is his-her curse: a "misplaced love," because it is targeted to something that is not there—"Mother Nature": a reality capable of anguish.

Why is it so? Because both the deterministic-probabilistic reality, from subparticles to galaxies, and the opportunistic reality of the food chain—nested in it in utter solitude—do not deal with love. Love is the precious invention of consciousness. Where there is no anguish there is no love. Where there is no anguish there is no esthetic resolution.

With the invention of love would go side-by-side the invention of our God. Our semigods, our archangels, our angels, if not for the fact that love has become a reality while our gods are as yet conjectures. Both the real and the wished-for need nurturing so that someday in a remote future that which we long for might come to be in full glory. It is the creational process that might be able to create God and grace. The toil and the struggle inherent in the bridging from invention to creation is history—the history reality is generating.

At the core of it, and via the labor of consciousness, is the transfiguration of reality and with it the anguish of life vis-à-vis the indifference such "mineral" reality is cast in. The transfiguration is the esthetically beautiful.

In music, the performer is the indispensable conveyer of the esthetic event that music at its best is. An end in itself, by the way, wrested from reality via the transfiguration of fragments of it.

Sounds and "times" for music.

Stone and space for sculpture.

Colors and patterns for painting.

Love of nature and love of art are not one and the same thing, and there is no ambiguity in the distinction. At the bottom of the difference is what I perceive to be the fact that love is not a natural agency, but is instead a very peculiar and very "upsetting" agency of humaneness.

The Love Project is the human project, and the esthetic realm is the most powerful and most subtle force-field of it. So powerful as to suggest that cosmogenesis under the spell of love might turn out to be an esthetogenesis.

What to say to spell-bound musicians? Go at it!

4

For Venice Biennale 1986–87

Nature and Art

The thesis for the Nature and Art Program is: nature and art are "not the same" and what makes the difference is the filtering process the mind engages.

The "filter" is all of a person—the good, the bad, the rational, the irrational, the transrational, the calm, the troubled, the joyful, the mournful, the knowledgeable, the ignorant, the sequential, the random, the hopeful, the anguished, the elated, the depressed.

Put simply, nature is dispassionately beautiful, art is compassionately beautiful (the esthetic) via the filtering of reality by the mind. The "filtering" implies the Techne indispensable for that process to be active. Art, the compassionate beauty, is not therapeutic "art" (the charitable beauty).

The Nature and Art Program then takes to task artists, performers, and environmentalists, proposing that, whatever spillover from their professional makeups exists, a botanist/lover of poetry or a geologist/amateur musician, for instance, could or perhaps should find ways of expressing themselves in both pursuits not so much by the botanist writing inept sonnets or the geologist butchering an innocent andante (both legitimate private outbursts), but by a meeting of minds and hearts and a development of scripts that call upon the best of them all—botanist, poet, geologist, and musician.

Specialization is a traditional preoccupation within the arts and sciences. The attempts at barrier-breaking have had only very limited success, and yet the yearning for the multiple-in-the-one is not fading away. Often what results is a mish-mash of moral play, advocacy, dilettantism, or unlimited schmaltz.

Naturally, the above-mentioned Techne is the mooring and the bottleneck for the whole program. Human Techne (technology) started with a stick scouring a dried stream bed or the beating of a gourd. It is now positioning itself for Martian digs and synthesizer wizardry.

If there is anything to the notion that the filtering process of nature, via mind, will not abate, but will in fact grow exponentially, then the esthetic process will engulf larger and larger portions of reality. The product of such an invasion of nature by mind might point toward an esthetogenesis of cosmic dimension, which is what "seeding" of outer space by human settlements implies. Thus, any activity that even modestly

The metamorphosis of the beautiful into the esthetic would be the critical evaluation of the connectedness of the "mental" to the "natural" punctuated by the awe, the secretiveness, and the anguish intrinsic in the MCD domain. (7/25/98)

Beauty is skin deep, always. Landscape, flower, butterfly, deer, cat . . . humans! Beauty envelops good, bad, true, false. It is a shroud that is indifferent to the body inside. But look at the labor nature puts in to get the iridescence of a peacock's tail, the deer's majestic antlers, a butterfly wing, a fish impressionist pattern . . . the songs, the scents, the forms, and the colors. (9/13/97)

We love nature, mostly a presence; nature does not give a damn (sorry) and carries on with her mindless "dams," one after another according to gravity, geology, wind, and water, the life sine qua non. (11/18/99)

Hand and mind have reshuffled matter for over 2 million years. At first the hand and eventually the mind having the "hand" on the throttle governor. Matter-hand-mind, a formidable triad. (6/19/94)

The mindless making itself into the mindful, the coarse made into the sophisticated, the beautiful made into the esthetic, the proto-ethical made into the ethical, the grace-deprived made into the graceful. The whole because of the know-how slowly and painfully creating the What. The pyrotechnics of space transfiguring itself into Duration. (1/23/00)

attempts to get nature to interface with art and vice versa is a worthy activity. It helps to keep the future exciting and the present promising.

The empirical part of Nature and Art deals with the use of a physical setting, as a forceful presence, in a program involving (in synchrony) sight, light, darkness, the senses and the sensitivity of peoples. Given the dramatic geology of the Arcosanti site and the four-dimensionality of its environs, the purpose of the Nature and Art Program is to develop, tangibly, the overall thesis, with the events that are contextual to the place. This, far from meaning once-and-for-all occasions, could open the way for similar undertakings wherever the environment is called on to be a part of an esthetic script. Nature and art are put face to face. Thus differing and different communities can engage in truly original events (and don't we need such occasions?). To some degree such action is not novel; the novelty is in the conscious and intense character of the event generated by "speaking" to the surroundings and being "spoken" to by them.

Arcosanti is on a narrow wedge running east to west. Facing it, to the south, about four hundred feet away, are two dramatic basaltic cliffs—the rims of the flat land south of them. To the east, the geotopography opens up onto a farmland bottom, the Agua Fria stream with its large cottonwood trees and even greater "drama" by way of more cliffs and mesas. The ravine (valletta) that separates Arcosanti from the south cliffs has its own character and its own spring supplying the growing vegetation. Between the two cliffs, there is a slope into which is nestled the Amphitheater in an early stage of development. Different hours of day and night generate different expressions (in the eye of the beholder/filter). Sunrises and sunsets can be extraordinarily beautiful.

The apparent stillness of things invites the Arcadian landscapes on which body and mind can dwell. That immensely dynamic turbulence that is the organism, populations, etc. Turbulences, the domain of MCD . . . (12/27/95)

One of the proposals of Nature and Art is to develop a "score" in which different sounds, voices, brass, percussion, strings, electronic, and exotic instruments engage in a colloquial exchange—the coyotes are masters of the art—from different locations up and down the geology and the buildings. Reinforcing the sound score would be visual images and motions. The audience would not be consigned to one area; it would be stationary or moving according to the score sequences. An extended score would involve the Agua Fria Canyon (two miles of it) as a dramatic backdrop for more focused events: readings, music, dance, visual arts. Unlimited possibilities.

One aim of Nature and Art is to develop a grammar and an annotative convention (like those used in musical scores or dance charts) that permit a transposition of scripts from one environment to another. This language could eventually become a fecund source for the production of events of the

most disparate kinds and within the most different contexts. This language also suggests that a "new" instrument could be added to the orchestra—environmental instruments made equally of nature and artifacts, uncontaminated by the nostalgic excesses of "the spontaneous as the truer" notion.

The "concert hall," in which the environment becomes the comprehensive instrument, with constellations of conventional instruments clustered and playing at specific points and at designated times, will become the "auditorium." There are the particular voices in a four-dimensional geodrama. The eyes, as well as the ears, are intellectually and emotionally engaged by one comprehensive instrument and its devices. The uncontrollable intrusion of nature, breezes, foliage rustling, running water, lightning, thunder, and occasional cries from birds and other animals are reminders of where the ancestry of life and art began . . . and remains.

Il fare prima del pensare. Life, the impulsive and pensive calculator! (12/21/99)

In the Mesa City Project (1960), the spine of the mesa is quarried for construction material, and in the process the quarry is made into the ceremonial-cultural-esthetic continuum. The underground is not dedicated to living per se but to celebrating: exhibitions, museums, galleries, opera houses, concert halls, shrines, temples, and festivals. Not only is the quarry with the powerful equipment of today a providential staging for the large underground or below-grade volumes (to be finalized into the celebratory functions); but in the back of my mind was and is the evolutionary mark that makes us animals of light, air, and daily and seasonal cycles. We have more of the eagle than of the mole. (4/14/99)

The Concert Hall

We are told: fill your belly, dress well, utter niceties, sit down comfortably, relax . . . now, here is Beethoven. Enjoy it fully . . . . Could there be a betrayal?

We sit, passive if proper anvils upon which the composer hammers in his anguish to forge beauty. Did he want it that way, and if he did, was he right? Perhaps a surgeon in action or a sculptor cutting away at a block of stone or a sweating performer is a better resonator of such transfigured anguish. Not for nothing does the soldier march to his death at the martial sound of drums, bugles, and brass. At the bottom, we buy the soul of others, the composer and the performer, with a debatable currency.

What are the reasons why we take music into the concert hall: acoustics? undivided attention? comfort? expediency? economics? management? glamour? control? feasibility? fashion? image-making? Of all of these, and perhaps of many more, *acoustics* and *undivided attention* are truly important for the subject matter: listening to music. The question is not *this* setting or *that* (an open space, for instance). The essential question is: What is missing in this setting that might be present in *that* setting and vice versa, and thus how important might be the experience affordable by *that* and not by *this*?

For Nature and Art, I suggest we emphasize those events the concert hall cannot host, regardless of the question marks attached to the list above.

Notes on Structuring and Development

Program Development in a Unique Setting

Nature

The site, the Agua Fria Canyon, the valletta. With sharp and short briefings on geology, fauna, flora, history (the Indian village), the cliffs, the moods and climatic vagaries, nature (filtered by mind), greenhouses, gardens, etc.

Figurative art, music, literature-drama. Make extensive use of geotopography and day/night cycles.

- Set up sound and light sources at the edges of south mesas and in valletta spots. Both sound and light can be live or taped and reflected (lasers, etc.).
- musical groups (brass bands) on edges of mesas (exotic instruments welcome).
- Develop one play (Greek Tragedy?) and readings within a wandering mode, integrated with light and sound.
- The art of cooking in connection with the environment.
- Call upon early music, medieval, baroque, classical, romantic, impressionistic, expressionistic, postmodern, jazz, rock, folk, etc.
- One amateur hour per day.

Program and Presentation

1. The (scholarly) historical premise:
    - the perception of nature
    - the perception of the esthetic
    - the connecting links
    - a brief chronology (diagram)
2. The philosophical underpinnings:
    - nature and articrafts
    - the esthetic theories (Plato, Croce, etc.)
3. Nature and Art according to different cultures, examples (slides). (see subject #2)

5

For Venice Biennale

Threshold

SEPTEMBER 18, 1989

Since I dwell now and then with the design of bridges, I find it interesting to compare the concept of bridge with the concept of threshold. A bridge is unequivocally that which connects; a threshold is that which gives access.

When the bridge says no (to traffic) it ceases to be itself. The threshold is permanently engaged in saying yes or no. The bridge is indifferent to what it connects; two identical halves, two inimical camps.

The threshold is less neutral. It has something to say about that which is on one side and that which is on the other. If and when the bridge adopts the prerogative of threshold, it forgoes its own connective primacy. What remains is a conditional connectedness.

For the bridge the password is unhindered flow. For the threshold the password is sanction: affirmation for this, negation for that. The triumphal arch deifies the victor, humiliates the defeated. Dachau gates sanction the legacy of murder, joining the neutral outside with the hell inside, allowing that which comes from the neutral envelope to accede into the core of evil.

So the threshold as it connects also tends to define or stigmatize, to exact a triumph or a humiliation and in general to transform or at least alter the mood and the character of the trespasser.

Therefore thresholds tend to acquire iconic-historical patinas. To be up to their potential they must generate some sort of synoptical aura. Often such an aura finds its center in that part of the threshold that almost functions as a Maxwell Demon: the door. The door swings open or swings shut in obedience to programmed responses and also to the reaction of the trespasser. In general, if the inside program is friendly with the outsiders (demand) the door will open gracefully. If not friendly, the door is the last diaphragm to give in disgrace.

Another characteristic of threshold is its variety in scale. From the minimalism of the hut or igloo opening to the behemoth of the Paris Grand Arch . . . and then to the future thresholds in outer space, where size begins to become "cosmic."

I would now like to dwell briefly on two thresholds in the middle and in the large scale:

- the Apses: thresholds poised on the earthly landscape;

The starting is in banal observations, then the mixing up with, at times, surprising or troubling results, then tossing these together with some previous lamp post, ending up now and then with modest or immodest revelations. That seems to be my (unintentional) modus operandi. I have been moving from architectural and urban models to models of thoughts in forms of hypotheses. In fact, I have been navigating the hypothetical all along. (10/2/98)

. . . the I, the Thou, and a third party, the It. The It is not the source but is the storage of all inquietudes, doubts, anxiety, passions. A storage colored good or a storage colored evil. The gods were born . . . after more than 2–3 million years the delusion carries on full force and blood stained. (7/6/97)

- the Eco-Minutiae: thresholds within the void of outer space.

In their specific forms, they both generate from my work. The apse has been part of my architecture from the early 1960s; its original dimensions were 8–10 meters in diameter and is now becoming 50 or more meters in diameter. The Eco-Minutiae entered into my grammar in the late '60s and, by way of stages, are now variations of a pseudo-egg structure from 2 to 20 kilometers in diameter; Eco-Minutiae are space habitats.

If reality is space, then the "use of space" is never a sort of tangential, casual, intervention in the space/reality domain. It is fully invested by the weight of "core reality." Then habitat, for instance, is so weighted and so crucial in modeling reality and so . . . dependent on the degree of Miniaturization and Complexification applied to it. (7/18/97)

The Apses

The architectural form of the apse is a quarter of a sphere skin on top (or not) of a half-cylinder of the same diameter. "My" apses, with the convexity turned toward the outside, are a habitat per se, where the skin has doubled to make for an interspace 10 meters or more in depth. Or they can also be part of a habitat developed behind the convexity of the apse. Persian architecture offers the closest approximation to such apses.

A morphological characteristic of the apse is the focusing of sound coming from the outside or the radiating of sound coming from its center. This characteristic I transpose by substituting people for sound waves, while at the same time letting the people-wave penetrate through the apse walls by way of portals. So the convergence or divergence of people moving through the lens of the apse makes the apse into a true-to-form threshold. But this is only the beginning of the story.

The Apse Effect

To the above connective function is added the sanctioning-characterizing aspect. While acting as a focusing of peoples and things in motion, the apse, opened to the south, acts also as a device selective of the sun radiations projected within its architectural boundaries. It is easy to see that according to the seasonal changes of the sun's trajectory, the south-exposed apse will accept, deep inside its "territory," the benign, welcome winter radiations while turning away such radiation more and more as the seasons change from winter to spring and to summer when Father Sun mutates into Father Furnace.

The apse is an effective passive "sun machine." Within its boundaries it generates a sunny ground for work, play, repose, and socializing during the winter months, while offering a shaded ground in the hot summer season: shade against the cool backdrop of the apse structure itself. The American Indian cliff dwellers knew a thing or two about the Apse

Effect, and in environmental dimension.

The threshold has thus become also a gathering terrain, a social nexus, right there at the edge of where, in my design, is the "outside" of the city, which develops within the apse itself and/or whatever added structures might be developed on the sides and behind it. Anthropomorphically the apse, like a big upheld hand, not rigid or stretched but alcovelike and curved, is a form of gentle welcome or send-off, while adding the element of repose, in fact reflection well symbolized by the reflection (or deflection) of the sun's rays.

The Apse Effect, a threshold characteristic much in evidence, is primary in the Arcosanti Project, where two of the many apses have been operational for many years.

The Eco-Minutiae (Ecological Minutiae)

We are on the threshold of the space age.

In their first generation, cosmonauts and astronauts are engaged in the technology of getting up there and, once up there, surviving and returning.

The second generation will see the development of space control and the beginning of productive cycles justifying in part the enormous cost of space ventures. It will be the age of techno-stations and avant-posts in space and on planets and moons. The foothold age.

The third generation in the space venture will be the establishment of modest ecosystems in points of specific interest in space.

Three possible situations

a. space habitats free floating in space;
b. space habitats grounded on planets or moons;
c. space habitats partially or totally burrowed into asteroidal chunks of mineral matter.

The third one might turn out to be the most feasible and the least expensive, besides being very promising for reasons of mining, research, learning, flexibility, mobility, etc. In any case, those habitats will also be stations, caravansaries of the space age, where the space traveler will find a less contrived environment-staging, reminiscent of earthly landscapes, and the beginning of autonomous local ecologies.

My attention has come to "a," space habitats free floating in space; and "c," space habitats partially or totally burrowed into asteroidal chunks of mineral matter. I see space egg-placentas strung into the black endless void according to useful networks of routes for travelers-explorers. They will be essentially ecological bits simulating to a default the complexities and the awesomeness of that which Earth so generously gives to us.

We are *now* possibly at the threshold, where Mind, unwanted offspring of matter, turns upon matter and demands it to become Mind. (Matter, that which cannot enjoy and suffer, has no will. Only the living can want anything. The mindless can't.) The latest in this "confrontation" is the so-called silicon intelligence. The theater of this "confrontation" will eventually be the cosmos at large. (4/30/96)

We space travelers on a big ship Earth have the luxury of the split-egg morphology: the rejection of the sealed-in (air-conditioned) mindset. (5/20/93)

Those bits of manipulated minerals will develop their own local, isolated (lost) ecology with a niche reserved for those human pioneers that out of curiosity, thirst for knowledge, courage, and self-sacrifice will give themselves to such gilded prisons for the sake of humankind, consciousness, mind, transcendence. Sudden catastrophe or creeping catastrophe (miscegenation, etc.) will be integral to the scenario, the dole to pay to the indifferent, probabilistic, life inimical, and immense milieu of the interstellar void.

In those Minutiae, the threshold will coexist with that which the threshold is trying to offer: a step into the cosmos from the secure, if not benign, earthly pied-à-terre. The sperm pursuing the egg is in enemy territory, the immune system disposes of the intruders with spectacular success. Out of 2 million or so sperm, one, if any, will make it. As the eggshell-membrane punctured by the lowly sperm is the threshold to (the next) life, so the space traveler "puncturing" the Eco-Minutia envelope leaves the lethal void of cold, black space and enters the life-sustaining ecology.

To the traveler's deprived senses—sight, sound, smell, taste, skin feelings—the Eco-Minutia will display itself as the architecture of interiors, the only possible architecture of space where the outer is life negation and the inner is life sanction: sanction and hope of life enhancement. The arrival-departure stations (in a way, the whole Eco-Minutiae) will then be the threshold in its most iconic power.

Death and life mediated, via the working of Mind, through the archway of the Eco-Minutia. Food for "myth" and self-fulfilling prophecies but anchored in relativity, quantum theory, uncertainty paradigm . . . a truly human endeavor, one that might keep the hatches toward survival open in view of the day of reckoning on a planet no longer fit for life, probably not because of man's wretched behavior but because of a Father Sun senescence.

Eco-Minutia thresholds will then be strung in space along the most convenient or the most promising routes to this or that point, this or that planet, moon, asteroidal cluster . . . It might turn out to be highly desirable that Eco-Minutiae come in clusters of three. Then each one can "reflect" on the other two in search of reassurance, variety, safety, companionship, social and cultural exchange, technological and scientific cross-fertilization in a sort of necessary opportunism shot through and through by the imperative of the I-thou survival-interdependence.

Anguished interpretation of reality: the esthetic. "Rational" interpretation of reality: the scientific.

The internalization from frugality of the passionate mind (to do more with less). When interpretation escalates into identification, the I-Thou duality ceases: It is Omega Time.
(5/28/97)

6

For Venice Biennale

Toward the World Governing the Environment

APRIL 1994

The contribution of art and culture.
The places of beauty.
Nature, urban development, and social life
in esthetical perspective.

1

Is beauty a right?

In the eyes of the beholder, nature is often beautiful. "The beautiful" is a category invented by man or it is a signification that man has put upon the real. The difference between a (beautiful) landscape and a painted landscape is that the filtering the mind is engaged in while painting the beautiful landscape is imprinted by the anguish such mind is inescapably suffused with, because of *il Mistero Tremendo*, the perhaps unavoidable nature of the What and the Why.

A "puny" mind will produce a poor painting.

An "average" mind will produce an idiosyncratic and at times interesting painting.

A "great" mind will produce a great painting . . . an event by which anguish is transfigured into the esthetic.

The beholder of the landscape experiences the beautiful.

The beholder of the painting experiences the esthetic.

Nature can be beautiful; man's work can be esthetic. Perhaps then beauty is a right while the esthetic is grace.

2

If so, how to uphold it?

People and society are in desperate need of grace, the "art of living," for instance. But grace is remote whenever an opaque diaphragm separates people and society from the awareness of the enormity of what we are adrift in, the utter indifference of the cosmic mega- and micro-processes toward consciousness, love, compassion, equity, and the esthetic. All of those human inventions-creations, with no resonance within reality, we must (imperatively) create and then wisely uphold, an awesome task since awesome is the reality containing it.

3

And, today, with the enormous problems of an urban reality

The mediocre moral play that the rock bands give form to never emerges into the esthetic; it remains a sort of therapy in reverse, a moaning and shouting of single distraught minds fully at ease in their indignant dogmatism. (11/1/93)

The unique virtue of Beethoven to work at the very core of chaos and being aware of it: See it in the second movement of the fourth piano concerto. See it in the last few piano sonatas. (1/7/95)

Ours is not a noble species by birth. It has to sweat out nobility from the mindlessness of our ancestry, a monumental task. (7/11/97)

in rapid and often dramatic transformation, what is beauty?

On this score we are in luck. The urban reality, I call it the Urban Effect, is in a true sense the only hope we have for a coherent—that is, sustainable—alternative to both the environmental nemesis and the societal-cultural withering away.

The evolution of consciousness and Mind is the evolution of the Urban Effect from day one, 3.5 eons ago when for the first time "dust" became living dust, organisms.

The Los Angeles newcomer and the "Broadacre" suburban diaspora are the potential nemesis of the Urban Effect (evolution), here in the USA and everywhere on this planet as long as the American Dream (the single-family house) is an exportable commodity.

With today's state of the art, the universalized American Dream extended to 10 or more billion people by the year 2050 will necessitate 20 planets (at a stress equal to today's). At twice the efficiency in the production-consumption-gratification process, we will only need 9 additional planets.

In view of this, frugalization becomes an ethical-esthetic imperative.

Why so?

The ethics of equity, environmental coherence, survivability . . . the esthetic as the eminently frugal event. With every esthetic event an immense power is generated, putting a spell on the producers, beholders, performers, participants.

In the esthetic event, mass-energy and space-time are reduced to a minimum, a sort of residual vis-à-vis the awe, the joy, and the trembling of the mind. A radiant witnessing of consciousness gone critical, so to speak, toward the transcendence we seem to be addicted to in our best moments.

The Ultimate and Final Singularity

Self-consciousness, self-awareness, perhaps the most singular, unpredictable, momentous event ever to emerge in and from reality. The "final" reason for that (last-final-cause) is that with the self-consciousness of the individual the door to a possible cosmic self-revelation is pried open, even if only infinitesimally so. (10/1/94)

The high price of frugality, that is, of excellence. Excellence does not come cheap. Both excellence and frugality address the imperative of internalization from where excellence finds food for action—that is, makes public that which must originate in utmost privateness. The "explosive" radiance of frugality is in the mostly unconscious grip of irreducible anxiety, a residual anguish, in each of puny us in the midst of the ungraspable enormity that reality is.

The radiance is best evident in the esthetic event . . . the power-radiance of sounds and tempos organized by a Mozart, a Ravel . . . with such radiance the unbounded power is unleashed on the listener. Frugality at its best. (5/9/95)

4

And can it have a common experience and measure?

Our nomadism to Athens, Kyoto, Angkor Wat, Paris, Bombay, Florence, New York focuses on the human pursuit of grace. How to extend, democratize, and maintain in our habitat such experiences is a challenge facing us all. Unfortunately, our pursuit of consumption-gratification does not point at a sophistication of experiences, at the ephemeralization of perception. It points instead toward opportunism and greed.

Opportunism is the ancestral imprint, 3.5 eons of it, we all carry in our flesh and bones. Greed is the opportunistic drive gone self-conscious and ego-centered, that is, inventive, clever, cunning, hypocritical, deceiving, cruel.

The individual-society contract is out of balance. That is why American cities are falling prey to squalor and violence. The injection of grace in their physical and cultural structures is in inverse proportion to the emergence of the parasitic sub-

urban diaspora. A true Utopian dream, it is a shortcut to doomsday for both city dwellers and suburbanites.

5

Experienced and a measure of beauty as configured in the various professional and intellectual fields?

The hedonistic track we, the affluent society, are on, and the nothing less than astonishing know-how we are developing and applying, speaks more to gratification than to grace and more to instrumentalization than to fulfillment. If, optimistically, we can point to this age as an interim and a trampoline to the real substance of the (evolving) human condition, then the harshness and squalor of the How frenzy can be explained if not justified.

But if this interim age becomes the norm for future times, then we are in for immense suffering. Because unless Howness takes us bit by bit closer to the perhaps unsolvable mystery of the What and the Why, and in a Where, When (space-time) holding a bearable amount of suffering, then Howness vacates the field of magic to become madness and senselessness.

Lose one's cool! Look around and . . . cry.

Greed is the direct cause of environmental transformation and degradation. Greed is eminently satisfied by hoarding physical things: habitat, equipment, real estate, commodities, industries, bombs, precious metals, networks, etc., the endless instrumentation of happiness well served by the shopping center iconography. (4/6/94)

The resolution of our environmental and ethical quandaries will not be in self-gratification and fun. (6/13/93)

What is the joyful note, the grace of what we are and do? It is that via us and all of life, we are making fire and stone into flesh and Mind. Be, us all, mindful! Mind full! (3/1/96)

. . . for equity and grace to really prevail, aside from their necessary presence across the planet, it is imperative to reexamine and eventually abandon the excesses of consumerism, hedonism, self-gratification, and the limitless exploitation of the planet itself with shallow ethics and value-wanting behaviors. (6/19/97)

7

The Eleventh Hour

APRIL 1994

1

In the terminal scenario proposed by the Eleventh Hour program (KBDI public television, Denver, Colorado, April 9, 1994), the injunction seems to be "spare no punches"; therefore this is my opening statement: To be consistent with the reality of our planet, the American Dream must reinvent itself or choke on its own consumption-gratification-unlimited Utopia.

Simple arithmetic shows that to maintain the same amount of today's environmental stresses for a population going from 5 billion to 10 billion, as anticipated for the middle of the next century, we would need a second planet Earth. If then the USA's standard of living were to become democratically universal, the so-called upgrading of the 10 billion people now averaging 1/20th of the U.S. living standard would require 2 planets x 20 = 40, that is, 39 additional planets by the year 2050. Assuming that we might be able to become twice as efficient in our pursuit of plenty, we would still need 19 additional planets.

Even an extraordinary success in mass migration to other terra firma in the solar system would never begin to take care of the impending catastrophe. It would take tens of generations, if ever, to escape the collision course we are on now: the demise of the biosphere as we know it and with it also the now-emerging noosphere (the sphere of consciousness proposed by Teilhard de Chardin).

Biosphere and noosphere are diverging. The divergence factor is hyperconsumption. It clogs the arteries of the bio-noosphere animal. It is an entropic intrusion disproportionate to the rewards that consumption delivers. (1/26/99)

What are the alternatives?

- First, we can retreat into Fortress America, keeping at bay 9 or so billion people, half of them disenfranchised. Given the nature of the global economy and the intricate flow of goods and people, not to mention information, the odds of success are practically nil, and the ethical cost would in any case be unbearable.
- We can—perhaps we must—contract the hedonistic "passion" pervading society. Much of our consumption pursuit is identified with the single-family house now promoted by all groups: political, financial, real estate, commercial, the auto industry, road builders, appliance and furnishings manufacturers, public utilities, etc. The single-family house is the most consumptive and the most ecologically pernicious invention ever.

- Reality being what it seems to be in its laws, tempo, and the dimensions of the planet, the growth from 5 to 10 billion people makes mandatory a drastic frugalization of the American Dream. There is also the question of equity that is not going to go away, no matter how temporarily fulfilled we might expect to feel in pursuing our materialistic heaven.

Let me illustrate my point with the following; and this is not meant to be exemplary or virtuous. It is simply what the "territory" of Arcosanti, the prototype for the frugal alternative, is.

My residence-atelier at Arcosanti measures about 600 square feet. It is more or less typical of the other 40 or so residences on the site. What applies to it applies to the other residences.

Here are the time gaps (walking) separating me from the people and facilities at Arcosanti: 15 seconds to the offices and drafting room; 25 seconds to the greenhouse or library; 35 seconds to the Music Center and Amphitheater; 45 seconds to the residences-ateliers surrounding the Amphitheater; 45 seconds to the "store"; 45 seconds to the meeting spaces and south garden; 45 seconds to the wood and metal lab; 1 minute to the swimming pool; 1 minute to the ceramic studio; 90 seconds to the foundry; 90 seconds to the café, the bakery, the gallery and visitor center; anywhere between a few seconds and 2 minutes to the other residents (about 40 people); 4 minutes to the Minds Garden and the north rim of the Agua Fria River; 5 minutes to the orchards, vegetable gardens, camp, and Agua Fria Canyon; 9 minutes to the viewpoint on the rim of the south mesa.

All of this, though far from depicting a full-fledged urban environment, is nevertheless indicative of the necessary orientation toward a more frugal, less segregative, and more effective way of conducting our human affairs.

Arcosanti . . . an urban laboratory in the making . . . the appeal for a frugal commitment so as to induce a more equitable and sustainable development of the human experience. (11/25/95)

Arcosanti . . . a neomonastic experience. Economically speaking, the "vow of frugality" is an equivalent to the life experience of about 5 billion people. (3/24/97)

2

When it comes to information, that is, the yet-unprocessed knowledge, we can see why space and time are easily an obstacle to efficiency. The greater space and time are, the more sluggishness impairs knowledge and action. That is why living nature has turned time after time to an unbelievable compaction of events—that is, toward Miniaturization—in order to sustain its evolution and its liveliness. Such compaction is in the nature of Complexity. The vehicle for Complexity is then Miniaturi-zation. For some strange reason, this bond of M and C, a true fusion of the two into one, has escaped our thinking. The inability to perceive this fusion has deprived our minds of a normative instrument and of inexhaustible guidance.

The fact is, the hinge where "physical" matter becomes life and Mind has a pin. The pin is MC. The marvel does not stop there. The more Complexity is forged via Miniaturization, the more "red hot" the hinge-pin combine is. It radiates more and more. Radiates what? It radiates consciousness, self-consciousness, thinking, acting, inventing, doing, creating, memorizing, etc. It radiates life. I call this treasure house Duration. Duration is the third agency in the MC paradigm I propose. In a way, MC is the cause, and D is the effect.

One can say that, in general, life is an implosive process developing under the guidelines of Complexification-Miniaturization, MC, and generating the radiance I call Duration. In fact, by hyperextrapolation, one can propose the Big Bang as an explosion-radiation event (ongoing) and the Big Crunch as an implosive-radiance event (hypothetical in a remote future). Mind is the radiant event.

The nonexpedient reason why we need to abandon the American Dream is that life is a congregational (gathering), implosive phenomenon, not a dispersive, segregative, explosive one. Therefrom the greatness of the second invention, the city. The two greatest inventions of our species, besides speech, are the invention of love and the invention of the city. (5/20/93)

3

MC is at the core of life. Suffice it to point out that the brain is a hyper-Complex, hyper-Miniaturized organ cast within an incredibly MC organism, a human being. Without the body-brain "combine" there is no mind or life. That is, in biotechnological terms, without MC there is no life and no Mind—no Duration. In technological terms, without MC there is no microchip, no computer, no virtual reality, etc. . . .

Why hinge and pin? Because at such a critical point where Mind-Duration, this "ultimate stuff," is generated, reality takes an "independent spin" away from the constraints of space and time, away from probabilism and determinism. It is the independent spin whose sum total is the past of life's evolution.

What is one of the normative lessons of MCD? It throws a realistic light on suburban sprawl and unmasks its "unavoidable" nature: a pernicious undoer of life. Suburban sprawl is a mega-turization process, and consequently it is the nemesis of MCD. If we consider that suburban sprawl is:

1. the ultimate, optimal, necessary habitat for hyperconsumption-gratification; that is,
2. it is the connective structure for the consumerist ziggurat;
3. it is the undoing of the biosphere; and
4. it is the demise of Homo sapiens' best gifts.

Then we must face the consequences of ignoring reality and its workings. We can only offer lame excuses for our extravagant behavior.

Whenever the MCD injunction is ignored, a breakdown is imminent. In the mounting tide of consumption-gratification and among the mechanisms of life's demise is the

automobile. It couldn't be otherwise. The automobile is the product of gigantic technologies; it is a gigantic technology in which the car itself is only the tip of the iceberg. A price far out of sane boundaries for a purely logistical device: moving things and people to and from thresholds of action. The no-man's land separating and isolating such actions is a direct intrusion and imposition from the very machine invented for the reduction of space-time, the car.

No magic machine—and the automobile is one—is worth the sacrifice, the suffering, the destruction that 5 or so billion of them (and the hidden icebergs) would do to the Earth and its dwellers. The automobile must be eradicated from the urban context and given to exo-urban activities like leisure, tourism, sport, special tasks, etc.

The wrongness of the automobile is self-evident: the more life wants to focus itself, the more gridlock is generated by the gigantic nature of automobile logistics. There is an unresolvable incoherence between the ephemeralization of reality via the Miniaturization of space (brain) and the sprawling of life made necessary by the wrong logistics promoted by the automobile. (3/8/99)

4

It is becoming more pressing, day by day, that we attune with the doings of nature—not the romanticized "Mother Nature," by the way—and seek to steer our power of transformation in the direction of coherence with the reality of the mineral-astronomical cosmos with its laws, the biological phenomenon grafted in it and our emergence from such phenomenon.

The universal paradigm of MCD is unerringly at work wherever life is at work. To go against it is a sign of insanity.

We are masters at figuring out how things work and how to do things. Our technological prowess sweeps us off our feet. But this "knowing how" married to expediency (80 percent or more of what we do) and disconnected from realism is the surest road to self-destruction. The road of doing better and better the wrong thing.

Two examples: the gun and suburbia. From their respective origins: a metal pipe haphazardly spewing metal fragments, and a dreary post—Second World War Levittown. To the slick killing machines of today and to the affluent "Broadacre Cities" of a well-honed territorial perversion.

Given the population growth and the MCD nature of life, reality seems to suggest that now, NOW is the time for transcendence—that is, for a shift from gratification to radiance, implied in a conversion from the megastructural segregation and isolation of suburbia into the ministructural intensity and awareness of urbis, of the urban condition.

We belong to a limited ecosystem, the planet. Within such confines, we must do our best and do more with less. (2/8/97)

One can propose two opposite trends: Trend one, four or so eons long, the Urban Effect induced by MCD, which is instrumental for the evolution of life. MCD is a genesis instrument.

Trend two, recently emerging in part via the Western technological revolution: the consumption-gratification-

Civilization was the invention of cities in an almost runaway mouth to tail cartwheeling of the Mind and the toil of generations succeeding generations. The Urban Effect is not really the invention of man from zero point. All organisms are Urban Effects, the unbelievable coming together of the Miniaturized and the Complex. Man as a hyperorganism is the coming together of trillions of events, all spatial by the way. (3/9/99)

unlimited Utopia.

Consumption-gratification is a counterevolutionary instrument. It is a nemesis instrument.

The sooner the conservationists and nature lovers understand that the reinvigoration, if not salvation, of the environment is totally dependent on the generation of splendid cities and the demise of the suburban diaspora, the sooner we will be able to begin in earnest the development of the third millennium.

There is no solution, not to speak of transcendence, of the man-nature conflict outside the creation of breathtaking cities. It is as simple as that. Why? Because such cities are coherent with the rules of the living via the MCD paradigm, and as such they are the most frugal and rewarding response to our longing for fulfillment.

8

For the Fifth International Architectural Forum

Prague Statement

NOVEMBER 1989

A.

From conception to death, each of us is a consumer, which means that each of us partakes in the transformation of reality and, closer to us, the transformation of the ecological balance.

Consumption by the soon to be 6 billion people is thus the very massive inertial wheel spinning and carving into the capitals of the planet. Part of such capitals are the vegetable and animal kingdoms.

In view of this, about thirty years ago, I proposed that a condition of *relative poverty* (and I must emphasize the word "relative") in U.S. terms is a realistic condition to endorse and live by. This is to be practiced out of free choice, not out of a mandate from above (or below).

As one could have guessed, the label *relative poverty* found no resonance in a society driven by marketplace canons. So after some years I adopted the word "frugality." But to no avail. Society was unwilling then and is unwilling now to respond to the implications such a proposition presents. That notwithstanding, frugality has been my password ever since.

At Arcosanti, the modest urban laboratory we have been developing for the past twenty years in Arizona's high desert, we have been and are trying to practice what we preach. I propose now, as I have been doing for thirty years, that frugality might well be the only *universal* and perhaps *sufficient* response to the planetary crisis we are generating.

At the very core of the crisis is the ethical vacuum many of us live in, and within the vacuum, the suspended dilemma of equity and worthiness. We are, ever so slowly, realizing that societal equity cannot be separated from ecological coherence, and that for both the time schedule measures not in years but in eons.

Two examples illustrating the predicament of consumerism:

1. Consider the "Home Sweet Home" American Dream; once extended to the whole 6 billion or so people of the planet, the "dream" will bring about 2 billion single homes with, among the paraphernalia of equipment and things, 4 billion automobiles and related services.

True equity, that is, total equity, given the nature of reality, can only be retroactive. I call it the self-revelation of reality. (2/23/99)

Arcosanti is primarily engaged in habitat, the physical reality we invent to shelter ourselves and our activities . . . (4/4/99)

A congested civilization is by physical laws a civilization of gigantism, as our so-called cities testify. The Phoenician metastasis of 1 million or so occupies 400 square miles of desert, and is "growing." Such gigantic pseudostructures are logistical nightmares, wasteful, pollutant, and segregational. There is no evolutionary coherence to be found there. The delusional "well-being" is draining away the core of the best gift we are in the process of creating for ourselves and for the reality we come from: the animation of reality. (3/10/99)

That would not be frugality; it would be the nemesis of life and nature as we know and cherish them now. So the dream promises to become a nightmare, with suburban sprawl as the more than willing deus ex machina.

2. If 800 million or more Indians were to become consumers (American style), the gross national product of India would increase thirty times over. The 800 million or more Indians would impact the planet as if they were in fact 24 billion additional people to house, feed, and satisfy. Twenty billion Indianlike consumers would fill an additional 2,000 Calcuttas of 10 million people.

"Consumption unlimited" is thus the real enemy, and, as it has been said, the enemy is us, us, the compulsive buyer pursuing happiness via hedonism, if not downright materialism.

Advocating *relative poverty* from a peripheral position, so to speak, in the 1960s, I find myself now in the mainstream of the human condition dilemma and an adequate response to it. But society seems still far from realizing the gravity and complexity of the present predicament, since, as individuals, we seem to be unwilling to become responsible for our actions; the bed of the mainstream seems pretty dry.

Yet the imperative of frugality is a glaring light in front of us all. It is up to us all to be responsible and respond, or to ignore its call and pay the consequences. That is to say, our children will pay the consequences. A grave and perhaps tragic prospect.

To participate in, to design, to build suburban sprawl is to go by the ethics of wrongness. To live in it forgoes any honest pretense of environmentalism. I am an environmentalist, or I am a suburbanite. I must choose. I cannot be both. (1/10/97)

Unhinge fulfillment from consumption. Seek the lean and effective by peeling away the mediocre layer one at a time. Put understanding, knowledge, and awareness on the priority list of consumption. Seek discovery and creativity away from fakery, flakiness, and fashion. Nothing less will do since hedonism is the incline that discharges into irresponsibility and parasitism. (8/27/93)

One of the worst punishments for our children: the constant, unrelenting hammering of the market, ads and all. (2/12/00)

B. Presented

I want to express my profound dissatisfaction with this conference for the lack of serious consideration about the perils of consumerism. Suffice it to remind the delegates that the climatic changes in store for the planet are *directly* tied to consumerism, and the consequences could be catastrophic. I feel the conference has played on the fringes of the real predicament of the human family and consequently has been in large measure an exercise in self-deception.

C. Not Presented

Apropos of Social Justice

Like it or not, the core of the question is not justice. *It is coherence.* An "incoherent justice" is not justice at all because it forecloses the future and is therefore self-contradictory. A dead society, or species, is not a just society or species. It is naught, pure and simple.

An "injust" coherence tells us that reality is as yet hardly

dealing with the human phenomenon. The food chain is not just. It is opportunistic, "fitting," coherent.

Coherence is process. It is of the context of transformation-evolution.

Justice is an ideal whose Utopian character is easy to understand. As such, justice is an *end* whose advent is defined by the word "end" itself. There is no end before the end.

Therefore, there is not and will be no *justice* but the longing for it and for a remote possibility of a coherent transformation of such a kind as to embrace and transfigure all the victimization brought about by a probabilistic-opportunistic reality in time-space—that is, the all-comprehending metamorphosis of it all.

D. Not Presented

About the misuse of words: The words I refer to are "in scale" and "megastructure."

Since single-family homes are unavoidably generating *flat megastructures*, like Los Angeles with a 2,000 or so square-mile megastructure, the single-family home is out of scale. It is dehumanizing society, depriving it of the access to the civilizing and culturizing elements that make human history.

Two-dimensional structures like those of Los Angeles and Phoenix are gigantic mistakes damaging both society and the environment. They are for nemesis, not genesis.

The semantic imbroglio over "mega" and "mini" is indicative of the conceptual confusion being fostered year after year and denouncing perhaps a degree of intellectual dishonesty on the part of environmentalists-transformers, the likes of which we are in this congress.

We have no rivals, at least in this solar system, in manipulative power. Now at the edge of alchemy, making something into anything we want, we must attempt to work out desirability, not only for political correctness or historical fitness, but for the evolutionary coherence where our "salvation" ultimately is.

In this inescapable prospective, the realists of the day become brittle practitioners. Practical man is playing ball with the delusional, and reality is not even aware of the drama developing in her bosom. (6/17/99)

How can we recognize the road to coherence? By seeking, by evolving a better grasp of evolution in toto and of human evolution in particular. In its grand lines such evolution seems to be relatively clear and most telling. One single telling fact of human evolution is that it is doused in opportunism, the very same opportunism guiding vegetal and animal populations. Opportunism transferred from populations to individuals is the blessing and the curse of humankind. (6/20/97)

9

For the Center for Respect of Life and Environment

On the Land Ethic Project

AUGUST 1991

At the center of the hurricane is the ominous quiet generated by the fury encapsulating it. The Land Ethic Project reminds me of that. The eye of the proposition is strangely depressed. It seems to propose that, all in all, the biosphere would be better off if we, Hominidae, were not (didn't exist).

Since we exist (become), the biosphere has to do, while we more and more seek ways that will be gracious, cooperative, self-effacing, and apologetic for the well-being of reality whose misfortune is Homo sapiens sapiens. As a repentance moment, a momentary atonement for our callous, arrogant misdeeds in the evolution of the planet, this attitude might be the right one—honorable, subscribable. As a normative, final one, it is to my knowledge a desperate, betraying one.

I say this because, from my perspective, life's aim—if one will ever concretize—is not to keep the eco-niches strong and healthy, period. The aim of life is to keep such strength and health for the purpose of generating more consciousness. Why? Because only consciousness has the admittedly remote chance of "salvaging" not only itself but the whole living kingdom here and elsewhere. But, by the way, for this to make sense—a glorious sense, by the way—one cannot escape the notion of a "Second Coming."

This glory of a Second Coming might very well be exclusive, since there might not be any other possible denouement within which all the due is given to all the partakers constructing reality. Short of such recall (Second Coming), for each maggot, mushroom, or greyhound, the wiggling, the swelling, the running through life is to pass on the little magic bundles of knowledge for which wiggling, swelling, and running are joyless, inconsequential distractions. Millions, myriads of those "passing on" in the immense thickness of time, pleasure and pain, joy and suffering-incidental. On and on and on . . .

And the miracle of the biosphere slowly emerges from the stones, the waters, the sedimentations of matter under the shower of energy from "Father" Sun. For the glory of what? Of whom? Life? God? My cousin?

For the glory of something or someone perhaps, but not for the builders of the miracle: the maggots, the mushrooms, the greyhounds, my cousin. They, hypermyriads of them, just nothing but disposable instruments!

My cousin, for one, does not like to be a disposable instrument for miracles. She in fact hates such a notion if her Becoming has been flawed by pain, suffering, inequity, anguish . . . Think of the quasi-infinite number of "those" gone for the food-chain glory!

Is there any possible escape from such immense holocaust? Means upon means upon means, eon after eon with no hope, no resolution, no true glory? A Second Coming might well be the only resolution—that is, the recall of the past down to all of its most "insignificant" details and the experiencing of it all by our acquaintances, the maggot, the mushroom, the greyhound and my cousin—no longer only as forgotten means, but also as prodigious ends.

The eye of the storm you are in with the Land Ethic Project is quite oblivious to the prodigiously large "volume" of inequity contextual to the landscape of reality. As a consequence, the eye is at last wanting in significance. The biosphere minus Hominidae or a similar kind of consciousness will never make it on its own. At most ("best" is not in the dictionary of opportunism), the whole, massive time-elongated biomass will turn out to be a puny memory in the zero-consciousness of a dead planet betrayed by a tired Sun-Father.

The conservators, the stewards, the nature lovers, the Earth First! haters—all to be party to the deception of the millennium. Mark my words, shortly but never too soon, the environmentalist movement of our generation will be looked upon with scorn, or perhaps anger.

The betrayal of mankind, hidden in the nature lovers' gurus and their epigones, is automatically also the betrayal of nature, the savage probabilistic-opportunistic reality from which we come. Only Mind (consciousness) has the remote chance of "salvaging" ecology from the fated death of the planet, certainly not the lily or the tiger. The true environmentalist is the humanist; otherwise he is for the nemesis of consciousness—the mind, the most precious jewel in the crown of Creation.

My participation in your noble effort is only possible if I can voice my anxiety about the void in the eye of the storm. Mind you, I was a "qualified" environmentalist long before many of you were born.

The sun was very orangy and very large this morning. If we really must worship something, we might as well worship it. If it turns off for just a few hours the planet, its surface, is in trauma; a few days in coma and life turns into icicles and popsicles. At God's pantheon is pandemonium. Who among us could do such a thing is the indignant question. By then the whole planet's surface is an ice-skating sphere. I know, I know, the gods are at the switch. Do not tell. They might themselves turn into god popsicles, god icicles. Life went on for eons without worshiping the pantheon crowds, but ho, ho, god sun was there night and day to nurture it, making some of itself into it. Sun god, thank you. (8/17/00)

10

Hyper Building

1996

As we head towards the twenty-first Century, we have started to seek an urban architecture that will support a new era.

To understand what will be expected from the cities in this new era, we may well look to personal demands in addition to the perspective of both Japan and the world. It is important for us, therefore, to discuss an ideal lifestyle and the environment that cities should provide to support such a lifestyle from a broad perspective and to build our dreams for the future . . .

—Jotaro Takagi, Chairman,
Hyper Building Research Committee

The Hyper Building Research Committee was established in December 1994 as a joint research organization composed of 93 corporations . . . with the support and cooperation of the Ministry of Construction. The secretariat is established at the Building Center of Japan.

"Hyper Building" is a long-term structure with a lifetime of 1,000 years; with an urban function based on the assumption that it have a height of 1,000 meters; with a total floor space of 1,000 hectares; and a high population density, as it will be used continuously by several tens of thousands of individuals. (Hyper Building Research Committee, symposium material, Japan 1996)

I don't think we can be historically correct if we cannot be evolutionarily coherent. (5/12/96)

The migratory populations of the next millennium will be in need of never-before-seen enclaves for living, working, learning, producing, playing . . . geographically anchored down but radiant from the core to reach beyond territory and physical presence. (3/25/96)

The Quartet in A (Arcology) Major

Preamble

To enhance the notion of process (evolution is process), I am presenting the Hyper Building as phase one of a development whose goal is the establishment of an urban settlement for about 1 million people in a sunny desert region.

This would be achieved by the construction of three additional Hyper Buildings. If one Hyper Building were to succeed, there would be tangible financial advantage in "cloning" it with improvements experience would suggest.

I must make clear that the proposed design is in its conjectural stage: one kilometer square by one kilometer, to be precise.

If the conjecture turns out to have merits, serious work could be contemplated to move into the feasibility stage.

The Hyper Building

The Hyper Building is a one-kilometer-high tower surrounded by a double set of concentric exedrae. The exedra is a semicircular edifice that can host a large spectrum of urban activities. Tower and exedrae are not separable.

1. The present outline ties together the many facets of the design. The guiding idea is: *the focused vis-à-vis the scattered*, or geometrically speaking: *the radial versus the orthogonal*.

While the orthogonal is neutral, the radial implies center, radius, and circumference.

The tower is at the center; the radial is the stage for the horizontal mobility. The circumference is made of two multilevel exedrae.

2. As just mentioned, the items I am about to state briefly are laced by a continuous thread (precedent-consequent). The items, in order of appearance, and in their heterogeneity:

People	Self-Containment
Female/Male	Nature/City
Urban Effect	Identity
Pedestrians	Democracy
Sun	Urban Laboratory
Symmetry	Logistics
Garments	Terra
Focalization	Emergence
Third Space	Frugality

Miniaturization-Complexity-Duration

3. *People*, we, are around thanks to the female/male sexual differentiation. Eros has been the constant drive in the species. This providential obsession is inscribed and described in the human habitat and the arts.

In an analogy, the tower stands for the lingam, the male; the concentric exedrae stand for the female, the womb.

The interpenetration of the two generates the "fecundity" (complexity) of the city, guarded, so to speak, from intrusion, the otherness of nature that comes wavelike to break on the shoulders of the outer exedra.

The female/male analogy points to the potential richness of the Urban Effect developing at the many physical levels of the Hyper Building, unencumbered by the unfriendly automobile mode.

4. The *pedestrian* has full sovereignty, enhanced by elevators, escalators, moving sidewalks, electric conveyances, and bicycles.

5. With the *sun* as prime agent, the design shows a north-south plane of *symmetry* coherent with the same plane of symmetry defined by its daily and seasonal trajectories.

Implode around the lingam, which stands sterile and pathetic in all its diverse versions around the world, a womb of complex and intense events. (7/3/96)

We might be on the road to self-extinction in a mix of opulent void and the inception of silicon and postsilicon intelligence, but tribal nostalgias will do nothing for us. Cities built civilizations. Let's build even better cities. The biosphere is begging for them. They are its salvation. The do-more-with-less, the lean credo. (7/27/00)

6. Since in the multistory structure a great variety of activities are juxtaposed, the structure becomes a stratified sequence of *focal* points. In a flat grid they would necessarily be scattered, therefore the gigantism of the traditional habitat.

Such focalization has virtues that must be acknowledged and encouraged. (Life's virtues, by the way.)

In the dynamics of life this implies a sort of three-dimensional, 24-hour frequency pulse. Residents and people outside the Hyper Building are attracted to and released from those juxtaposed focuses on such 24-hour cycles.

An "automatic" consequence of this current-countercurrent flux is radial-circumferential geometry. This in turn defines the enveloping character of the exedrae, differing greatly from the "indifferent" character of the orthogonal, flat grid.

7. The sun's presence and the *garments* the exedrae are apt to wear in response to the sun's trajectories and seasons strongly suggest that the mentioned radial, horizontal geometry also be found on the vertical. Consequently, the exedrae lean toward the vertical axis of the tower, thus also favoring the garments display.

The garments are (greenhouses) transparent or (parasols) opaque membranes according to the season. They stretch from one exedra to the other and they drape portions of the south side of the tower.

8. A series of concentric exedrae will define a *third* set of spaces between the indoors and the outdoors.

This third kind of space via exedrae and transparent or opaque garments can modify and moderate the temperature, light, wind, and rain. Spring and fall equinox could be moments of ritual when the garments go from transparency to parasol and vice versa. The winter greenhouse mode generates large volumes of warm air.

This change would also change the perception of the cityscape. Sensations, perceptions, and emotions would converge toward seasonal pageantries.

9. The *self-contained*, three-dimensional landscape of the city marks a clear distinction between *nature* and *city*, while putting nature and the "feet of the city" within walking distance for residents and guests. Nature is also very visible to horizon's end from the many levels of the city and from moving escalators.

. . . the pedestrian reemerges as the self-propelled person cutting equipment, energy, and time needs. (7/26/00)

The *identity* of the city, whatever originality it might develop (complexity), would have a powerful signature in its physical structure.

10. Since *democracy* is and will remain for centuries to come more a dream than a reality, the Hyper Building will contain in its stratified focuses a stratification of social, cultural, economic, philosophical and ethno-racial groups.

Avoiding violent *conflicts* will take a lot of knowledge, experience, planning, tolerance, and hard-to-come-by wisdom, not to mention large infusions of wealth.

A generous and positive attitude by the citizens toward this *urban laboratory* could produce an Urban Effect of an enviable and germinal kind.

The noble imprint of the city would be in its complex dynamism and its active tolerance.

11. The *logistics* of the city will be carried out on three parallel planes: for people, freight, and utilities. Transportation to and from the city is via regional-continental mass transit (linear-motor). The main terminal is on the northeast side of the Hyper Building.

Plugged into the network are also the three main "terras" with their construction yards at different levels of the tower.

12. In case of *emergency*, the evacuation of the tower will be mainly via an array of escalators and slides leaving the tower at intermediate levels to land and ground level within a 500 meter radius circumference, "draining" the tower of its dwellers in a matter of minutes. The heliport on the roof of the tower would also be an important evacuation facility.

13. The miniaturized and complex environs generated by the Hyper Building define *frugality*, the same frugality impossible in the scattered mode of suburban sprawl now embraced by hyperaffluent societies. The hyperproduction-consumption cycle demanded, mandated by suburban sprawl, besides clouding minds, is dotting the landscape with ever larger mountains of waste and pollutants.

Frugality is the vessel for interiorization, and life, the whole of it, is interiorization. Materialism is the nemesis of frugality.

14. It might be suggestive of the Hyper Building's long-range intent to point out that an impending ice age would make the arcological mode of the Hyper Building into an imperative because extremes of cold and bleakness demand extremes of compactness and cooperation (MCD). The same is true for space. The survival of the species would then be consigned to arcologies, *of which the Hyper Building is one.*

The environmental dimension of learning (as a child watching horseshoeing in the stable for hours: noise, smoke, smell—a glimpse into the What, the Why, the How, in a small space-time capsule). The opacity of learning in environmental segregation: zoning. (6/17/93)

Both Hyper Building and Arcosanti are willy-nilly urban laboratories. In them the whole spectrum of private-public life is put to the test within the experiential novelty of a different habitat for different historical-evolutionary times. (2/17/96)

We need conversion in people to generate the lean society residing in the lean habitat. (5/23/00)

The MCD in all of this? MCD in all of this!

The brain's superb miniaturization of its architecture, the "vibrant" geometry. The unimaginable Com-plexity surging from such architecture. The durational indestructible presence of its memorizing, adding past upon past in the construction of reality in Being. (6/18/97)

Homo erectus via wood, fibers, bones, clay, and fire has the first taste of becoming Homo faber. Via hundreds of thousands of years of experience, hands, larynxes, and brains in synergy evolve into Homo sapiens. With it, the How begins to shows its magic tool and magic kingdom. (3/19/96)

11

The Wheel and the Goddess

Nature and Art

SEPTEMBER 1987

Early man was burdened by the immovability of things. Moving rocks, trees, carcasses, people, etc., was fatiguing and often impossible. Rolling things, if things could be made to roll, was the system that contained an answer. One fine day a lad or a maiden with sufficient skill in abstract thinking had the idea of pinning a nonrolling object to the center of a rolling object. A plank, a stool . . . the wheel was invented. Eventually, this revolutionary technology spilled over into cosmological and religious constructs. Thus, within the anthropocentric context, the wheel revolutionized both heaven and earth.

So it is Techne all the way, be it the probabilistic Techne of the subparticle domain or the sublime Techne of a Bach concerto: how reality is reconfigured by the resources it has generated via reconfiguration. (2/9/97)

The pin-hub became the catalyst for all sorts of fanciful and dreadful hypotheses. Around the pin-hub turned the wheel of fate stoked with all sorts of chimeras. Passions and rages could be made tangible (to the mind's eye).

But, in fact, the inventors had been after the alleviation of toil and, if possible, more money in the bank. Perhaps better food for the family, perhaps a larger portion of a fermented beverage in the evening for his/her aching body.

WHAT IS THE WHEEL, THEN?

IT IS A TECHNICAL DEVICE GENERATED BY OPPORTUNISM.

But even in those early ages there were other kinds of wo/men milling around in the tribal crowds. Distressed, passionate, questioning, driven, dreaming, thinking, feeling: the anguished kind. They did not invent wheels; they scratched cliffs or the skins of their kills, chipped stones, painted caves or their kin. Images in the image of what? Well, when not nonfigurative, in the image of living things, among them "fat ladies." More passion than fancy in this; perhaps a passion tied to the mystery of life, to fertility and most of all to Eros. Those people were "artists" with their anguish resolved for the occasion into the esthetic.

WHAT IS THE STONE GODDESS THEN?

IT IS AN "ART OBJECT" GENERATED BY ANGUISH.

The lack of a final explanation is the Mistero Tremendo and the anguish intrinsic to it. (1/20/94)

Nature-Technology-Art

Then there is nature. Yes, the BIGGIE.

As the clever lad-maiden invents the wheel, so nature (and for eons past) invents itself step by micro-mega step. Techne is the ubiquitous manipulator in the whole and in the detail, and art is not exempt from its active presence.

So one can say that inventors (wheel), creators (stone goddess), and nature (itself) have at least one thing in common: they depend for their exploits on Techne. How else? The very nature of things is per se Techne—that is, transformation. Try to imagine that for a brief moment reality stops ticking away, stops altering itself. Time would vanish (and space too).

Reality in Being is timeless and necessarily technoless.

Reality Becoming is time-driven and necessarily techno-transformed.

One consequence of the above is that the nature of the deed is defined by the mindset of the generator and not by how the stone has been chiseled away—that is, not by the kind of skill applied and the kind of tools used. And also not by the content of the work. The inventor will carve an "operational" stone wheel; the "creator," a wheel of fortune of sorts. The creator will carve the stone goddess or, as a much lesser one, the winged goddess for the automobile hood. Nature in her quasi-infinite clowning has done and is doing the preparatory work in both the generation of stone and the generation of minds and hands shaping the wheels as well as the goddesses.

What if the product is not the wheel or the stone goddess but "COMPUTER ART"?

Without considering the impact of innovation-euphoria we cannot shed light on such a question. Those who work on "computer art" are not under the spell of the Mistero Tremendo as much as they are under the spell of computer magic. And understandably so. Creation comes about when a post-technical attention sets in. The Mistero Tremendo is a demanding master. It demands full attention.

In this age of constant innovation we produce numberless investigators and inventors. The dearth of creators is explained by the overwhelming power that innovation has and the (technical) euphoria it generates. In the second- and third-generation crowds of inventors, we will be able to find the beginning of a creator's renaissance (a wish only?).

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The bulk of the Internet is noise, a demonstration of MC when the "medium is the message." At the other extreme is the instance where the medium has "vanished" because of the formidable power of the message. Bach's well-tempered clavier, Piero della Francesca's portraits, Omega Seed . . . (9/20/95)

So What of Nature and Art?

The diaphragm between nature and art is the anguish besetting the species. Where does such anguish come from? It is there simply because we are self-conscious animals. Such is the nature of reality and the nature of wo/man. S/he cannot

escape or resolve the "Mistero Tremendo," therefrom the residual anguish.

Whatever comes from us is, one can say, nature itself but filtered by the diaphragm of compassion and inequity that is in the nature of wo/man. The warp of the diaphragm is the structure of knowledge (see science and philosophy) that differentiates nature from culture.

Those more sensitized to the human predicament have somehow four choices:

A. Turn to God (as one of the hypotheses to consider).
B. Become the resigned but noble workers for mankind.
C. Give up by living an opaque life (or committing suicide).
D. Metamorphose anguish into creation.

Nature—reality—is the Mistero Tremendo. The avenues of science, philosophy, metaphysics, and hedonism are not capable of abating the last residuum of anguish, as if it were a polished sphere impossible to get hold of and forever nested in each of us.

What the artist does is to chip away infinitesimal specks of reality and transfigure them into specks of divinity. As such, for a fraction of reality but forever, the metamorphosis from nature to Mind is a fact. The art object, then, poems and sonatas included, is an end unto itself, self-significant and nonobsolescent.

These qualifications should be universal; that is, all events generating from reality should be, or become, self-significant and not obsolescent—ends in themselves.

THEN A SUCCESSFUL AND CONCLUDED COSMOGENESIS TURNS OUT TO BE AN ESTHETOGENESIS.

THE ABSOLUTE, AS THE SUM TOTAL OF ALL ENDS, IS THE BEAUTIFUL.

The esthetic . . . converts the idiosyncratic into the "universal." (3/10/87)

Lift the eyes to reality, the cosmos, and try to be engaged in it. There isn't any other way. The only worthy local action is the one that ends in resonance, in the awareness of what we are in as a species, as life, as consciousness, as grace in the making. (11/5/98)

12

The Third Millennium

Necessity and Sufficiency

MARCH 18, 1993

Slow down and ponder could be a good slogan for the first steps into the next millennium. (3/10/99)

1

Given the confusion and anxiety arising from the enormous load of exponentially growing information, it seems desirable that some sort of priority scale be proposed. This may help in positioning the human condition within the planetary context. To this end, I choose a perspective that works around the "necessary and sufficient" proposition.

Necessity refers to means; sufficiency, to ends. My work addresses that which is necessary. What is necessary is not that which is sufficient.

For instance: The richest inventory of musical instruments (necessity) will never grant per se even a single good melody (sufficiency). But without instruments, vocal chords included, no music is possible. That is, music, any music, implies the existence of "fitting" instruments.

As I see it, the human condition is faced with two fundamental necessities. To emphasize their preeminence, I call them imperatives. They are:

- Sustainability
- Complexity-Miniaturization

I see the imperative of sustainability as expedient in the context of planet Earth. It could be proposed that sustainability might eventually become a non sequitur if and when intellect, science, technology, and wisdom push the limits of legitimate transformation-manipulation into ever receding horizons, the whole solar system horizon for one. So the imperative of sustainability is expedient and contingent, though no less of an imperative.

The imperative of Complexity-Miniaturization is ontological because it refers to the very nature of life, the whole of the living reality, from its beginning to the present. Outside of Complexity-Miniaturization, no living phenomenon can take hold because the very guts of any and all organisms are living proof of the immense Complexity "they are," and they can be so only because of the immense Miniaturization with which they come about. To ignore these facts is to forfeit the guidance necessary for coherent action. It is to take action from reality into Utopia.

The ontological nature of Complexity-Miniaturization

becomes apparent when we realize that Complexity-Miniaturization as means "automatically" spill over into ends because the critical consequence of Complexity-Miniaturization is vivification. Thus is the mineral made into the living and eventually into the conscious and the self-conscious.

The prodigy of such a metamorphosis is best perceived when we realize that a sort of Holy Ghost I call Duration emanates from Complexity-Miniaturization. Duration is disengaged from the constraints of space-time. Duration is made of memory, of recall, of postgenetic knowledge, of transcendence. It is the quintessence of the human experience. Duration as a sort of Holy Ghost in the trinity: Complexity-Miniaturization-Duration because it "comes from nowhere," at first "sotto species" consciousness, then in the Hominidae as self-consciousness. Self-consciousness opens the gates to good and evil and to the whole tide of mental agonies and glories.

It might be worthwhile to point out an analogy with Plato's Divine and Necessary Causes: In Complexity-Miniaturization-Duration, the necessary causes, the instrumentalizing causes, are the two inseparable agents of Complexity-Miniaturization. Duration is the "divine" consequence. Divine because it is the initial step toward a possible, if very remote, revelation of reality to itself via the yet very humble self-consciousness of conscious man: the specific radiance of Mind.

Note that while Complexity-Miniaturization spells hyper "concentration," a true implosion as documented in every organism, Duration spells radiance, the light of Mind reaching out to the very edges of reality. Quantum physics has to juggle with the quantum of light, the photon ghost; Complexity-Miniaturization-Duration has to juggle with the Holy Ghost of Mind, Duration.

According to the above definition of the imperative of sustainability and the imperative of Complexity-Miniaturization (enriched by Duration), any process that does not take into account the two imperatives simultaneously is automatically an ill-fated, short-lived process. It is pernicious indeed because it distracts us from reality and it robs life of the precious resources the nonliving and the living kingdoms offer us.

But working within the boundaries of the imperative is a necessity; it is not a sufficiency. It delivers means; it does not create the ends that are made possible by such means.

The two imperatives are means in search of grace.

How to generate love out of indifference. Only memory can have a go at it. A fully crystallized, pervasive memory: Duration. A memory that can pluck out of the past any episode, even the most cruel, and, by way of its knowledge, make it glow in the numinous light of a finally created all-comprehending grace. The luminosity of a posteriori grace, the equitable and esthetic singularity: The Omega Seed. (3/22/99)

I am trying to make sense of the eschatological drive we can find in each of us. The need of a conclusive meaning with which the whole of reality not only makes sense but also makes for a glorious, excruciating, astonishing, and graceful end. (11/5/98)

2

Is it valid to call the present a very special age? Are the facts taking the statement beyond the common presumption each

age has of being "The Age"? Perhaps so.

This is the age when, for the first time in the history of the Earth, a species is told in no uncertain terms that its own presence among other species comes into question unless its propensity for transformation-manipulation is, at least for the time being, severely disciplined, that is, curtailed. For instance, the adoption of the American Dream as a physical standard for the whole species spells doomsday for us all.

Unless the Dream is severely restructured, the future of the species is dim. This per se has no impact on nature because nature has, at last, no ethical worries. One living planet more or less is quite an irrelevancy, assuming wrongly that the demise of man would entail the demise of life.

"Progress," the one measured by physical transformation, appropriation, and use, is at present in question on at least two levels:

- the perennially present level of grace versus opportunism;
- the new level of sustainability versus unsustainability.

Or, in other words:

- the ethical level—culture;
- the environmental level—nature.

There lies the uniqueness of the present (human) dilemma. To the never-resolved flaws of inequity (human and "divine") is added the novel dimension of a very possible biosphere nemesis, anthropocentrically evaluated. Anthropocentrism is the only mindset, the only "field of experience" we have access to and deal with. Constitutionally, we cannot think independently from our (anthropos) thinking apparatus.

At this point in history, the human condition is so starkly quarantined from reality (the biosphere) that most of the (internal) quarrels we dwell on turn out to be quasi-frivolous—as if on a sinking ship whose structure is collapsing, we, fellow travelers, debate, get lost in what is going to be for dinner. Proletarian, black tie, vegetarian, crystal and champagne? Without the urgent restructuring of the ship, the future of dinners and diners will be short, and the few last diners will witness violence and cannibalism: the metaphorical and literal devouring of our own flesh. The whole spectacle of no concern to Gaia, our opportunistic maker.

How is our technological and technocratic culture going to cope with the ultimate curse of consumption-gratification unlimited that is fueling the engines of our industrial miracles?

The parochial "what is good for General Motors is good for America" has become the catholic, "what is good for unlimited transformism (matter into energy, mineral into mental, heat into electricity, oil into garments, corn into gaso-

The single-family home is the single most consumptive and segregational habitat we can conceive. The choice is clear. The single-family home and suburbia with it go, or we humans go.

And the biosphere couldn't care less. (8/27/93)

Eventually, Howness has to develop an ethics compass. (12/29/98)

line, sand into information, etc.) is good for the species."

To discriminate, to select, to prioritize, to do justice, to engrace, to beautify, to transfigure . . . from the dawning of the human experiment, human history has exalted and crucified man in the name of such agencies. The new dimension in the puzzle, the new agency, is the environmental injunction. The biosphere frontier no longer has the elasticity, the give of the frontiers of old. The giving, short of a true metamorphosis of reality (not to be dismissed), has to come from taming our aggressive expectations (now still a "Western privilege").

Equity and frugality ought to be the paramount agencies of the next millennium. The short supply of equity will make frugality into a bleak despot managed by a minority of brutal pseudosaints. The demise of frugality will produce a hedonistic tide for the "Chosen People," a glorious 15 minutes of celebrated irrelevancies crash-landing on the unforgiving and indifferent slab of reality.

We seem to incarnate a frenetic Howness in search (conscious or not) of a Whatness, which becomes ever so faint.

Unless such Howness is bridled by a still unavailable wisdom, things will get far worse before the trend is reversed . . . (8/30/97)

Through the ages we have generated an eclectic mechanism for human survival and for metamorphosis. It is called the city, whence civilizations. The cities (and towns), hybrid organisms as they are, correctly implement the project of "reality" sensitizations. All organisms sensitize reality inasmuch as they all are mass-energy/space-time converted into life and, with man, into consciousness.

As for all "organisms," the human habitat has to be coherent with the dictat that makes life possible—above all, the imperative spelled out by Complexity and Miniaturization. This imperative is the conduit, the only possible conduit known to life, for the "packaging" of information, interaction, dialogue, symbiosis, understanding, discrimination, specialization, anticipation, efficiency, metamorphosis, etc. in bundles ever diminishing in space-time: nature becoming culture.

It is in this very special conjuncture in the evolution of the planet that the Hominidae, via the urbanizing effect of Complexity-Miniaturization, have the chance of making their presence felt, at least within the solar system's domain.

But this presence will not amount to much unless we persevere in the Complexification-Miniaturization of present reality, the only possible avenue toward sensitization. The mentioned imperative ever-present in the 3.5 billion years of evolving life.

This means that consumerism, now willy-nilly destined for the entropic ashes wasteland, has to be converted—by the way, through a true ethical conversion—into a tide of sensitization.

Miser-miser-able-miserable, a tune to dance by or to scoff at, but then the miserable is the proto-esthetic in search of transcendence, the house of (aging) mirrors. Keep delusion out, please, please! (8/2/99)

The making of more consciousness, more knowledge, more wisdom, more creativity, more grace, more compassion, more generosity, more love, more beauty.

There is more than a touch of irony that it is the biosphere

itself in all its probabilistic, opportunistic splendor that has to teach us the ways of ephemeralization, which are the ways for salvaging first, transfiguring second the human project, and, more momentous yet, if perhaps more remote, the "stewardship" of the living phenomenon at large (a stewardship in the sense of a total recall in the most remote of all futures).

3

The (American-planetary) Dream sees the shopper-consumer not walking to the shopping center with frazzled paper or plastic bags. The Dream sees him/her in sedan, van, pickup, two of those per 3.5 people per household, converging toward the cornucopia. The to and fro of those vehicles will measure in miles, and the Dream confirms that the to and fro will be multiple. House—commercial center, house—production parks, house—learning enclaves, house—health enclaves, house—cultural enclaves, house—worship centers, house—recreational parks, house—transportation nodes . . .

This to and fro of 10 billion people in their 3–4 billion magic machines will grind the biosphere down if, aware as we must become, it means that for each person there will be tons of goodies produced, used, consumed, stored, recycled, discarded; each one the tonnage of a thermodynamically degraded bundle of mass-energy; each one in turn "dislodging," pushing around, space-time quanta. OUR space-time, our breathing living space-time, ours and of all creatures big and small.

The dream would collapse under the weight of its own folly well before the 3–4 billion drivers' seats reach the production lines. Mixed in the dust and the pollution of a collapsing Dream would be abundant misery and blood that "necessity" and greed, the primers of consumption-gratification unlimited, will sow on it with cruel largesse.

The obvious response to such a potentially collapsing Dream was invented long ago in the civilizing devices called city and town. It is sad many times over that those self-collecting organisms anteceding the automobile (which Los Angeles incarnates) are being discarded or quarantined.

Of the four major dangers confronting the family of man, demographic explosion, endemic inequity, "loss of grace," and consumption-gratification-unlimited, the last one is most pernicious because it is the one that directly plays havoc with the biosphere. The environmental breakdown denounces the consumerism binge for sabotaging the attempts to resolve all the other very human dilemmas.

The human problems of indigence, injustice, cruelty, violence, intolerance, bigotry, xenophobia, etc., do not themselves cause environmental disruptions. Nature is totally indifferent

Legs are for going places.
(3/1/00)

Consumerism is not only frivolous, it is critically pernicious. Under its spell we reach for the off-the-shelf virtues. Today a new blanket, tomorrow a new car, next a new kitchen work-saver, next a new media room, a new membership, a new home . . . Virtue upon virtue cluttering mind and soul, edging the trembling of the Becoming on a receding border of sensitivity. The hard-edged equipment of happiness constantly obsolescent and constantly asking for a price: coherence constricted and environment demeaned.

For virtual reality to become virtuous it needs to dislodge the consumerist appetite by delivering a simulated world of plenty as a valid and propitious substitute for the "real thing." The hard-edged equipment of happiness mentioned above.
(12/2/94)

to our human moral, ethical, political, and religious-esthetic hang-ups. It couldn't care less. But it is the consumption-production-disposal cycle that is the killer of species in general and eventually of our own species.

It does that on two counts: environmental collapse and the demise of humaneness.

A societal-economic-cultural nexus of 10 billion people endorsing the lean dynamics of frugality, intelligence, inventiveness, swiftness, and compassion would make for a far more modest impact on the biosphere. Since planning, architecture, and the filling up of the spaces they generate are evidently the bulkier, costlier, and matter-energy-consuming aspect of our demands on the environment, a coherent response is eminently architectural.

In this scenario, the city is the maker, suburban sprawl is the breaker. The spatially and functionally segregated house is by physical necessity the most consumption-demanding of all shelters. It consumes the planet like nothing else does. Emblematic of such greed is the automobile, the most gigantic and costly logistical system ever invented.

Our future and the biosphere's future are locked into the Urban Effect and its success. Outside of highly alive and "magnetic" cities and towns, both Homo sapiens and a biosphere inhabited by humans have no future worth considering. I refer to the bulk of humanity and to its cultural focuses.

The city implies Complexity and Miniaturization, the two imperatives for any form of life. Suburbia is the epitome of simplistic and gigantic agencies proposing or rather imposing the unraveling of the living into dissolution and death. Suburbia is a supreme consumption machine producing harsh conditions. We must choose between Utopia and reality. The choice will define the nature of our future (or no future).

How to avoid the fateful pitfall of guiding Miniaturization on a path that caters to technocracy (consider computer technology) is going to be the genius of the third millennium. But Miniaturization, the collected and the less consumption-oriented life, is the lens for both human spirit (Mind) and Gaia's health. Away from such concentration, Complexity is not possible and life/consciousness outside of Complexity is an absurd notion, as evolution well proves. There is no radiance where there is no "compression." The city is a cosmic lens of sorts—it radiates consciousness, and it is in view of such a Complexity-Miniaturization mode that the city can be a radiant phenomenon. The city of light.

The Japanese society, among others through history, had, and perhaps still has, at least vestigially, a splendid record of leanness and frugality taken to high degrees of sophistication. How to remain in the territory of such frugality while expanding into the magic kingdom of technology is the

It is the human kingdom where Miniaturization becomes mandatory, and not because our needs and our numbers escalate but because our needs are more and more identified with consumption, that is, the processing of ever larger portions of the earth. A sort of gargantuan appetite bent on devouring whatever falls into the hands-jaws of the hypertechnocratic engine. That is why gigantism has to be dismissed from our "ethics" whenever comparable results can be achieved by Miniaturization—see maglev vis-à-vis the automobile, see urbis versus suburbs, see microchip versus bureau (bureaucratic juggernaut).
(5/5/96)

prime task of civilization and with it the restoration of a damaged biosphere.

Population control and the frugal pursuit, via the Urban Effect, are the necessary if not sufficient gates to the future. All the rest, good and bad, is futile if not molded in such ways as to pass through those two gates. Therefore the imperative of disposing, the sooner the better, of suburban sprawl, the true culprit of consumption-gratification unlimited constructing the DREAM.

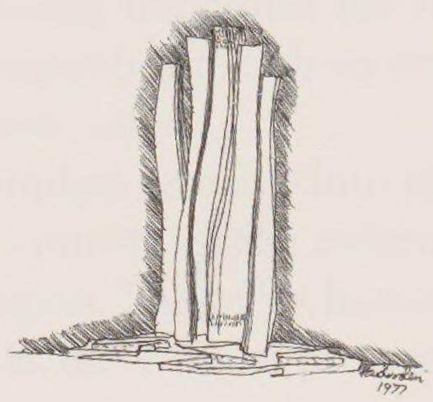
No more urgent problem, none, is facing us, us of the West in particular. Us, U.S. citizens even more so—the emblematic and performing consumer par excellence. History, perhaps even evolution, will be harsh with us and with our progeny if we persist in such a brand of DREAM.

The alternative, if we dare to label it so, is what comes down to the "Fortress America" syndrome. Utopian in feasibility and horrendous in ethics, it is a tragic possibility to contemplate. The family of man within the large community of the food-chain creatures has to prove that it is worthy of a prodigious future. A future that might even "astonish" reality itself (that would be the day).

Dignity and the esthetic then are the eminent domain for the third millennium. (3/25/99)

PART 2

Religion



It was formerly believed that if all material things disappeared out of the universe, time and space would be left. According to the relativity theory, however, time and space would disappear together with the things.
—Albert Einstein

From dust to flesh, from flesh to estrus, from estrus to eros, from eros to love, from love to self-revelation . . .

This might be the evolution matter is being forced into by the mind, the inventor of love.

This is the content of Religion.

Grassroots evolution is the methodology adopted by the Religion Hypothesis. The mandate-from-above methodology imposed by all theologies is not considered valid or useful.

All the beaches, all the mountains, all the galaxies of the cosmos do not feel an ounce of anxiety, but Mind, the beholder, will eventually feel a limitless anguish for such an immense presence denied of love, compassion, joy . . .

The transfiguration of such limitless anguish into radiance via matter becoming Mind is the context of the esthetogenesis of reality and is the task of Religion. The puny human phenomenon, carrier of the mind, is at the core of the process.

. . . . .

Mistakenly called religions, theological fires are again burning hot in many spots on the planet. Cruelty and blood-spilling, which are inseparable from them, are here as well. The forebodings are even more distressing. What is developing now might just be positioning theologies of different shades for the coming of the main event, persecutions going critical.

Theologies go hand in hand with intolerance and the violence it generates. Wait and see.

Beside the well-seated, ever present, but rarely acknowledged motivations that result from ignorance, fear, bigotry, and intolerance are new driving motivations resulting from the shallow conduct of current societies. Greed and hedonism, now rampant with the "haves" and seeking their place with the "have-nots," are, with those other motivations, conjuring a sort of powerful, materialistic, planetary wave.

The virtues of equity, tolerance, fair play, honesty, dignity, and generosity, not to mention compassion, grace, and mindful pursuits, are becoming rare and anemic. But while ethics and values are perishing, people do not find a secular alternative way of conduct worth the name. "Anything goes, because nothing is worth anything anymore," the thinking goes. It ought to be possible, perhaps imperative and necessary, to

present an alternative to this unholy alliance of religious vestiges, this theological salvation of many shades, and the actual, not virtual, ethical void. The pantheistic alternative, at least in its modern garment, will not do. The pantheistic concoctions of various flavors are as static and transfixed as the minds of the believers who are transfixed by the presupposed benevolence of a reality vibrating and groping after deliverance.

The agnostic and/or atheistic alternatives will not do either, perhaps because at last both are unduly, certainly discouragingly, pessimistic to the core. Both views say we had better take resignation and withdrawal as the only true wisdom and virtue. The most ethical standards of these alternatives and the most virtuous conduct practiced by proponents will not have impact or recognition. Nor will they bring the Garden of Eden. The pantheist and the atheist will have to satisfy themselves, the best of them, by being noble, desperately noble.

No serious consideration should be given to the "magic" but catastrophic technocratic materialistic pseudo-alternative.

I propose Religion, binding, as an alternative to the perniciousness of the theological fabrications and to the bleakness of noble self-immolation to no avail. But Religion's ultimate virtue and glory will come at a truly immense cost, the price demanded by a total cosmic metamorphosis engendered by Mind. It is an immense price because it is evolutionary, truly creational, and, to our still enormously limited knowledge and wisdom, astonishing.

This essay is an attempt to outline Religion, an eschatology. The hypercritical importance of this eschatology would be in the very fact of witnessing matter slowly, over 20–30 eons, "self-effacing" and leaving in its own wake the radiance of Mind, Duration. This is an ephemeralization to the point of "self-annihilation" produced by Miniaturization and Complexification carried out to "infinity," with the parallel emergence of an infinitely knowing postspace-time condition, Duration.

In this evolution, the hyperdense matter of the origin, the Big Bang, would be ephemeralized in a hyper-radiant Mind of the conclusion, robbing the Big Crunch of its probabilistic, deterministic "fate."

Such an astonishing conclusion would be imperative because of the investment life would be making in order to compel matter into a self-revelatory process. It is a process saturated with joy and suffering of unimaginable depth, a process clamoring for its own Second Coming so as to partake in the grace that only such an end can generate.

As contributors we all are means to a possible end. As participants we all must eventually be ends among ends . . . or else. We are both authors and actors in the Becoming. We

ought to be there at the End where Becoming ceases and Beingness is the self-revelation of the whole.

This matter-to-Mind journey is RELIGION, binding, no longer in need of theological constructions and simulations.

Premise One

Mind is the most important event developing within the Becoming of reality.

Mind, springing from self-consciousness, is the agent that could also make the whole of reality self-conscious. It could generate a self-revelation of reality in its own evolutionary totality from the first Big Bang moment to its possible Big Crunch last moment. In the absence of this virtue of binding all to all, reality will never become conscious of itself and will thus remain on the whole nonsensical.

Now we know that a physical event, let's say sand that becomes flesh and flesh that becomes mind, introduces within reality an absolutely novel and original presence impregnated with previously unheard of manifestations that are prodigious, suffered, and transfigurative.

Reality does not suffer before the emergence of life, and, since it does not suffer, neither can it enjoy, desire, or love.

The immense smallness of the mind within the immensity and the indifference of the Becoming, that is, the evolution of reality, gives the mind itself a tragic and heroic character from beginning to end. As soon as reality becomes conscious of the endless road to be traveled, the whole of it might become joyful, loving and esthetic. It is a journey of billions of years to the end of space-time, "at the end of time."

What will reality be: genesis or nemesis?

If the mind will be able to take reality to the self-revelational moment, then reality in toto will find the fullness of knowing itself and the fullness of love and beauty, an esthetogenesis.

If the mind is unable to take reality to the point of self-revelation, then reality will be a blind fury of self-annihilation. In such a nemesis there will be nothing before the beginning, the Big Bang; nothing after the end, the Big Crunch; and between those two extremes there will be a bottomless chasm of suffering lost to any hope.

Premise Two

Reality is a closed reality. It has a beginning, the Big Bang, and, presumably, an end, the Big Crunch.

The emerging of Mind reaching to the "four corners of the universe" with an anticipated self-revelation only possible at the very end of space-time would be impossible if reality

were open ended. The resurrection that self-revelation is would then be impossible, as impossible as the realization of the state of grace or Esthequity in full.

Ignorance, suffering, and cruelty would remain and would permeate a reality that is breaking up. Such a reality would be intrinsically nonreligious; it would be against the binding of everything to everything that is by definition a truly religious reality. Religion and eschatology go hand in hand. The eschatological aim is the success of a reality that is totally religious. A "religion" incapable of such cosmic binding is a religion eschatologically wanting and thus a religion of cosmic desperation with no end in sight.

Reality, matter that becomes mind, is matter that "suffers" such an implicit metamorphosis. If such suffering is incapable of producing self-revelation and with it the transcendence of suffering into "grace," then all suffering has no meaning. It is a senseless curse, total and bottomless; the glass is empty until it overflows.

Premise Three

By definition, the future does not exist. An existing future is no longer a future. The present is, instant after instant, a creational event.

The past is the Being generated by the Becoming.

The present is like a diaphragm renewing itself ad infinitum. It is the thinnest of all conceivable diaphragms. Such a diaphragm at the edge of chaos, at the "edge" of the nonexisting future, unrelentingly builds reality, that is, the past. Such building is creational and is the Becoming.

Reality can create the past only by way of memory:

the physical memory of matter,
the genetic memory of life,
the cultural memory of the mind.

The collapse of memory would mean the end of Becoming. The Becoming is the fruit of memory operating on matter (mass-energy) by way of space-time. Thus the Becoming, present after present, creates Being, the past. By transforming matter through the work of space-time, space-time gives matter the space to make the transformation and the time to do so.

The past is the only reality, and it is not erasable.

Succinctly, here are some of the necessary premises to the Religion Hypothesis presented:

- Reality has a beginning and will have an end, the Big Bang and the Big Crunch.
- There are no original intents or reasons intrinsic to the alternative between existence and nonexistence. The

fact is that there is existence.

- Such existence, Being, is the product of Becoming. Reality Becomes from the very beginning at the Big Bang to the very end at the Big Crunch.
- The Becoming of reality is "registered" cumulatively in the past. In fact, the past is what reality becomes moment after moment.
- The past cannot be erased and is what reality becomes by way of space-time acting upon matter (mass-energy).
- The past is Being, the only unique Being.
- Space-time is the "mechanism" that from the very first moment has transformed the original Beingness into Becoming, the evolution of reality.
- The mind, itself generating from the Becoming, could and perhaps ought to bring reality to the point of self-revelation of the complete memory of the Becoming in its totality, of all the past.
- There is not a "before" the beginning at the Big Bang, as there will not be an "after" the end at the Big Crunch.
- If there are other realities, one or a nonfinite number of them, those realities are by definition, indecipherable and for all purposes irrelevant.

The Hypotheses

Theological	The certainty of God
Religious	The imperative of total binding
Eschatological	The imperative of a conclusion

The Theological Hypothesis

For the theologian, the existence of the divine is incontrovertible. The nature of the divine is the subject of the theologies invented during the development of consciousness, of knowledge, of love and of willfulness, of all human inventions and creations. With the invention of the divine comes its investiture with many qualifications. One could propose that the notions of omnipotence, justice, knowledge, wisdom, love, and everlastingness are common to all theologies.

The theological groups prevailing now, Hinduism, Judaism, Christianity, and Islam, have been subject to controversy, fractures, and sectarianism from their inception. Schisms, alliances, divisions, persecutions, excommunications, condemnation, punishment, torture, and death are ambiguous and peripatetic parts of the theological scenario.

Such experiences are powerful, but the inclusion of extremes of violence, martyrdom, and death put in doubt the sincerity and the love of believers and perpetrators.

One thing seems certain, the impulses toward compassion,

justice, grace, and binding, religio in Latin, are buried, or at least dangerously weakened, by those same theologies whose purpose should be precisely the strengthening and the vitality of those same "disciplines." This is why they are theologies, the worship of divinity, but not Religion, the quest for a cosmic "binding," for religio.

Why does it have to be so? Hypotheses generated from premises unhinged from reality are necessarily plagued by all sorts of conflicts. It follows that a dogmatic premise on the existence and the nature of the absolute inevitably causes a dogmatic penchant toward the entropy of knowledge.

The Religious Hypothesis

The theological structures we have come to refer to as religions have developed within animistic hypotheses. For instance, the a priori existence of divine anima and consequently the notion of reentering or of dissolution into the original "grace," Nirvana, are at the core of the major theologies.

The Religious Hypothesis has little to do with the invention and the worship of divinity. It is dealing with the discovery of and coherence with the evolutionary process within which the continuous creation of reality, one present after another, proposes. Part of this is the focality of human life in particular and the progressive animation of the originally nonanimated reality in general.

Such focality is, in fact, an axiality, since space-time is operating without breaks upon reality itself.

It is in this axiality, not created or preordained a priori by God or gods, but emerging from the progression of Becoming, that the religious imperative develops and grows, giving shape to what eventually becomes the convergence of reality toward a special point, the singularity of self-revelation, that is, the "resurrection" of reality in toto.

But this special point of self-revelation is the opposite of the God-creator of theologies. It is instead the very creature generated by the evolution of reality.

Thus the causa prima of theologies, God or gods, is instead the final binding effects of Religion. This final effect is necessarily realized at the end of space-time, and it is the Omega Seed.

The Eschatological Hypothesis

Reality, that is, mass-energy to which space-time allows spatial extension and time to do so, does not contain at the origin meaning or knowledge. Reality is a Becoming that "necessarily" follows the rules intrinsic to its nature.

In this universe those rules seem controlled in the subparticle domain, by quanta, by probabilism, while in the macro

and mega domains such probabilism gives room for deterministic and statistical sidelines. The living phenomenon injects in this probabilistic, deterministic, statistical reality a disconcerting novelty: opportunism and willfulness. With those comes a first indication of "axis," an intent soon to be tangled in the emergence of good and evil, of the graceful and the beautiful.

Anthropos, the human phenomenon, "traumatizes" the probabilistic, deterministic, statistical reality with the opportunistic and willful inventions that have the potential of transforming matter in a new unheard of reality: Mind.

If there is an "alchemy" in the process of matter Becoming Mind or spirit, this alchemy is in the action of Miniaturization and Complexification always working in tandem. These in turn generate Duration, a reality unhinged from mass-energy space-time.

Here is why.

The evolution of reality, necessary if not sufficient, is achieved through the application of a paradigm with three voices: Miniaturization, Complexification, and Duration. In Miniaturization, Complexification, and Duration, the third voice, Duration, is the "product" of the first two, Miniaturization and Complexification.

Complexity, the content, needs an optimal container in which to be and to grow. Such a container must be the smallest of all possible so as not to be a prison but an indispensable support, a self-effacing grid. Ideally, this grid should be physically dimensionless, thus the imperative of Miniaturization.

Perhaps in the realm of mathematics, Complexity could do without Miniaturization if it weren't for the fact that mathematics, like memory, and thus Duration, is in the domain of "infinite" Miniaturization, the obliteration of space-time consequent to the absence of the physical container, so to speak.

The fact is that Complexity is not separable from Miniaturization for the same reason that the mind cannot be deprived of the body.

Miniaturization and Complexity together seem to be the only agency capable of generating life and consciousness. Without Miniaturization and Complexity working together, the human brain, a superb exemplar of Miniaturization and Complexity in working order, does not come about. Without the brain, the mind does not exist, and the paragon of sensitivity, reflection, knowledge, love, beauty, etc., cannot emerge from the food chain's fireworks.

The jewel of Miniaturization and Complexity is Duration. Duration is reality, actually fragments of reality up until now, so impregnated with Miniaturization and Complexity as to extrude itself from space-time. Memory is

made of Duration fragments. A no-longer-fragmented Duration is the self-revelation of reality, the revelation of itself to itself, or resurrection, which is the same thing. This is reality decanted of matter in the sense of metamorphosis of matter into Mind, the Omega Seed.

MCD is Religion.

Duration is what allows the past to extend itself unremittingly by way of all the successive diaphragms of present after present, diaphragms without thickness. It is an extension that is necessarily in its own domain, the domain untied and freed from space-time. It is the same space-time that is active and is indispensable for the Becoming. Duration is Being.

Duration in its totality, at the end of space-time, is the total memory, the complete remembering, that reality has of itself. As pointed out previously, it is as if the whole past were "defrosted" of its space-time bind.

One could say that reality wasn't prepared for the degree of Miniaturization and Complexity necessary for the emergence of life. It is that very Miniaturization and Complexity that must have "appeared" as a contradiction, a rebellion against the probabilism of the immensely small, the quanta, and of the determinism of the subatomic, atomic, and molecular.

It wasn't prepared then, 4.5 or so eons ago, and perhaps never will be. Religion is an imposition upon reality. Without the will of the mind, reality would never become Duration. It would remain unrecognizable to itself and consequently would remain senseless.

To explain again the notion of Miniaturization-Complexity-Duration as Religion, I suggest a sort of loose analogy—the canary and the jumbo jet. Assume that:

- each "byte" of information/work, in reference to the canary and to the jumbo jet, is separately located contiguously on a surface;
- each byte is represented by one square centimeter;
- for a working jumbo jet, 1 million of those information-work bytes (squares) are needed;
- for the living canary 1 trillion of such bytes (squares) are needed.

This means that, if it were not for the "magic" of Miniaturization and Complexity, a canary "born" from jumbo jet technology in this representation would be, let's say, 1 million times bigger than it is.

One can immediately visualize and appreciate the immense and critical importance of Miniaturization and Complexity. I am assuming that in this scenario, the MC present in the canary is 1 million times greater than that in the jumbo jet. Only with the "compression" of Miniaturization million times greater could the jumbo jet reach the

Complexity of the canary.

In other words, 1 million jumbo jets would be needed to approximate the amount of information/work, the applied knowledge, of a canary, though even this applies only if such a gigantic fleet of jumbo jets is not made up of 1 million clones, but of 1 million jumbo jets each with a specific "persona," as it is with canaries.

Naturally, this means that there would not be canaries or any other living organisms if it were not for the Miniaturization-Complexity "miracle of binding." In time, with Miniaturization and Complexification comes Duration, that is, memory-consciousness.

In the canary, MCD refers to both knowledge and productivity. Once more this reiterates the imperative of Miniaturization-Complexity-Duration for the Becoming of the living reality.

The Mind as the Efficient Memory of the Past

Reality at a certain evolutionary moment, five or so eons ago, began to define an inclination toward the "direction of the mind." At first, this premonition of axiality was extremely weak, belonging to a reality of finite dimension. All we may hope for is that this movement toward mind might lead us to an evolution directed toward Esthequity.

Matter is the immense turmoil in which the esthetic and the equitable, far from being naive cliches, are pivotal agencies. One step at a time, matter itself is transcended.

This means that at the final moment reality will have made itself into Esthequity. But such perfection would not be saturating the whole evolutionary body constituting the past as a whole. If such an a posteriori saturation of the past is not present, then an ultimate perfection would be of a bottomless cruelty because it would be the consequence of a purely instrumental bottomless bloodbath.

All theologies have attempted to remedy the malediction intrinsic to a final justice rooted in an endemic injustice, the cause of limitless suffering. Thus redemption is promised via reincarnation, resurrection, Nirvana, paradise, etc. By way of those, all the means, all the authors and actors of such final perfection, evolution and life within it, would reappear as ends in themselves, a Second Coming.

The resurrection proposed by the Religion Hypothesis of the Omega Seed is less messy, more coherent, more "elegant," and, according to some scientific thinking, in the realm of the feasible. This resurrection simply states that with the "draining" of space-time from the whole of reality, from the entire past, the whole past becomes present. This past becoming

present, "purified" from space-time in its "frozen state," is Duration, the seed Omega of the Good and the Beautiful.

The feasibility of such a remote and hypothetical conclusion depends on the power of Mind, now only embryonically formed, to intervene in the Becoming and all pulsations of space-time in a way that compels matter to transfigure into Mind. The "magic" mechanism of this transfiguration-metamorphosis is lodged in the MCD paradigm. Without its active presence, matter remains matter. With the action of Miniaturization, Complexification, and Duration upon the Becoming, it is as if the mind were the efficient memory of the past. The mind would then be Duration itself.

When the efficient memory of the past becomes total, the whole evolution of reality registered within the past is "remembered" in the pure Duration of Omega Seed. This is the "Second Coming" of all, Fido, his ticks, and myself included. This is reality in the conclusive act of self-revelation, not of reinvention. This act, which turns out to be a binding of all to all, this Religion of reality, is Esthequity finally contemplated, in fact it is the Good and the Beautiful relived by all and everything.

. . . . .

Not God the Creator,
but
God the desirable creature.
At the end, God would be the verb.

Throughout the cosmos, the parallel processes of self-creation and self-revelation made possible by the durational progression engendered by Miniaturization and Complexification define the Religious, religio, context.

This is the Religion of

Miniaturization
Complexity
Duration.

It is the Omega Seed Hypothesis.

This hypothesis defines a process that moves reality from the fragmented to the binding.

The Miniaturization and Complexity of single organisms is superbly high, as in the canary, but the Miniaturization and Complexity present in species, cultures, and populations is desperately low. For a long time, such "collective primitivism" will be the primary obstacle toward the emerging of Duration as a major force in the metamorphosis of matter into Mind.

The evolution of reality toward Esthequity is hindered by such crude and structurally inefficient work. The consequence

is that the binding, the religio, manifests itself in what are often cruel banalities, pitting the high MC of the single organism against the low Miniaturization and Complexity of populations. But in the development of the food chain the appearance of individuality, with its ego and other attributes, was indispensable to the emergence of consciousness and of Mind.

It is the mind's task to produce conditions that will extend the immense Miniaturization and Complexity of single organisms to the infrastructures connecting and separating organisms from organisms. This includes all the institutions of societies, cultures, and civilizations, from the productive to the organizational. It is like moving toward the animation of the very means that deliver the ways of survival and development. The means will become animated to best serve the ends.

Nanotechnology, which will construct systems one atom at a time, points the way toward such transformations. It goes without saying that this is a gigantic step toward Miniaturization and thus toward Complexity and Duration.

The hope for a fully achieved condition of Esthequity can be serious only if reality is "forced" into the filter-lens of MCD. Because of this MCD is Religion. If things don't go this way, reality will end in the annihilation of the Big Crunch, at that point unavoidable since reality had not been transfigured by the storm of the mind.

Theologies contain elements of religiosity, but Religion denounces theological structures as simulations generated by mental anguish.

Religion is a bouleversement of theologies in the sense that what is at the origin of theology, the verb, is, in the eschatological hypothesis of Religion, at the end.

In addition, theologies have a triggering event of "unbinding," the fall from innocence and grace followed by a search, a posteriori, for a rebinding. The whole, in an anthropocentric medium, is unconcerned about the dismissal of a grand reality. Theologies put Creator and creatures in a simulated and Utopian reality instead of allowing for an operating, evolving reality, the Becoming.

Religion is not capable of true religio, of binding, as long as reality remains split into two classes, means and ends. To put it bluntly, if 80 kilograms of "matter" can become organism and Mind, the matter of all the world should, or, better put, ought to be able to become Mind, producing the prodigious luminosity of a reality finally and totally conscious of itself.

The "demiurgy" of such transcendence is hidden in the MCD that the anguish of the mind "forces" into matter not yet transfigured.

Evolution, if wisely guided by the mind, would have the task of relentlessly conducting this march toward the metamorphosis of matter Becoming Mind, Becoming spirit. It is a

task of unimaginable proportion. In space-time this is a task of terrifying profundity. It represents a quest and desire for knowledge the fire of which can only be timidly conjectured.

Facing this desirable and even possible Becoming, there is no escape from either an intense exhilaration or an anguish of cosmic size, the anguish now nested in all consciences.

God as the End Creature

The Religion Hypothesis proposes God not as Creator, but God as creature.

This not only invests mankind with dignity; it offers her inner self a sense of the prodigious while demanding an immense responsibility: the responsibility to create the Divine using everything from a reality originally deprived of even a pale intimation of divinity.

Many eons had to pass on this planet for an infinitesimal amount of matter to become Mind. This creation, if generated in and by the Becoming, will not take hundreds, thousands, or millions of years; it will take billions of years. This creation is a sort of darkly anguished continuum only occasionally radiant from fragments of Esthequity, but habitually immersed in ignorance, doubt, desperation, pessimism, cynicism, the fatigue of sufferance, and the exhaustion of hope since at last and for an "eternity" reality is and remains indifferent.

One could say this oppressive indifference is a cruelty without sin. It is innocent, yet it is constitutional to the tide of the Becoming, which uses matter "magically" operated upon by space-time as its medium.

At the same time, only the Becoming can let the mind emerge from itself. With it, the will is obscurely hoping that at a critical point the Becoming will be able to reveal to one and all the meaning of itself by reaching for grace, the equitable and the esthetic, by reaching the self-revelational conclusion.

Esthetogenesis

I like to define this Becoming as the esthetogenesis of reality because the esthetic object, of all the products of the mind, in sound, voice, form, structure, color, etc., is the "conclusive" one, the one independent from meanings, functions, attributions, idiosyncrasies, etc.

The so-called work of art, uniquely among all "products," is an end in itself. Attributions, goals, meanings, declarations, and so on can from time to time be legitimate and significant, but in all instances they are peripheral. It is this rare self-validation of being ends in themselves and not means that confers to the esthetic objectivism a unique position, a privileged one, in fact, a holy one because the esthetic objects are fragments of the "Divine."

If Mind will have the power to guide reality not just toward an end in a journey in which Mind would not have a voice, but toward a specific and directed end, then the supreme nobility of the esthetic event will prevail as an esthetogenesis of all the Becoming.

When the truly esthetic is born from the conscious or unconscious anguish that the mind cannot escape, it is an indication of its originality and of the profound and possibly absolute value of the esthetic object. The very nature of the esthetic is this anguish transfigured and made perennial in the esthetic work.

The Depth of Space-Time

Naturally, it is all but impossible to conceive the nature and the behavior of reality in space-times so remote. The Religion Hypothesis can only suggest that eons from now the mind of those times, incarnated in the deepest mystery, will be predominant and prodigiously radiant. The carbon cycle, the flesh, will possibly be abandoned for the sake of an evolution of immense complexities contained within systems immensely miniaturized with memories vivid beyond human comprehension, Duration. It was once said that "no human can behold divinity and survive."

All of this will be in a space-time transgressing the current rules in a reality shaken by the terrifying voice of the emerging Word and finally the emerging of Omega Seed radiant in equity and beauty.

Resurrection will not be the occasion to restart from where one left off at death one minute or one eon ago. Sisyphus has no voice in such a matter. Resurrection is the total experience of all things "now" bound in the whole to Being, whose Becoming is finally revealed in full, down to the last speck. It will be an experience prodigious beyond comprehension, more so than for a bacterium to conceive the nature of mind. In this case, it will mean comprehending the creatures of all Becoming made, a posteriori, so to speak, into the creators.

All our hypotheses about the existence and the nature of God or gods, the nature of paradise, Nirvana, nothingness, resurrection of the flesh, reincarnation, and sitting to the left or to the right of God are innocent fantasies in the presence of a reality that "beyond all times" simply discovers, knows, and recognizes itself, all of itself. The joy of discovering what has been generated or created is then "infinite."

These agencies must not be viewed as components of a sort of evolutionary soup in the universal pot of the Becoming, present after present, but instead they must be seen as the registers of absolute fidelity, which the past is from

beginning to end. The Becoming of this grape, for instance, develops from nothing, ripens, juicy and original, and is the berry among berries. This is the "obvious" consequence that flows from each present into the past. Reality must register all and everything, including the droplet of ink from this pen writing this word.

There is no power within reality that can destroy the past. That which happens has happened forever, be it a quark or a broken fingernail. In this frame of things, the I at the end of the long night that is billions of years long is the same I of the Second Coming, the I for which waiting does not exist since subjective time does not exist in the objective time interval between death and resurrection. The instant of death coincides with the moment of resurrection with the condition that such resurrection is made possible by a reality that evolution has transformed into pure Mind by way of Miniaturization-Complexity-Duration.

When personal Becoming ceases at death, "merging" with the Being outside of space-time, the past, the I is subtracted from the pulsations of space-time. For this reason, if resurrection were to come, it would come only at the end of space-time, and such resurrection would then come at the "moment" of death. The eons passed to reach the Omega Seed would pass only in the Becoming; "time" would not pass in the Being.

Being, the whole past, is then nothing but the detailed memory of the Becoming, a perfect registration of the whole of it. Being is "outside" of space-time. Being is a sort of animate suspension ready to be animated when space-time ends at "the end of time," as the saying goes.

While there are many theologies with their faiths and their dogmas, there is only one Religion and it is the process that binds, religio. For all theologies the subject is the understanding of the gods, which the faith of the believers says exists, and redemption and salvation in his/her name. With faith defaulting, God ceases to exist and becomes food for thought. For the tree or the tiger, which has no faith, God does not exist. There isn't the god of the cats or the god of mushrooms, though for a mindful resolution of reality there would be their entelechy in the Omega Seed.

The eschatological resolution is Religion at its completion. It is the Omega Seed outside of space-time that is by then "consumed." The binding is Religion itself; there isn't a Religion and the binding in its name. Religion is binding and vice versa. But Religion does not exist without knowledge. Only knowledge can truly bind things to things. The maximal religiosity coincides with the maximal knowledge. Such totality is the Omega Seed.

My Contribution

God is not the creator; God could be the creature. This is the eschatological genesis of divinity through binding, through religio, made possible by MCD.

This Religion is not the invention or the theology of Paolo Soleri in the twentieth century for the simple reason that it has "always" existed. The MCD methodology has been operative for four or five eons. It has existed in protoliving reality as a potentiality. It has existed in the living reality of the food chain as a powerful normative guideline. It exists in the human mind as causative of self-consciousness, of love, and therefore of equity and beauty, the esthetic. Then, far from being the founder of another theology, of another version of a hypothetical, original divinity based on arbitrary, anthropocentric, nondemonstrable premises, I would instead be a person who modestly tries to put into words that which is going on under our eyes and ought to go on within the structure of reality.

The imperative hidden in "ought to" is the imperative of equity, of compassionate justice, and of beauty, of the esthetic event; they both depend on knowledge. Without the momentous "invention" of love expressing itself in eros, compassion, altruism, generosity, and tolerance, the constructions of the mind, the knowing will be destined to sterility, squalor, and incoherence. This entropic alternative defines, ab eternum, an indifferent reality that for the mind translates into a dark desperation with no resolution, an "infinite" anguish . . . of no value. This anguish is an ontological cruelty negating the very self, and if the universe turns out to be open, without a beginning and by definition without an end and therefore without the End, such negation is the unredeemable fate of consciousness, love, and beauty.

I would find myself in disgrace if I were to be seen as the founder of a new theology. "New" theologies are a dime a dozen. Instead, the task is to find words, even if I am not up to the task, for the description of the methodology of the ever-operative Becoming reality. This methodology could also explain the unavoidable violence of reality and can propose a possible resolution into absolute Grace at the end of time. This Grace is finally created in the very act of self-revelation of the whole of reality and from its nobility throughout the immense evolution from indifference at the Big Bang into love at the Omega Seed.

This is not another theology, the quest of God the Creator; it is Religion, the anticipation of God as totalizing, self-creating creature: The Omega Seed.

I am not a theologian; I am perhaps a technologian, that is, one who is concerned about the technology of Mind (the whole 15 eons of technology of matter becoming Mind). I am not a founder of religion; I am a finder of Religion and of the CMD paradigm. Religio was founded, now we know, when space-time got Becoming under way. (1/28/95)

13

Hypothesis 5

NOVEMBER 1989

For the "Western" mind and for centuries of its history, the consequence of a life often wretched has been the need for transcendence: the "afterlife" is a mode of transcendence.

Thus in parallel with the hopeless mindset is the redemptive mindset. For the first there is black despair with the closing of all hopes for deliverance. For the second there is a quasi-trancelike trust in a process that will eventually pull the individual from the bottom of the well of fear and suffering and thrust him into the divine light of love and felicity ab eternum.

The "Eastern" mind is guided by the notion that the tangible is at last deceptive, is indeed deception. As long as the self remains paramount along and among other things, all of them deceptions, the self (the individual) is denied access to that which is real and permanent: Brahma-Nirvana.

As for the "Westerners," the resolution is to return to the father but not the dissolvent in him (it); for the "Easterner" the resolution is the dissolution of the self into the nonbeing of Brahma (the void).

Noble and desperately wishful as they, the Christian and Muslim notion of redemption and resurrection (less noble the notion of damnation) and the reincarnation-Nirvana notions of Eastern theologies, none of them offers any shred of realism. Conjectures and hypotheses addressing the immense loneliness of consciousness, the curse of the suffering, and the infinite dread life is weighted under are at last naive, if not cowardly . . . My hypothesis, as crude and faulty as it might be, does not promise the pastoral sweetness of paradise or the dissipation into the naught the blessed must seek. (12/25/94)

Not the stuff of angels. The stuff of (remote) grace. (3/24/97)

That *for centuries and for billions of people* those cognitions have designed and redesigned the human condition, the human emotions, and the planet indicates the importance and the impact they have had and continue to have on reality. Those cognitions have one thing in common: *the seeking of foreverness*.

Unable to accept any of the three: (a) meaninglessness, (b) within the glory of God, (c) reabsorbed in the void and totally adverse, and unimpressed by (d) the notion that we come and go and that is it (meaningless reality), I had to search for a fifth way. I found it, this new hypothesis, not in my senile seventies prodded into and deceived by fear and decay, but in my fifties, in the prime of mental energy.

Hypothesis 5 did not generate from anxiety or ponderous thinking or from leaps of imagination triggered by hyperme-ntation. It came very plainly as a coherent conclusion to the Complexity-Miniaturization-Duration paradigm (CMD) I wrote of in the early '60s.

The ultimate consequence and strength of CMD is that if at the origin of reality there is a "point of light" Big Bang, which I label "mineral," an end of reality could be in the cards. Such an end, the Big Crunch, could be an altogether different kind of point light. I label it "Mind," a *mindfull* point of light.

It seemed to me then, as now, that there is a logic and an

elegance to the hypothesis, with entropy being possibly the only theoretical block to its remote advent.

What is more, within Hypothesis 5 the four others would find a more desirable and convincing resolution. Suffice it to mention a more plausible interpretation of things accompanied by more extensive, indeed satisfactory (to each and all things) conditions of equity and beauty.

Resurrection (Judeo-Christian-Muslim), reincarnation (Hindu), dissolution (Buddhism), and the disposal of meaninglessness are "cared for" by Omega Seed.

For instance, in Omega Seed there isn't such a thing as the act and the judgment of the act. The act is self-judging. But it can only be so a posteriori, in the light of Omega Seed, since judgment, self-judgment included, is imperatively in need of *all* the existential parameters. That necessitates that the fitting of the act, any act, is exact and total—that is, in its own circumstances that by the paradigm of self-sufficiency reverberate quasi-ad infinitum into the past and into the future of it.

At the hypothetical day of recall, Omega Seed, there won't be a reckoning, selection, or partition between elected and damned (or the void): There will be self-elevation into the exact niche, and for every niche there will be an immense milieu of knowledge-understanding.

This makes Omega Seed so much more rigorous and disengaged from the opinionated.

The (numerous) conditions are set up by the mineral-to-Mind process that best empowers reality to self-evaluate. In such light, the equity paradigm will finally find satisfaction, and with it the esthetic absolute will be.

The meaningful, the full of meaning, implies fullness of knowledge, fullness of equity, fullness of "beauty"—all states that are out of reach as long as there is Becoming, since Becoming via Mind is per se the quest for fullness. (1/14/95)

Religion is "the thing." Theologies and their animistic constructs are distractions most of the time, pernicious per se, and in general obstacles to the perusable religiosity of intellection. (7/29/99)

As long as the atmosphere is what it is, I must resign myself to watching the balloons sway close to the ground in the ways the winds of Utopia move them. The sands whipped up by the ill-fated Utopian winds are sandbagging the eyes and the brain of the poor actors: you and me and all. (10/26/94)

14

Rio: An Observer's Snapshot after the UN Conference on the Environment

RIO DE JANEIRO, MARCH 1992

The engine propelling the Rio event has three components:

1. animism and its corollary of a divine power;
2. Mother Nature and its sacredness;
3. the Love Project: us and our history.

As human inventions (we use the word "revelation" to unload self-responsibility), the three have a field day in the good-and-evil scenario.

In (1), we take the invention not as a hypothesis but as the truth. Idols are then easily generated and idolatry fills the history of the species. Idolatry is alive and kicking.

In (2), to see mothering and fathering where there is just and only probabilism and opportunism is to commit the greatest sin of self-deception. In (3), the Love Project is a true noble undertaking of which (1) and (2) are unnecessary, burdensome, fellow travelers.

As long as we burn incense, burn candles, and spill blood to our invented God, we will be the perpetrators of our demise. As long as we declare allegiance to our theological-animistic idols, from Mother Nature to social Darwinism, we do harm to the light of Mind and sow suffering. (7/7/96)

The nonliving domain that animism says is God's creation is a probabilistic-deterministic "project"—the cosmos. The living domain that animism says is God's creation is an opportunistic "project"—the operative food chain. The human domain, consciousness-mind, that animism says is God's most cherished creation, is the Love Project—a human invention-creation.

Reasons and facts seem to suggest that the very bulk of reality, the cosmos, is driven by probabilism imbued with determinism. No God is needed for such "cool" management of particles, subparticles, weak forces, strong forces, mass-energy, space-time. The animated part of reality, as far as we can conjecture, a puny, puny part of it, is driven by opportunism—the food chain testifies to it.

Probabilism, determinism, opportunism—the unloving, the fatherless, the motherless are not love and compassion agencies. Love and compassion are a "yet to come" dimension that only consciousness and reflection can generate. Social Darwinism and technocracy should be aware of this. But the

animistic tradition is an enormous obstacle.

The Love Project is the greatest of human inventions. Given the embryonic stage it is in, 3 million years vis-à-vis 10 to 15 billion years of probabilism and 3.5 eons of opportunism, it is fragile, naive, demanding, desperately in need of care and passion.

So Rio will be a gigantic quicksand kettle where self-deception, fantasizing, self-hatred, frustration, fanaticism, idolatry, and fraud will have a large representation. False premises, as those listed above, in the long run can only cause devastation and squalor.

If Rio turns out to be an animistic bordello, even the most benign, well-meant results—and there will be many—will be flawed at the core and therefore in the long run pernicious. Reality cannot be understood and worked with on false premises. And the presence of something, the cosmos, does not make it sacred. Not by a light year!

Why is it imperative that the premises be true or truer than the animistic ones? Because with animism we are bartering the power of a probabilistic-deterministic cosmos and the splendor of an opportunistic, "living" reality for an at best murky simulation in which we might find a degree of reassurance for the human condition.

This wish, innocent, perhaps even noble, is a powerful mover. It has shaped human history, but beware of its incoherence. Animism turns out to be (as proposed more than once) the great opiate for the human soul. It renders opaque the splendid but harsh coherence of reality. Its prodigious evolution is trashed away because we, occasional lovers, want it that way.

We should instead be rightly ablaze in our Love Project because in its light the whole of reality could become self-aware, self-recognizing, "Divine."

Last ought to be the Verb!

Where should the Rio engine take us? To a more sensible state of affairs where nature and we can interact reasonably, wisely, and respectfully. But reason, wisdom, and respect demand an understanding of what the participants are, or at least of what they are not. Therefore the first realistic step would be to "clear out" the territory, and this is where Rio will not be up to the task. Too much wishful thinking, fantasizing, not enough practice of realism.

The strangeness of all is that only through an altogether anthropocentric take on reality can we come up with the benevolent Creator and the caring Mother Nature stuff. These are in the eye of the beholder, us, and in nothing else: Seeking the right action from dreaming is anthropocentrism to the core, the species as the master. The very pitfall we accuse ourselves of not being able to dispose of!! Apparently we are not.

We are opportunistic animals longing for grace. (4/6/94)

Let mankind disappear and all his gods will disappear with him. Virtualities! We should be more humble: We are alone. (6/7/00)

So much of what we are doing in Rio will have the substance of rain dancing. A demeaning fact if you think about it. It implies the belief that such a majestic and ruthless thing reality is would bend to our toe tapping and pious asking?! Rain dancing as emblematic of our presumed, pretentious, voided-of-proof dialogue with the gods. Celebration of life yes, transformation of weather, what a come-on!

15

Hannover Expo 2000: The Millennium of the Zebra

MARCH 1992

As the human phenomenon shows signs of tightening up all the parts into an interdependent coalition of things, the balance and sensitivity necessary for this new animal, the homosphere, is more and more eroded by the emergence of the me. Six billion me's soon . . . (7/30/93)

Intent and Content

Will Expo 2000 be a testimonial? A guide? Will it advocate a plan?

The key to relevance is the right anticipation of what the condition of man will be by then, eight years from now, and what the condition will offer worth encouraging and what ought to be refuted or reconstructed. We are thus dealing with "prophecy" in the context of the golden rule of the practical: the practice of realism.

What is realism?

The country I live in, the USA, is practicing a dream, the American Dream. This practice is bankrupting the country. Given its size and power, the USA, the ruin, is overflowing and overtaking the world at large. What will be the effects of such dreaming by the year 2000?

- The secular community seems to be hesitant, if not unwilling, to move from dreaming into reality: a move that will entail a "change of mind."
- The religious community is cast in a different, but perhaps as pernicious, dreaming.

Expo 2000 might well be primarily faced with such a dilemma. Will realism prevail or will the dream continue? Once a dream is sought and sold as the Garden of Eden in the making, the dream is in for a nightmarish turn of events: Reality is constitutionally that which cannot deliver the Garden of Eden. No matter how clear our practicality, voided of the practice of realism, we will not generate the fairness, that is, equity/well-being, the power of transcendence that only the practice of realism has a chance to generate.

What is Expo 2000 to do? Document the progression of catastrophe? It might help to attempt a sort of consensus about the key agencies to be dealt with realistically:

1. the biosphere's limited capacity
2. demographic pressure
3. technological transformism
4. consumption unlimited
5. equity and its remoteness

In slower times, in more predictable times, in less litigious

times, in less greedy times, an eight-year anticipation would have been easier. In what reciprocal position will the environmentalist, the scientist, the politician, the technocrat, the economist, the artist, the theologian, the teacher, the social scientist, the humanist, etc., be? Which will have frozen into a monolith opaque to all but his or her own passion, which will have fragmented into a paralyzing diaspora, and which will be vibrant with life and anticipation? It would be hard luck indeed if Expo 2000 found itself out of tune, if not out of breath, because of lame anticipatory thinking (and doing).

It would be "interesting" to see an American landscape subtracted of bible and guns, its landscape minus delusion and cowardliness (the gun man dynasty as a cowardly man dynasty). (11/19/00)

Every initiative is in need of a backbone. Backbones can be multiple. Icons are emblematic of backboneness. Indications of the state of a country can be traced to its own icons. The USA seems to have, among others, the following:

- Home Sweet Home—the single-family house: consumption unlimited
- Automobile "mobility": pleasure and status
- The gun: a sort of self-reliance regardless (see the "peacekeepers" of the Pentagon)
- Walt Disney: simulation, escape, nostalgia
- Show biz: fun, shallowness, societal mediocrity

Walt Disney is important for us because it is in the business of our task, Expo 2000. Walt Disney's main devices are simulation, nostalgia, fantasizing. International initiatives like ours are part simulation (the "instead of the real thing"), part show biz, part advertising-propaganda, part path-finding, part testimonial, part advocacy. From the preliminary planning encounters, it would seem that the last three should be in evidence. The structure of the content will define the structure of the organization.

The Zebra Proposition

The Zebra proposition is the intentional development of already ongoing processes. It is the channeling of the propensity of vocational communities to expand beyond national boundaries toward the adoption of the best features they are nurturing (in a transnational context) and doing this at the expense of less desirable and often strong power plays and exclusionary penchants.

Identifying oneself in the deed is to break out of the idiosyncratic cell and to become "public property" and public conscience and public transcendence or malediction. The true public figure is no longer an ego; for better or worse, he is the people, his people . . . (5/3/00)

Vocational communities (VC), the guilds of old so to speak, would slowly supersede the national identities destined to fade away by being assimilated into the transnational VC where passions become fruitful. All the VCs would be contained and kept within constructive boundaries by the VC of information with the responsibility of keeping a coherent whole, entrusted to an international arbitration court. Expo 2000 would be an optimal testing ground for this new set of

agencies, the transnational VC.

DO NOT BUILD NATIONAL PAVILIONS—THE LEOPARD LANDSCAPE.

"BUILD" THE VOCATIONAL COMMUNITIES PAVILIONS—THE ZEBRA LANDSCAPE. Not by nations but by guilds: Cut down nationalism, xenophobia, bureaucracy, centuries-old taboos, racism, segregational thinking all in one swoop.

A sampling of VC's
Pedagogy
Agriculture
Demography
Social Sciences
Arts
Politics
Physical Sciences
Philosophy
Religion
Nutrition
Technology
Health
Economy
Astronomy
Architecture
Engineering
Logistics

Each VC, in transnational mode, could show where it has been, where it is, where it ought to go.

The "umbrella" would be the one chosen by Expo 2000: Nature, Man, and Technology—that is, each decision, program, and development in each VC would be accountable to nature, to man, and to a truly realistic evolution of the power of transformation that technology offers us.

Expo 2000 would initiate a systemic collection of data as they refer to each VC. The process, eight years of it, would be crucial per se and for the product.

Some random consequences of such work: The physician of Berlin would be "side by side" with the shaman of Africa; the astronomer of India "side by side" with the stargazer of Tibet; agribusiness USA "side by side" with the farmer from Borneo . . . Such programs would automatically arch above national barriers by outgrowing them via the people dedicated to their vocations while calling on their loyalty to the needs of nature and humanity and for their adoption of those technologies coherent with such needs.

Instead of looking at ten versions of potato peelers presented by each of 100 participating countries, that is, 1,000 peeling instruments—the sledgehammer approach to mosqui-

The multinationals, in their colossal ways, are bringing back the zebra-guild format at the expense of the leopard nations format. The "noosphere" (Internet) itself is clearly beginning to give the lie to national barriers to the consternation of "patriots" all over the world. (9/6/98)

Howness is the bridge between space (the What) and Duration (the Why), the *religio* process. (11/17/98)

to killing—the visitors would be offered the "evolution" of the relation potato-Hominidae that the Nutrition VC will exhibit inclusive of potato processing.

Expo 2000 would principally be a lens-filter that in seven years, 1993–2000, would develop the wherewithal for the emergence of VC "globally driven" and with normative indicators for what lies ahead that will make them responsible to all the other VC's, all irradiated, so to speak, by nature, humanity, and technology.

The years following Expo 2000 would be dedicated to the further development of the transition nations—VC's inching closer to the notion of one world and a coherent evolution into it. THIS PHASE COULD BE A KEYSTONE STRUCTURE IN THE VERY EVOLUTION OF HANNOVER.

The mega machine of globalization is a flesh and brain grinder on many occasions, but it might be the price we have to face while searching for a bearable and ultimately excruciating emergence into Esthequity. (4/21/00)

A sampling of difficulties and obstacles

- criteria for selecting the VC;
- how to call upon institutions and individuals (e.g., is the Colombian government to designate this or that farmer, or is that done by the VC farmers?);
- direct responsibility (how much) vis-à-vis nationalistic, bureaucratic, power-driven, xenophobic screens;
- how best to make tangible the 40,000 children per day victims of famine, malnutrition, destitution, by which VC, and how best to proceed to diminish the tragedy;
- ridiculing a VC is easier than ridiculing a nation "gone critical."

The Zebra Noosphere

The spotted-hide leopard becoming the striped-hide zebra. The leopard hide symbolizing in its dark dots city-states and nations. The zebra hide symbolizing vocational communities in their stripes (transnational reach) that in truth should criss-cross each other. The snake pit would be an unappealing metaphor, and how true it would become if the destructive aspects of the leopard segregation were to take root in the zebra interpenetration.

In the Logistics VC (transportation), the automobile would be the spottedness (leopard) that would fuse in the stripedness (zebra) of super-trains and maglev cradles.

The Health Care VC stripe-network is made of spots, physicians or health organizations bound by professional loyalty and the national spottedness overlaid by international health care guarantees (ruled by an up-to-date Hippocratic oath).

History might show that on at least some occasions guilds were instrumental in alleviating the tragic conditions of some section of society when city-states or nations were at war by reaching beyond the confines of local despotism. The book-

printing guilds of Europe were, in toto, instrumental in uniting the communities of learning. The route-stripes made by nomads of learning, students and savants alike, from all corners of Europe were instrumental in the diffusion of knowledge.

A new global logistical network based on maglev and superconductivity could become the device upon which the VC's of the world could be overlaid, not a coincidence naturally but a resonance with coincidental heights. The paradigm shift toward urban linear cities "piggy-backed" on lean, frugal, speedy, city-friendly, wasteless, pollutionless maglev-superconductivity super-cradle services could almost tangibly present the apt stripe-world that does not recognize the artificial boundaries of historically exhausted nations. The leopard-spotted world superseded by the zebra-striped world.

The movement of workers from one vocation to another does not dispose of the VC; it only makes them permeable to the advantages of all. Japanese and American car builders are closer to each other than farmers and teachers in a single country. This is so because the VC remains intact even when the personnel shift from one country to another. This is a good dissolver of xenophobic, isolationist, confrontational nationalisms. Why not adopt and sustain the already built-in tendency to "zebra-dize" the human family?

If the universe is a string universe, maybe the Earth zebra string could resonate from it, beautifully undergirded by the maglev-superconductivity logistics network. Each VC viewed as a force field performing throughout the roundness of the planet to weave the living basket of the noosphere. If the not-so-whimsical cosmos is going about things in string fashion, perhaps the suggested zebra-biosphere is not so off-target after all. One might propose the interweaving of species as the interweaving of biosocial vocational communities on which we overlay the zebra noosphere made up of "cultural species." Couldn't one speak of plankton loyalty, of spore loyalty, of termite loyalty, of tree loyalty, of elk loyalty, etc., etc.? Biological guilds of a sort. To those genetic loyalties, mankind is overlaying cultural loyalties.

Nations are moving toward explosive deadlocks. By injecting the fluid of VC we might be able to unlock the energies of individuals and institutions and transform explosive stresses into constructive processes.

WHAT BETTER WAY THAN AN INTERNATIONAL EXPOSITION TO MAKE THE CONSCIOUS STEP IN THAT DIRECTION?

As suggested at the initial meeting, it might be far easier to connect the New York surgeon with the Sorbonne professor, the home gardener of Mexico City with the agro-industrialist of Arizona via the vocational channels and the passion sustaining them. There is the potential for solidarity that could

Xenophobia lies at the feet of all flag poles (at par) with the folly of the Chosen People. (4/29/95)

Genetic opportunism is not vindictive. Human opportunism (cultures) has made an icon of vindictiveness. History is full of its exploits, cruel and bloody, and rotten to the core. (7/22/96)

find ways of offering, for instance, the coca farmer of Colombia a way out of his life-and-death dilemma. What politicians seem unable to do, farmers' loyalty empowered by an international endorsement and support could.

The astronomers' community is a living example of a VC, a zebra reality in the making. Astronomers from the four corners of the world coming together in the extraordinary environments of astronomic observatories.

The high-tech placebo prescription side by side with psychiatrist, confessor, medicine man, all part of a Health VC trading secrets and ambiguities, finding a less ambiguous place in the search for well-being. As long as we manufacture as many illnesses as we do cures, such clearing of the air will never come too soon.

I, as an organism, and all organisms, do not exist out of love. I exist, Become, out of self-love. In vegetal and animal, it is the love *of* the species. We humans have to relearn this. A good physician (doctor) acts somehow out of love for the species even when out of love for an individual. (12/25/94)

It would be calming for the troubled spirit of contemporary society to identify honest loyalties and work with them in greater awareness.

The third millennium will be the Millennium of the Zebra, in which the love for oneself and others will tend to constrict itself into narrow and intense bands of "dedication." This will be made necessary in part by the immense proliferation of information, producing in minds a sense of loss and futility. For many, this condition will be fatal in the sense of causing a breakdown of the faculties of true learning and coherence (and for some it will be sloth and boredom influenced by information overload). But for others it will be the adoption of internal focusing favored by some innate genetic tendencies toward a passion for only some of the numberless quests available to human curiosity. Those are the VC candidates.

The millennium of the vocational communities not bound by geography will be a constructive, perhaps passionate, response to the quasi-uncontrollable onslaught of often contradictory agents, in constant and often chameleonlike action. To be the best one can to one's own calling will be again the greatest challenge and will induce a healthier "Love Project," the project our species is bound to pursue not by default but rather by dedication and intensification.

The medical community, the scientific community, the agricultural community, the pedagogical community, the arts community, the technology community . . . will define boundaries of loyalty in the nature of porous, transparent, living membranes, boundaries of identification within which to perform at the full throttle permitted by the sustaining milieu.

We are bound. We must perceive the "beauty of the bondage" and seek transcendence endlessly or vegetate and die. (9/22/94)

Sticks and stones, mud and leaves, steel and concrete, plastics and fibers, and "intangible" materials will be the building blocks in the raw landscape of the present for the builders to operate its transformation: the Builders' Vocation Community.

16

Expo 2000: The Seville Compromise

OCTOBER 1992

From a state of war and enemies to a state of synergy and friends. Too much to ask for from the politically correct and the historically fitting. We need to move into evolutionary coherence with a sprinkle of transcendence added. The step from opportunism to grace, a long step, the hardest of them all. (11/9/98)

It turned out that nations would call the shots, not the people. That is to say, the "zebra" notion was buried deep enough to be made inoffensive. Given the nature of the beast, it would have been naive to expect a different (tentative) conclusion.

How do we empower the people without "offending" the nations?

That seems to me to be a crucial question if we still want to produce a truly original and, more important perhaps, more germinative Expo 2000.

If Expo 2000 wants to be a sort of historical watershed: 5,000 millennia of Homo faber accomplishments landing (crash-landing?) upon the third millennium (Christian calendar) a presentation in zebra terms—that is, the transformation of the earthly reality via the mind-hands-will of people—might be the most true and poignant:

"This is how we got here, year 2000. Where do we go from here?"

Homo erectus becomes Homo faber via the *brain and the hands (and speech)* working in synchrony. Water, bones, stones, wood, fibers, clay, and fire were the base materials. By way of those, the biotechnology of the living stuff overreaches in the new hard technology that shapes and will shape us, our lives, our societies. (3/21/96)

In purely logistical terms and within the space-time allotted, the logistics of ideas, interdependence, synergy, authority, power, means, and things—not to mention politico-financial-xenophobic power plays—the difficulties would be staggering, but nothing could produce a comparable shift, producing a coherent connection with the reality of Homo faber—Homo sapiens. Consider for one the nature of the Expo 2000 language in "zebra mode." It would be ecological, biospherical in the true sense because it would not find the barriers and the diaphragms nations put up out of their own very nature and purposes. It could mean a first and persuasive step in a natural dissolution process of boundaries and it could be done in the domain of action and performance under the eye of the whole world.

The breaking (or weakening) of national boundaries would be as invaluable for the constructive aspects and the perhaps necessary presence of nations as it would be for the vocational communities (VC's) and the participating individuals. In place of a passive presentation of the up-to-date state of nations, the Zebra mode would define a first step toward the reformation of a historically tested way of letting the thrift and industriousness of people run on the whole planet by force of "merit."

We have no rivals, at least in this solar system, in the manipulative power. (6/17/99)

Chances are that the world will be unrecognizable within three to four generations. If so, to keep abreast of history as it is developing via our activities and the biosphere inertial flywheel, we might want to do the only realistic thing: Given the enormous stresses generated by generations of the American Dream—like thinking and doing, the real thing to do is to be "revolutionary" in order to be evolutionary. If we shy away from such boldness, history might well pass us by, that is, history as evolution.

That (the nature of) nations may remain cast in the mold of today is part of the nonevolutionary thinking with a prognosis of a dim future. In fact, under pressure of the xenophobic kind, nations might well clone themselves in even more pernicious copies—see the Yugoslavia syndrome. On the other hand, if a more equitable Family of Man is auspicious and eventually implementable, the nations have to give way to better "animals."

The question of justness in the cosmos at large, becoming a question of effectiveness in the living world, becoming a question of justice in the human world, becoming a question of grace in a potential reality (in the making). (10/14/99)

My Millennium of the Zebra proposition is a crude attempt to reconfigure the structure of societies by encouraging people to participate in that kind of pattern (the zebra stripe) which would respond warmly and sensitively to the vocations of the person. Such a response, which can be engendered only if the majority of us can act upon the inclination toward definable activities—in the guild mode, so to speak—could transform the mood of whole societies and move the main effort from the confrontational theater to the cooperative theater. Not the "me against you," not the "us against them," but the parallel and at times symbiotic, synergistic working of vocational entities between themselves with room for true passionate skills to develop. A win-win proposition.

Nations would not necessarily fade away. They could eventually take on a sort of gossamer character. Such character could be strong but not stifling, containing but not confining, original but not parochial, willful but not xenophobic . . .

Consider again the few pointers in the Millennium of the Zebra:

- A medical vocational community in which the opaque diaphragms between the most heterogeneous kind of medical practice would be dropped, and a truly global dedication to health prevention and care would accelerate the development of universal equitable health care (from shaman to microsurgeon in synergy).
- The production, processing, distribution, and consumption of staples and crops, immensely advantaged when the barriers of tariffs, vested interests, corporate myopia, and national pride would be superseded by the unarrestable forces and dynamics of an eco-agriculture that

knows no boundaries; taking advantage from a close collaboration of all the disparate empirical and scientific knowledge of diverse culture and ethnic traditions (from the barefoot farmer to the agribusiness entrepreneur).

In quasi-architectural form, one can envision a cornucopia of human industriousness, from the very modest and tentative making or thinking—the agricultural stick, the knife, the loincloth, the leaves tisane, the fertility statuette, the animistic cosmogonies, etc.—to the variance of today's products, theories, and hypotheses. A sort of spiraling storm engrossing time-space.

The developing scenario for each "vocation" (select five to ten of them) always through the lenses of the human maker and doer. Naturally, to the human one can be added, for instance, the direct participation of the animal domain: the horse, the dog, the cow, the sheep, the pig, the fowl, etc. If I were to select eleven "vocations" among the many, this would be my tentative list: fibers, metal, clay, animal husbandry, agriculture, health, communications, logistics, habitat arts, and knowledge.

The hub of industriousness seen as the groping beginning of tool making, clothing, food processing, shelter building, medicine, astronomy, animism, etc., reaching into the wheel of industriousness now becoming an overbearing affirmation of power upon nature. A sort of panzer storm ethic of consumerism and its materialistic subtension. The cornucopia breaks down into the waste heap of consumption-unlimited unless we "frugalize" our pursuits and our immense (but perhaps short-lived) power of transformation.

How to physically present, from the perspective of the individual, the technological and mental cyclone starting from the very eye of its (modest) beginnings? The vocational community (VC) mode impersonated historically in the guilds might be the most appropriate and telling way.

How we might be able to identify the zebra landscape from the consumerist storm we are invested by might also be the key to an understandable and useful pedagogical and exciting Expo 2000.

To be successful, the cyclone may have to take the shape of a comet whose tail is a composite of the zebra stripes, and the head is the fountainhead of Mind, forging into the future (and not as the shopping center of collapsed values destined to become a black hole of futility). In it may be the real possibility for the emergence of new economic, societal, and cultural structures incorporating the ethics of diversity and uniqueness spelled out by individual passion for this or that "zebra stripe" comet tail.

We are conditioned by the very fact of existing. Nature is the greatest condition of all. Genes and the reality investing them. The big container-conditioners speak loud and clear. Within the pervasive conditioner are the "cultural" conditioners with all of their graces and demons. (6/20/98)

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Three levels of performance:

1. the level of exclusiveness the guild tends to generate;
2. the level of universality where the guild is one among many of the strands of a quilt of interdependencies. The quality of the quilt as reflective of the quality of each strand;
3. the level of interference, positive or negative, of the single strand and of the quilt upon the biosphere.

It is all or nothing all the way. All of "us" or none of "us" included. (8/20/94)

17

Tsumari Project: A Preliminary Proposal

AUGUST 1998

Tsumari is nestled in a mountainous region of Niigata, where ten to fifteen feet of snow on the ground is the norm in winter. It is blessed with many layers of natural landscapes complemented by man's practical and aesthetic addition of the terraced rice fields along the Shinano and Shibumi Rivers.

The "Tsumarigo Art Necklace Project," led by Fram Kitagawa, art director, was initiated in 1995 with the full support of the community of six municipalities. The intention is to revitalize this region, which like many other agricultural communities in rural Japan, has been facing a serious population drain for some time. The population of 92,000 in 1980 is now reduced to about 80,000. The trend will probably continue unless some hopeful initiatives are undertaken.

The Tsumari project is centered around a triannual art event for which various "stages" are built in each of the six municipalities. The inaugural event was held in the summer of 2000. An international mixture of artists and scholars were invited to participate in a wide variety of workshops, seminars, conferences, and live performances as well as the installation of visual arts.

Soleri was initially asked to outline his ideas on Tsumari regional development. There was also talk of an architectural commission that at this point remains a possibility as part of the rural development. Soleri has visited the region several times to assess its culture and environment. His last visit was to attend the triannual conference on environment and regional development and deliver a keynote presentation.

—Tomiaki Tamura, Cosanti Foundation, December 2000

The Content

The project will be presented in two parts: the content and the container. This preliminary proposal addresses the content.

When consulted in 1992 about the World Expo 2000 in Hannover, Germany, I advanced the idea that, after many events like those, rather than presenting an up-to-date display of national achievements, one pavilion per nation, it could be refreshing and far more telling about Homo faber-Homo sapiens if the fairgrounds showed the fluid history of the national containers.

What I call the "leopardlike dots" of national pavilions, necessarily prone to and promoters of xenophobic plagues, would be discarded in favor of the zebralike, fluid, elongated,

Habitat, as the skin of the animal, cannot escape the coherence mandate. Habitat must implode and complexify. It is the universal Urban Effect, the total opposite of exurbia and its own wasteful, pollutant, segregative, antisocial modes. (12/22/98)

politically "neutral" ribbons of the guilds: birth, development, obsolescence, and their virtue of not being prisoners to the environs mandated by politicians, clergy, and small and big despots.

The Hannover proposition was a switch from the leopard-spotted pelt emphasizing the isolation of the national claims, each nation in its own pavilion/palace, to the interfacing pattern of the zebra pelt, defined by ages-long guild experiences and knowledge.

I propose for Tsumari the zebra mode, and I propose that the habitat we are searching for be representative of and work in the zebra-mode approach.

On a modest scale, I propose a zebra approach to the Tsumari initiative extended to habitat and therefore the development of all-season green ribbon towns interconnecting with one another. Given the long winters of Tsumari, we may seek by intent and through design to establish what I call the all-season cityscape that after a modest first trial may afford to the people of Tsumari a pleasant, in fact exciting, modus vivendi, a ribbon city of sorts, a well-thought-out greenhouse condition that may foster most of the domestic activities and programs suggested, sheltered from the weather vagaries.

Territorially, the towns and logistics flows coincide, thus freeing the landscape from the segregated and invasive leopardlike pattern. It is invasive because it is modeled on the exurban patterns with their unavoidable load of land degradation, waste, pollution, high energy demands, and segregation, the whole under the hyperconsumption cloak. The eventual "ring" of all-season habitat connecting the six communities of the "Tsumari art necklace project" would emerge carrying pedestrian, bicycle, and public conveyances containing vegetable gardens, orchards, garden promenades, and parks in an energy-conserving, continuous volume into which the habitat is also developed.

The Complex, the Miniaturized made life. The clustering of life makes the genius and the conviviality of self-aware life. Life is not in metastasizing; it is in self-containing and becoming radiant because of it. Our genetic makeup is full of life history, the memory of it. We should not betray it. It is the only thing making us what we are and what we become. Our routine behaviors at our best moments document the faith and the coherence we are able to express and with which to become. (7/26/00)

I might have a good feeling about the horse sense of the "masses." I definitely do not believe in their ultimate wisdom. (4/20/00)

Zebra/Leopard Concept

In the past, the power of *one*, a despot, cruel and inhumane, generated misery, order, and esthetic landscapes. At present, the power of *many*, opportunistic and unknowing, generates detritus and puts stress on people and things.

Things are moving rapidly and accelerating. The new millennium has no molds, and it needs some in spite of the naive notion that molds are things of the past. That is where the guild notion/mold comes in handy: the *zebra* interfaces at the expense of the spotty dance of the *leopard* patterns.

The tight little fists of the leopard dots of the single-house pattern (no trespassing, private property, guns, arsenal at hand, etc.) are not just promoting the hermitage image; they are a

real presence with their loads of demands on life, human and not. Think of all the invisible and hidden umbilical cords feeding the isolated enclaves, feeding from near and far the little self-righteous parasite, the American family house.

The zebra/leopard analogy is a mnemonic way to interface the facts of nature, even when casual, with the "art of living." It is a way of imprinting the mind with a "memorable" imagery: the "dotness" of hermitage (leopard) abandoned in favor of the suggested ribbon interactivity (zebra) of the ribbon city.

Tsumari is another typical instance of the brutal power of "Howness," the ability to know how to do things, scattering around its good offices and its bad deeds. Needs and wishes are inescapably expressed in the fractured, rubbled, chaotic juxtapositions of old frugal ways and ostentatious, quick-fix new ways. One hopes it is only an interim period.

We have to hold Tsumari by its fragile shoulders and gently but firmly shake it up. It can find resolution in an evolutionary coherence, certainly not in political correctness or solely in historical fitness.

There are three ways of looking at the problem of habitat:

1. The actual transformation of the beauty of nature into the esthetic by the human presence in two different ways:
   a. the segregated way of the planetary hermitage and its polka-dot patterns of endless exurban planning. This is the common way.
   b. the integrated way of the Urban Effect and the zebralike interfacing fiber to implement the intensity of the urban implosion along logistical ribbons within a quasi-pristine nature.
2. The transformation (Techne) and the eventual transcendence of the reality of the pristine resources of nature into the towns and cities of culture.
3. The power that the MCD "formula" expresses in its unrelenting search for the ephemeralization of reality with no end in sight, if not the end of making reality into a self-revelatory conclusion.

In view of the preceding, there are nine proposals.

1. Dolorosa-Deliziosa Proposal

The Via Dolorosa-Deliziosa Analogy

We walk or drive "over" the biosphere with no compunction. We are wearing it out. The Via Dolorosa-Deliziosa is a symbolic ribbon of life being trampled by Homo faber. The ribbon is an artwork of indefinite length that is painted in sections by artists via crews of young and old apprentices.

The glory of Howness so celebrated and enjoyed by the present in the Western world is the powerful engine driving society. If it were not for the breakneck pace, the arts should be in paradise since at the origin of the esthetic is the search of the How expressing the passion of the Mind. (5/21/97)

Agriculture and habitat are the fundamental domains necessary for man to exist and evolve: food and shelter. Japan is especially sensitized to both. Making the wrong choice and persisting in improving the wrong is a secure road to catastrophe. (7/28/00)

"Salvation" will reside in linear cities thousands of kilometers in length "wrapped" around high-speed, people-friendly (maglev), mass transportation and mass transit systems . . . Such an urban phenomenon will be strictly pedestrian and double-faced: the habitat and the open land contiguous to each other and at each person's "finger tips." (10/25/96)

Nature, in effigy, being worn down by pervading technology, the rubber wheel a "tangible symbolism." (10/9/94)

The Dolorosa (pain-filled) symbol translates into the Deliziosa (delightful) symbol and periodically after restoration can be transferred in sections to public places, museums, schools, galleries, etc., etc.

The analogies consist in:

A. the erasing of images by the wearing out of pigments and textures caused by walking and driving on them.
B. the imagery itself produced by the painter and the fact that such imagery is the beauty of reality filtered into the esthetic of mind. The paintings, "presentations" of vegetal and animal species, can be by many artists and can be very abstract and unspecified if so desired by the painter(s). The painted ribbon road would be a kind of documentary about species and endangered species.
C. the emblematic/symbolic side of the process actually "demonstrating" how we tend to erase ecological balances by exploiting nature's resources.

The transition from art to an environmental concern can be felt, to a degree "inspired," by the strength of the images painted by the painter(s) under the "cloud" of environmental degradation mirrored in the "degradation" of their work marched over by thousands of unaware feet and rubber wheels. The prospect of salvaging and restoring the paintings (destined for public places and exhibits) would echo a desirable salvage and environmental restoration of habitat. Making the public aware of the silent catastrophe going on can be accomplished and indelibly imprinted in their minds via the analogy mirroring nature with art.

2. Workshop Exchange Proposal

Cosanti and Arcosanti have been built by crews of young people interested in my work. Under the Tsumari umbrella the dynamics of apprenticeship with residence and work can be developed at Arcosanti and then at Tsumari with the sponsorship of large construction corporations. The exchange can become a true resource for people interested in the biosphere, agriculture, and habitat. To the orthodox techniques of concrete forming and casting we have been adding earth- and silt-casting techniques. Cosanti and Arcosanti are examples of such methods. The coming together of young people of different maturities and their immersion in the learning/doing environs of Arcosanti makes for a multifaceted, rich, informative experience.

3. Speaking Wall Proposal

The Speaking Wall program focuses on the participatory pres-

ence of the public. *Participation* by making a "product" that eventually becomes part of the sections of habitat. *Presence* because the production is on a site (Tsumari). For an hour or so, the participants are "the builders of Tsumari."

The product is a reinforced concrete panel in the 40 x 40 centimeter range. The outer surface of the panel is embossed by the maker using a clay-concrete technique.

A time capsule is embedded in each panel. The time capsule is a brass cylinder containing the "message" of the maker: a quotation, an appeal, a poem, a letter, a prediction, a plea . . .

On designated occasions one of the events would be the opening and reading of the capsules' contents with the possibility of composing them into a document, a "manifesto," or a book. The building speaks back to its "builders."

The concrete panels. Try to make a chorale out of brief, little idiosyncrasies. (6/27/99)

4. Ceramics Guild Proposal

Employ local materials, such as clay and silt, to establish a ceramic atelier. Recruit local skills for production and management. In addition to using the wheel, the buildup, and the clay-slip-in-plaster-mold technique, we would use the clay-slip/silt technique we have developed at Cosanti and Arcosanti. Establish Clay-Silt Day connected with the equinox celebrations.

5. Arcology Gallery

The Cosanti Foundation has a large archival collection documenting my work, which is capable of filling several museums and galleries. Arcology is the content of the material.

6. Luce Tenebra Proposal

The Luce Tenebra shows the passage from the beautiful to the esthetic via the phases of a sapling becoming a tree, emphasizing the thresholds of growth into more and more filtered (controlled) stages to the final form where the tree is doused with water to bring to light the root structure (tenebra). The whole true organism suspended in air (with a lucite cylinder as the root tank) is exhibited.

The sapling is planted in a "glass" tank. After *x* years the tank is removed, and the tree is doused until the entire root system is uncovered. The tree of Luce Tenebra becomes a good subject for science and exhibits for sister cities' events: a city commissions Tsumari for a tree and at maturity the tree in its winter garment is part of a botanical-esthetic collection of the city. The tree becomes a living instrument for young, adult, and old alike to observe, admire, learn from, and talk about.

A yearly washout should be considered to document the

The sense of space is the sense of specific space. A specificity that permeates the memory of the formative years of persona. In the absence of that sense of place, for instance, the child dragged from one military base to the next as a parent's career might demand leaves a place-space vacuum in the child's psyche, a sort of place-space adopted child: the roots are missing and the tree is suffering, a grafting situation that can deteriorate into a parasitic situation. (6/23/00)

process of growth with the attendant consumer charts: light, fertilizers, chemicals, etc. . . . space performing magic at its best. Intentional changes in soil composition would give more insight into the biochemistry of the tree.

Nature does it (the tree), the mind "thinks it," and parallel with the memorizing process (the past of the tree) comes the documenting of the history and often the transcendence into the esthetic domain: the inspired poem, music, painting, etc., and/or the exhibiting of the tree itself. Bonsai art comes to mind: the master reconfigures the tree according to definite rules. The result is an "intellectual" tree of sorts in which the beautiful and the esthetic combine.

The metamorphosis of the beautiful into the esthetic would be the critical evaluation of the connectedness of the "natural" to the "mental" punctuated by the awe, the secretiveness, the anguish intrinsic to the MCD domain.

The virtual reality too can also be adopted, an enriching technique helping to reveal the "secretive" nature of the Becoming. A tree is the phenomenon observed and, beyond the factual, a series of analogies can be proposed.

Three things to be noted again:

A. the biotechnological marvel of the process going on in the *light* of day and in the *darkness* of the under ground;
B. the training of the tree and the setting it is in, producing a tree "filtered by mind." From beauty to esthetic;
C. the duality of light/darkness, good/evil, love/indifference resolved into the superior symbiotic synthesis of one living phenomenon, a Becoming.

The ontological-normative side in the last (C) is clear evidence that the domain of *light*, *Luce*, has to be hinged with the domain of *darkness*, *Tenebra*, in order to generate life. The duality, the opposition, and the enmity dissolve. They are exposed as a lie by the facts, in this case, of the tree, the photosynthetic process mixed into the chemistry of the soil in uninterrupted cooperative, complementary sequences called "tree."

Naturally, the Luce Tenebra project could become an earth celebration process and could hit at the core of the deforestation drama. We always see only half of the tree's true organism. The project would dramatically present the "whole truth" with great impact upon all. Good public relations, virtual reality, graphics, and written text would sell Tsumari as the Luce-Tenebra center of the world, with orders coming in and forests rejuvenated by public demand.

There should be inquiries at local universities, botanical institutes, and labs as the first resources for Luce Tenebra. And endorsements should be sought from universities, scientists, environmentalists, chemists, botanists, botanical gardens, etc.

Space and light.

A lightless space is conceivable. A spaceless light is not. Light is a fast runner by definition, and running means space to run in. But a dark presence, a black space, is lightless space also by definition. Then perhaps light is just a "form" of space. In the absence of that form of space, light does not exist, because light is space. What goes for light goes for the whole electromagnetic spectrum. Pull space out of it and "it has nowhere to go"; it does not exist. Space as distance: connector-separator-distinguisher, discriminator, savior. (8/23/00)

. . . . .

The Luce Tenebra is a small corner in the quest for knowledge, but it can be of great value beyond its persuasiveness in the public awareness. It puts the public at large "one inch" away from the (vegetal) wonders of trees and forests.

From sand to bronzes. From soil to silt to structures—cities. From silicon to intellection-Mind. Sand, silt, silicon theme variations on the erosion of stone being used in the Hows of things: metallurgy, construction, and brainy lattices. (6/8/99)

7. Minds for History

Minds for History is a program that has features common to the "Wise Man Conferences." In the original four Minds for History conferences at Arcosanti, the emphasis was on eliciting from the invited scholars, artists, musicians, and scientists their own model of reality. With that as the goal, the participants take turns questioning and being questioned by one another. Some important modeling and hypotheses came out of the spirited encounters.

8. Paradox Proposal

Dangers of the Global Hermitage

The Paradox Project sprang from the initial assessment of some of the consequences stemming from the silicon cyberspace revolution.

Six paradoxes are coming into focus. It is a paradox that:

1. An *ephemeralization* technology, the Miniaturization-Complexity computer Techne, generates new wealth that in turn finances a new wave of *materialism* courtesy of the production/consumption engine. The "savior" of intellection, the noosphere, is authoring the nemesis of the biosphere.
2. Homo carbonis might be engaged in self-extinction via the Homo siliconis he is inventing, a biotechnology reaching back millions of years, made fearfully tragic by the World Wide Web.
3. An optimized communication/information technology may generate a planetary hermitage engaged in a virtual reality and a technology promoting a hypersegregated Homo sapiens.
4. A technology of learning via information can very easily turn into a technology of data inflation-constipation of information and mindless, pernicious gossip causing a sclerosis of mind.
5. A democratic technology might engender a split between the "haves" and the "have-nots," a split of unprecedented cruelty.
6. A fundamentally democratic technology, the World Wide Web, might cause a luddite revolt against technology and its overpowering presence, a technocracy.

The global village never came about. It was a naive notion to start with. But what might well be in the making is the *global hermitage*. The global village proposes a sort of universal brotherhood that implies Utopia, an ultimate binding *religio* that is beyond the intellectual and wisdom capacity of today's species. The global hermitage (hermit) proposes a universal estrangement cultivated by self-centered individuals and their private gods and demons. (7/16/96)

People persuading people is often conducive to greater wrongness. Despots work always with their power of persuasion upon selected neighbors, then turn to force and victimization. Circumstances might persuade people, sometimes by slow infiltration; climate warming can be such an instance. Sometimes by way of a sudden alteration of reality. Ask the dinosaurs. For them persuasion was death. But then the despot is a circumstance all of his own. (11/26/00)

It is important to consider these paradoxes and to consider possible reconfigurations of the cyberculture itself if so warranted by the dangers hidden in them. But if encounters on this topic are to be considered on a regular basis, then the bulk of attention would go to considering the larger question mark of consciousness and the transcendence from carbon consciousness to silicon consciousness, and how an internship developed as part of the Paradox Project can result in a constructive, in fact, exhilarating experience.

The 1997 Paradox Conference at Arcosanti opened a dialogue about carbon/silicon intelligence. The responses of the Paradox Project to the tidal wave of cyberspace may in part depend on the hypothesis that reality is, and only is, space in metamorphosis. Space is a hypersophisticated geometric game (smells Pythagorean). It is the nonanimistic posture of MCD. *Physicality* is on its way to *mentality* and in for an immense effort to move toward two nonanimistic agencies par excellence: Miniaturization and Complexity.

7. *Performance and Events*

Throughout the 25 years Arcosanti has been under construction, there have been a variety of special events. The largest, the 1977 Arcosanti Festival, was attended by about 3,000 people. On average, the attendance is in the 100–300 range.

One thing to consider is the celebration of seasonal changes as they relate to the nature of the zebra-leopard and the nine programs. Form, space, color, light, sounds, and how the audience/ participants can produce an array of documents should all be considered.

As succinctly as I can put it, here are the critical aims of the proposals.

- With *Via Dolorosa-Deliziosa* we have the esthetic bridging into the beautiful and the scientific.
- With the *Construction Workshop Exchange* we have the *persona prima* experience of "Howness" with a purpose.
- With the *Speaking Wall* we have participatory ways of involving visitors and friends in the production of permanent and visible parts of Tsumari.
- With the *Ceramics Guild* we have the elementary materials, silt and clay, as mediums for artisan expression via the silt cast and other techniques.
- With the *Arcology Gallery* we have a document about the possible evolution of the Urban Effect.
- With *Luce Tenebra* we have the scientific bridging into the esthetic.
- With the *Minds for History* program we have a reference to the mind restlessly groping for resolution.
- With the *Paradox Project* we have the peering into

awesome things to come.
- With *events and performances* the field is vast and suited for the staging of events that might relate to the nine proposals.

Summary

The projects outlined here are coherent with arcological fundamentals that may help underpin the socioeconomic growth of the Tsumari community.

Some of the ideas may be feasible in the near future if desired. Otherwise they may be considered for the future development of the region where the community undoubtedly wishes to thrive for the next century.

The *Zebra-Leopard Concept* is represented by Arcosanti because the project integrates diverse domains in a complex that will promote lively interactions between people who occupy the space, the Urban Effect. The application of a single ribbonlike continuous structure threaded through the Tsumari communities may be too ambitious at this point, but any developments anywhere in the future should consider the sociocultural and economic implications of how the infrastructure of a community influences the strategy to sustain the overall ecology within the given environment.

Dolorosa-Deliziosa was originally designed for the 4-kilometer access road to Arcosanti. Naturally, the idea can be translated to any environment where nature, art, and technology meet and present ecological concerns. The scope of the project can be modified to fit into the Tsumari environment if interest is found.

Workshop exchanges between Arcosanti and Tsumari will certainly introduce both to a variety of cultural and environmental experiential opportunities that will bring our communities closer for meaningful learning while exploring future collaborative ventures between them. The Arcosanti Workshop program was initiated in 1960 at Cosanti and has been active ever since at Cosanti and Arcosanti.

The *Speaking Wall* project at Arcosanti is an opportunity for people who are interested in a small way in the construction of a building here. Any number of the panels may be the participant contribution. Within certain limitations and criteria and including individual time capsules, the panels can be installed as a part of a building's design features. Since we are planning to design and build structures in Tsumari, the Speaking Wall panels can be a part of future facilities.

Silt and clay have been among the resources sustaining Arcosanti from the start. The techniques developed here have been applied to making wind bells and sculptures as well as to the construction of large-scale buildings.

The introduction of a ceramics studio in Tsumari can open up an opportunity to demonstrate some of the techniques, an educational opportunity, as well as to produce a line of ceramic products that would generate income for the Tsumari community.

Given the vast differences in the environments of Arcosanti and Tsumari, some modifications need to be made in facility configuration and in the operational method to produce a workable adaptation.

The *Arcology Gallery* has been in existence in various forms for the past thirty years: in museums, exhibitions, publications (print and electronic media), and galleries at both Cosanti and Arcosanti. Tsumari will have the opportunity to have a gallery that deals with the precarious nature of human endeavors through ecological, socioeconomic, and esthetic points of view.

The gallery in Tsumari can be an exploration of ever increasing human potentials through ecological exhibitions that are coherent with evolutionary teachings.

Luce Tenebra is a part of our greenhouse design yet to be implemented. Aside from the philosophical and esthetic implications of the project, I believe the experiment has scientific and educational value. I would like to suggest that we make a first prototype at Arcosanti to test a unit, an outline of the experiment to follow.

Minds for History conferences were started at Arcosanti in 1989. They are intellectual probings of extraordinary minds that have contributed to our society. Occasional opportunities of this kind can certainly be stimulating to the Tsumari community, as they have been at Arcosanti.

The first *Paradox Project* seminar was held at Arcosanti in 1997. With the growth of computer-cyber technology, our uneasiness with our ability to balance our experiential, hands-on learning with employment of the cybertechnology on which we have become uncritically more and more dependent has also grown. The project suggests the development of an internship program for individuals to experience both the hands-on (physical) and cyber (mental) aspects of what Tsumari and other traditions can bring to the challenge of facing the next millennium.

One suggested type of *performance* is the pictograph—environmental light and sound shows—which were developed in the 1980s and have become an Arcosanti summer tradition. These could be translated to the Tsumari environment.

Conclusion

We belong to the same planet. The difficulties we, the population of the planet, are encountering are universal because

they are at the core of the human condition.

What Tsumari is searching for is a meaningful engagement for its people in rewarding and fruitful endeavors. Endeavors that prove to be merely politically correct or historically fitting will not ultimately achieve this. Only those endeavors that are evolutionary coherent will reward the people of Tsumari.

In straightforward or oblique ways the proposed domains work toward a keener awareness, participation, and enjoyment, and they are endeavors we have been pursuing at Arcosanti.

THE PREEMINENCE OF ART AS AN INTEGRAL PART OF LIFE IS ROOTED IN THE JAPANESE ETHOS. At Arcosanti we are aware of the indispensability of the coexistence of life and the esthetic.

Intensification of presence. Life as the intensification of presence is the Becoming that space generated with its metamorphosis. In the Tsumari instance, life burrows, invests, bridges, and tunnels with a continuum of intensified and energizing presences by calling upon Mind to intensify life by its own active, coordinated, transforming presence. Not by dotting the skin of the Earth by its labor, the leopard-skin model, but by ribbing it in the zebra-skin mode, ribbing it with its own con-fusing of past experiences and more specifically its communities of guilds, thus con-fusing them with their contemporaneous incarnations: the guilds of hard tech, silicon, and the consequent noosphere inception. (7/19/98)

When we speak of mind, we speak of a self-referential brain (body-brain). Animals are "mindless" because their body-brains are not self-referential. It takes the reflective dimension of body-brain, self-awareness. (8/15/00)

A taste of the naked mind. (9/26/99)

Most books are monologues on crutches: notes, references, bibliographies. The scholarly imprimatur (varnish?). (9/26/99)

The "vision thing" has taken leave from society, or is it perhaps democracy that unwillingly has chased it away? (6/12/94)

"Focus on the whole," the self-contradictory? Focus is concentrated attention traveling on a sort of light beam targeting a loco. It sounds almost idiosyncratic, maniacal, blind eyes wearing, exclusive, segregative. Maybe it is the application of the slogan "think globally, act locally." (8/17/99)

18

"Minds Directory" Conferences

A Proposal

1986

Conferences tend to be well-meaning waste machines. The waste is both material and mental.

Even in the best of cases the endemic problem with conferences is that what the participant hears are snapshots of mental processes. The speakers and debaters produce and vent shreds of their model of things because the conference format does not allow for more. All those mutilated notions, propositions, ideas, and paradigms fly by each other with little room for "encounters" but a lot of actual collisions. If one adds the semantic difficulties, not to mention the language barriers, the hope for true understanding and synthesis remains just that, a hope.

Adding to the problem is that speakers often work as selectors of other minds' ideas and concepts (the security blanket syndrome?) instead of offering "a piece of their mind." This adds more mutilated limbs to the collective mental space.

How can we obviate the situation, remain in the realm of the feasible, have some success at synthesis, and end up with "product"? My proposal is: DO NOT FOCUS ON A SUBJECT; FOCUS ON ONE MIND. Alternatively, DO NOT FOCUS ON SUBJECTS; FOCUS ON MINDS.

Focus on One Mind

Focus on one mind and construct, via dialogue and debate, a fairly complete image of it.

Phase one: Information flow from the selected mind.

Phase two: Analysis and clarification via panel.

Phase three: Synthesis and documentation via "biographies."

The survey of the chosen author's mind (the author, from now on) would proceed from the perspective of at least four different disciplines chosen from the following: the sciences, philosophy, theology, esthetics, economics, politics, history, and technology. One person of solid credentials would represent each discipline, and a person of solid credentials would assume the task of moderator. The core of the conference would then be constituted by the author at the center, a panel of 4–8

"investigative scholars," a moderator, and an invited audience (size to be decided) participating as listeners and questioners according to a schedule decided on in advance.

Chronology

Part 1: The author develops his "model" (1–2 hours).
Part 2: The panelists intervene for clarification and analysis (1–2 hours each).
Part 3: All participants contribute to a systematic critique and synthesis of the author's model (1–2 days).

It would seem necessary to spend at least three full days in encounters. Optimally, a week's work. The material would have to be reviewed and reedited by the author, panelists, and moderator before being incorporated into the final "product." This part would be better put together by a "professional" writer (a panel member?).

Results for Author and Panel

1. The author, who may miss some critical elements, can be effectively helped by interventions from disciplines that are not his/hers, to the advantage of his/her model.
2. The panel can benefit its members by participating in a live exchange of ideas about four or more models of thought focusing on one single-mind model.
3. The mental gymnastics the moderator has to practice speaks for itself.
4. The attention of the audience can be directed toward discovering the implications and ramifications of a thought process examined through different disciplines.

The common frustration felt at the end of even the best planned conferences would be diminished, if not canceled, by the automatic targeting built into the format.

One could envisage a cycle where all the participants and the moderator would take turns at the center as authors. To avoid congestion but retain the knowledge and understanding that would intensify via such cycles, each turn could be separated from the other by days, weeks, or longer. A new person could be a refreshing addition for each cycle.

Why a Minds Directory?

Because the conference would generate a "super-document" on the thought process as it has developed in the mind of the person (author), with all the attendant revealing pathways and mechanisms, the highs and lows, the banal, the sophisticated, the authoritative, the brittle, the insightful, the expedient, the rational, the intuitive—this document would be a precious pedagogical tool. A collection of such Minds Biographies on

video and audio tapes and in book form would constitute a unique and inestimable Minds Directory.

Perhaps the brains of "geniuses" are just brains with extraordinary juggling faculties. Prestidigitators of exotic excellence, or more exotic geometries than most humans. (3/2/00)

The Product

The Minds Directory would be a new reference instrument for any undertaking in need of specific mental resources and applicable models. Institutions of learning, governmental institutions, advocacy societies, and corporations in general would soon find it to be an indispensable device for the recruiting of those minds most needed for specific programs. But the substance would still be in the richness of each mind's biography and the role model he/she would present to students and everyone else.

If sharply structured, the Minds Directory would offer a survey of the outstanding minds living at present but often unemployed or badly underemployed, a cruel waste for all mankind. Think of the difference between the schmaltz of a "Who's Who" directory and a Minds Directory. Even a modest edition containing 10–20 authors analyzed and made intelligible, would fetch any price on the specialized and non-specialized market. Nothing of this sort exists yet.

For an opus referring to a few hundred of the richest contemporary minds, the history of culture would acquire a new, powerful instrument, and the understanding of our age would be made a fraction less bewildering. A thread could eventually develop pointing at the "unity" of the sciences and of culture.

To make Mind the raison d'etre of (Becoming) reality. Short of such transfiguration the mind will remain a puny little loose cannon within, a totally meaningless, totally indifferent reality running on automatic pilot: the idiot savant of the whole. (5/9/96)

19

Minds for History

NOVEMBER 1992

The Minds for History conferences were designed to identify and document the processes and models of thinking employed by extraordinary individuals whose minds have generated remarkable initiatives, discoveries, achievements, and insights into our culture and society. It was our intent to enrich the Arcosanti community and the region by providing a unique intellectual and cultural event. Our inaugural program, which was widely acknowledged by the international press, included such luminaries as Warren Bennis, Murray Gell-Mann, Robert Jay Lifton, Billy Taylor, Hazel Henderson, Harvey Cox, Czeslaw Milosz, and Richard Falk. The meetings were greatly appreciated for their spirit of adventure and discovery and lively interdisciplinary exchanges. A statement by Harvey Cox captures the essence of the conferences and reflects the consensus of participants and audiences:

> *I cannot remember any single occasion during my life as a scholar and theologian in which I have felt more supported, stimulated, and enriched at the same time. The format is unique and highly productive. The exchange of ideas and insights evoked new thinking and clear personal reflection.*

The Minds for History program was short-lived. After three conferences, all of which were critical successes and commercial failures, we had to abandon the project for lack of funding.

—Mel Roman, Cosanti Foundation

The present Western generations are clamoring for "personalizing." They do not ask for social, cultural, economic, or ecological niches, but rather personal niches. The paramount significance of the person!

But if one tries to shed light on such personalization, one is surprised by the amount of homogenization: We really beg for belonging to something, sometimes to anything, even at the expense of our own identity and dignity. That easily goes for the mediocritization of culture. I guess opportunism with all its possible vagaries imprints us in a schizoid mold, and in it the icon of true freedom is a distant notion.

The fractured nature of our society could be reason enough for trying to understand how some individuals seem able to leapfrog over the anxiety and, at least occasionally, generate the nondeceptive, the tangibly extraordinary. Extraordinary minds are asked to accept probing by peers from different disciplines seeking to understand the image

How can intelligence become a cosmic actor and begin to guide reality toward grace? As it is now, the cosmos, its dimensions that is, its inconceivable vastness segregates the cosmos from itself. The billions of years it takes for light, that is, information, to connect one galaxy to another makes *religio*, religiosity, into a ghostly unobtainable goal. (10/24/99)

A glut of idiosyncratic behavior, an epidemic of it. And of it only a tiny amount emerging from tedium, flakiness, and mediocrity. Excellence has its own stern rules, and its price is high. (2/17/99)

such minds have of reality.

That an extraordinary mind might be able to do without such an image is hardly plausible. It might well be that the image is not consciously developed, that it is ambiguous, painful . . . but down deep enough, it can be found. For instance, a God-fearing mind cannot abstain from contemplating the consequence of such faith as much as a nonbeliever must contemplate the consequences of his or her disbelief.

A worthy scholarly enterprise would be to develop a "Minds Encyclopedia" in which extraordinary minds from the past would be succinctly presented from the perspective of reality's modeling. This would entail many years of work, but the acquired information could be invaluable.

More than ever, science, philosophy, religion are contending over territory that is ephemeralizing itself more and more: the cosmos and its possible meaning. Leaving aside the probability that someday the three will find themselves in the esthetic basket, the fact remains that the anxiety of the species finds no pause or real comfort in any of them, or in any kind of maladroit ecumenism.

A profound understanding of things of one's own discipline does not automatically mean that one has a coherent take on what one might wish reality to be. But if there is one thing on which science, philosophy, and religion seem in accord, it is the indivisibility of the real (whatever the real might be).

To separate, divide, and isolate for a refinement of specific and probing tools is an extremely fruitful expediency: see the scientific and technological revolution. But how do we move from expediency to realism?

From my limited experience, scholars, academicians, scientists, and also philosophers are not inclined to modeling. Too risky and too presumptuous, I guess. (3/22/99)

If we persist in an analytical tour de force with no parallel toil toward synthesis, apprehensions, or comprehensive simulations, our minds, ordinary and extraordinary, will more and more become silt in the reservoir of knowledge and wisdom we desperately need to fill and fill with less and less detritus. The Minds for History play-conferences could make a brave contribution to reducing the silt-in.

Life is not a collection of stunts. Life is the grinding away in all its palpable and impalpable things, at all its harshness and sweetness. (11/28/95)

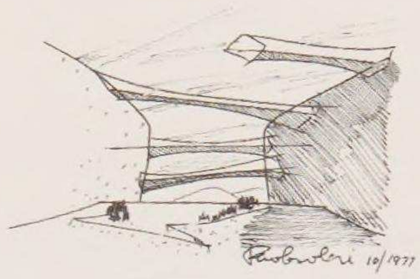
The hologram of recent technology that carries in each fragment an (ever impoverishing) image of the whole is very telling on two scores: One is the lessening of information-knowledge each fragment is capable of containing and offering the smaller the fragment; the other is the resonance box that everything in its fragmentary way is.

Nudge reality toward the generation of purpose. (11/5/96)

One can wish that the Minds for History holographic fruit will not be too puny, though necessarily fragmentary. The Mistero Tremendo might be forever beyond human grasp, and yet . . .

PART 3

Hoppers



11/26/00

The potential advantage of the hopper: if and when substance is there, any word can trigger a thought sequence. Analogous to a spiraling event (a rotating sprinkler, for instance) notions absent at the start travel tangentially away from the original impulse (water pressure in the sprinkler) generating other thoughts, quantas. Soon, at least occasionally, the politically correct shoots away into the historically fitting, pauses there a brief moment to plunge into evolutionary coherence, and even more rarely might explode into cosmic relevance. You might go from the word "coffee" to the seeding of the cosmos or similia.

Surveying a number of such "exercises," one might then form groupings where a thought or a bias runs deep. Soon hoppers of germane lines of thought take form. Fishing them out can then make easier the formation of edifices of intellection.

Animism

8/1/94

A reality constructed of emotionally charged entities—the gods, the spirits, the angels, the benevolent, the malevolent, the transitory, the sinful, the penitent, the possessed, the diabolical, the soulful, the pervasive good and evil—produces actors, us, imbued with all the destabilizing feelings and emotions one can generate. For such actors, a less-charged reality and a less-charged anima suggest coldness of heart (a pump, by the way). In fact, those charges are the emergence made possible and invented by a much less animistic, cooler reality. The reality of probabilism, determinism, opportunism, and the late Love Project reality.

The Love Project is the culprit in the total anxiety of charged things up and down the spectrum of plus and minus, sensitive and insensitive, good and evil, oneness and otherness, temporal and eternal . . .

This proposes the importance of a "cool" religiosity. A new "theology"? I propose the theology of the (as yet) nonexisting God, an utterly democratic theology but an unforgetting (but forgiving?!) theology based on the "fact" that nothing done can be undone and the necessity of a final condition where the unforgettable (all of evolution) is present and responsibly admitted . . . the bouleversement theology of Omega Seed.

The first catastrophe (the Fall) can be identified with the Big Bang moment when the nothingness of Nirvana becomes the Becoming-Beingness of the world (cosmos).

1/28/95

I am not a theologian; I am perhaps a technologian, one who

is concerned about the technology of Mind (the whole 15 eons of technology of matter becoming Mind). I am not a founder of Religion; I am a finder of Religion and of the CMD paradigm. *Religio* was founded, now we know, when space-time got Becoming under way.

Religion is the possibility of an ontological triumph (Omega Seed) out of a mosaic of individual tragedies, conception-birth-maturity-demise, imbued with the tragic sense of life. The toy maker systematically generating each of them leaves the question of equity unanswered. There must be a Second Coming of each puppet for it to participate in the glory, after having been one of the constructors of it.

My resolution is Omega Seed via CMD—the puppets metaphor and the magic event that will give back to each of them their life and "forever." That at age 50, let's say, you are derailed in the junkyard rail—be it 10, 20, or 50 years long—this is intrinsically a private "ontological" tragedy. Add to it the tragedy of the accidental or the tragedy of the pathological (illness).

In a noneschatological (self-creating) reality, life's singular individual manifestation is irrevocably dumped, therefrom the utter inequity soaking the process. Reality doesn't have to drop blood to be unfair. It just has to do what it does to be a dump yard. That is why theological deceptions have accompanied life from the very start of consciousness. Deception via the simulation of what we desire: equity via immortality.

My hypothesis says that the puppets, all of them, fall into an immensely long slumber, which will be interrupted for good at the clarion call of the Omega Seed, the Second Coming. For one and all of them. The slumber chamber is the past, the only reality. The present is that which produces the past via constant space-time flow. The present is the producer of the past via the manipulation of mass-energy by space-time.

The future is a figment of our imagination. Plants and animals do not have a future. Yet they keep generating the past, no questions asked, no fantasies and hopes intruding.

3/16/95

Three great curses of life. Two are the parent curses: the curse of theologies—that is, the dogmas about an existence of divinities (throughout history); and the curse of greed—that is, the dogmas about the sacredness of hyperconsumption (throughout history). Instead of one neutralizing the other on the theory that the soul (theologies) will conquer the body (greed), they work in a sort of negative synergy.

The offspring is the direct consequence of two dogmatisms not in conflict with each other, but, in the grand manner of self-deception, a "rejoicing" in the self-righteous glow

of the Chosen People. The product is intolerance. The God's Chosen People and the "self-made" entrepreneur in tandem. "Self-sufficiency" in the shadow of the "true god," Hindus, Jews, Christians, Muslims, etc.

A self-sufficiency in "the" midst of plenty. What is more, theologies are the nemeses of true religion, and theologies are once more in the process of tearing apart the fragile texture of humaneness so as to reinstate the Kingdom of God.

Greed is almost the mirror image of such fatal intolerance. It creeps throughout such a fragile texture and has no tolerance for the call of compassion, love, generosity, equity, etc.

One tears from above: Zeus and his thunderbolts; the other from within: the opportunism of the ego on a rampage.

Religion means binding (from the Latin *religio*). Theologies cannot bind since there is no way or sense in binding with those things that do not exist, man and the rest of reality to gods.

So the immense and immensely cruel persecution and disposal of the infidels (to save their souls) goes on unabated. In fact, now at a paroxysm of violence, be it contained in the raging "soul" or expressed in deeds.

The economic chasms that greed cultivates plays in the "hands" of phantoms, the gods, and the deeds also acted out by the flesh-and-bone-hands of the (chosen) elected.

As greed is endemic—that is, performing through the "rich," potentially and possibly explosive through the "poor," so is the endemic conveniently dressed, love for gods . . .

Poor humanity. Intolerance is your master. You and the daughters of two bitches, god and greed. G.G. ——> intolerance.

In a Gilbert & Sullivan twist, that is, the tragedy played out in our fundamentalist-revivalist gladiatorial games, God and greed and brethren do not tolerate the gentile, the brethren enemy out there. Find ways of preventing the American Dream going global and its most cherished icons- -single home, automobile, gun—from becoming part of a planetary iconography.

Three billion houses, 4 billion cars, 5 billion semiautomatic weapons . . .

7/3/96

Eighty percent of Americans believe in God—that is bad news, tragic news, even if half of us fake it. What a pity! I believe in man, in his mind, the inventor of God . . . Only the esthetic "redeemed" us. But, naturally, it is not redemption, a nonfact, but creation, the esthetic metamorphosis.

10/24/96

Theologies

We, planetary specimens, are in the midst of theological wars, as we have been for millennia. Theologies are killing machines history has sanctified and legitimitized.

Israel and Bosnia provide only the most virulent episodes of a planetary infection that does not seem to have antidotes. In the name of (my) God all seems possible and anointable. All sorts of intellectual constructs have been encrustations on an invention that seems to sing love songs, but that delivers pain, sorrow, suffering, and death with cruelties of very special brands. The invention is a sad mass delusion and, as such, evil. As killing machines go, theologies have the gold medal. Countless millions have been killed in wars, battles, executions, and personal confrontations.

The halo of suffering, anguish, and inequity that go with such slaughtering have been immense and anchored to strands of revenge that remain virulent for countless generations. Persecutions, like viruses and plagues, recur and recur, teaching no applicable lessons. Hate does not forget as it does not forgive.

If ever God existed, God should be rolling in seas of blood and guilt of cosmic proportion.

8/3/97

What prodigious flights would reality take once unburdened of animism is the excruciating question. It must be kept in mind that animism is a human invention and occupies the brain as love, science, and the esthetic do.

10/30/97 (OAXACA)

Retail animism versus wholesale animism. The retail animism cultivated by medicine man, shaman, witch man, "local" gurus, et al. Wholesale animism is incarnated by the great delusions of the "Great Religions."

1/21/99

Greek mythology rich and blood-stained, blood of God, lesser gods, and mortals, turned out to be the agent for esthetic exploit of first magnitude. From literature to theater to the "fine" arts: painting, sculpture, architecture, plus the artisan and craftsman delights.

Christianity, the offshoot of Greek mythology, had followed its stories in a different tonality to construct its own full mythology. We are awash in it. Delusion then, delusion now. The redeeming factor then and now is one and the same: the esthetic act and object. Theologies in function of the esthetic.

The esthetogenesis of reality marches on via and courtesy

of the animistic delusion converging in it all the anguish of the species. The anguish of Sophocles quite different from the anguish of Fra Angelico, but human anguish just the same transfigured into the esthetic.

10/14/99

Theology and Religion. Theology mandates a hypothetical presence, the gods. Religion is the pursuit of an imperative, binding love.

8/17/00

The sun was very orangy and very large this morning. If we really must worship something, we might as well worship it. If it turned off for just a few hours, the planet's surface would be in trauma, for a few days it would be in coma and life turned into icicles and popsicles. At God's pantheon would be pandemonium. Who of us could do such a thing is the indignant question. By then the whole planet's surface would be an ice-skating sphere. I know, I know, the gods are at the switch. Do not tell, they might themselves turn into god popsicles, god icicles. Life went on for eons without worshiping the pantheon crowds, but ho, ho, god sun was there night and day to nurture it, making some of itself into it. Sun god, thank you.

9/6/00

Experiencing and virtuality. Two worlds apart. The world of experiencing is the body-brain at work. The world of virtuality is the brain at work. The body-brain world is the awareness world on all the good-bad spectrum. The virtual world is the data world disconnected from the real. Animism is the Nirvana of virtuality, the simulation world that constricts its passions around imagining while reality goes by, the reality we interpret and live by with our body-brain.

10/4/00

It might be important, necessary, to establish the boundary of the real as distinct from the imagined. The imagined resides in the brain, and with the demise of the brain the imagined ceases to "exist"—all along it had been a brain pattern. The real, though subject to brain interpretation, is outside brain jurisdiction. It exists (Becomes) before the brain and it exists (Becomes) after the brain.

Naturally the brain itself is for real not only during its brief existence (Becoming) but also as the imprints it makes by its action. Part of such action is the imagining whose presence is there in the brain and nowhere else.

In the animistic brain the distinction between the imagined and the real blur and life becomes an endless simulation (exercise).

Theology is established when brains pick from one another germane images that soon take on a life of their own. That is how Jesus became Christ and where Christ a simulation becomes Christ the powerhouse. The demise of all the simulatory brains is the demise of Christ the simulated, though Jesus the persona is there in the past, as all other things are. Also in the past is the fraud that Christ is when located in the real by the brains that imagine him. In this "transaction" resides the power of animism: to make for real that which never existed. It is also the domain the Internet has to contend with. The distinction of the virtual from the real. The Internet will never make a fish; only fishes make fishes; nor can Jesus when reinvented (simulated) as Christ, both (virtual) Christ and fishes.

Christian brains are a tour de force of animism. It is the "as if" with all its powerful pull and all of it flawed, because it is a chronic misleading used by man the opportunistic animal. Angels could do of Christianity a sweet dance. Man did and does of Christianity a dance often, too often, macabre, as all theologies do, including the "capitalistic" theology. Angels make angelic use of capital; man makes opportunistic use of capital. Unfortunately, angels are a brain simulation while opportunism is built into every cell of our body-brain.

These are times of chaos "disciplining" all sorts of initiatives and enterprises. All of it in an almost nonchalant way of casualness. The great causes, brittle and cracking, are giving way to the virtual haphazardness afforded by silicon and hyperproductivity in the process of establishing new causes. In the Internet for instance, the casual meets its own nemesis, the causal its own theology; in the meantime the persona might find itself in the meat grinder of postsilicon intellection to be born again as a fleshless "persona" arguing for a window of opportunity upon the universe at large within the new causal frame of reference.

For any causality that is wrong from the start, the rule of a better kind of wrongness applies. Common to all wrong causalities, of which the animistic fallacy is the most embracing, there is weighing for them an optimization of wrongness. Sub-exurbia, the gun, the automobile, gaming, and greed are a few examples. The optimization of wrongness is a nemesis for human and eventually nonhuman as well.

10/25/00

To Venice

In saints and probably even more in hermits, the borders of monologue-simulation can melt away. Reality and virtual reality become one and in a state of trance can become a daily occurrence. The great books of theology are documents, often

powerful documents, of the genius of man to construct virtual worlds. Often, I guess, they are bazaars of nonsense, extensive mantras like those that sound constructs.

Even in sports arenas one can witness the power of similar words, and all sorts of mantras are roared by the large gatherings, not to speak of rock and rap sounded out in the new temples.

Then there is the soliloquy of the single brain to itself, the alter ego, gods and spirits being the interlocutor, growing in power by the day and the extrapolation of such lonely pursuit in the idiosyncratic temple of the single brain metastasizing into the great theological structures we eventually have to contend with.

Few solitary brain-bodies probably moving along with their nomadic relatives and serfs in deserts and prairies, thousands of years since, controlling, despotically controlling, our lives and shaping our lesser appealing deeds, the bulk of our history. Consider the Israeli-Palestinian exotic and bloody context. The phantom gods be damned, let me say.

To regain a pristine purity of Becoming is a false hope if we are unwilling to admit that from the very start of our history we "spoke" to the unanimated and the nonpresence later called spirits and gods, and that in endless sequences of auto-suggestions growing in ever larger self-deceptions we have constructed around ourselves structures that now we "honestly" feel and think of as indispensable for the development of our honor, our compassion, our success, and the meaning of our existence. What would be of ourselves without our gods, their injunctions, admonitions, promises, punishments, their love? We ask. Give it a try, I would say. After 3 million years of delusional roaming around, the democratic spirit should be a strong enough injunction. The absentee lords have damaged enough this very genome that could revolutionize reality itself, but we must first undo or at least distance ourselves from those simulations of our brain that pathetically but successfully isolate the I, the thou, and the it from each other via the pastiche of our misdirected imagining.

To promise that imminent death is the opening of the gates to paradise might be a charitable lie for the dying person. But the life-long lie that same person was penalized with is beyond the pale, is pure, cruel, life-long deception.

10/30/00

Venice, Monday

The causal and the casual. Living nature is predominantly causalistic: Survival and reproduction are the dominant drives, and the performance of individuals subordinated to the performance of the species is highly disciplined. There is an "innate"

formalism that is imprinted on the individual and the species it belongs to. There is an obedience of them to the cause, and with the formalities hidden or explicit, the reproduction rituals for instance. That is the causal world, and that is also the causal world of our species.

But with the emergence of the individual, the persona, there is a shift toward the casual, the "do as I please" syndrome.

The "virtue" of despotism is to retool, one could say, groups of individuals with the engine of causality. Those are causal, formal, ritualized tyrannies, kings, popes, conquerors, professional warriors . . . that keep the captives focused, if it takes the real or imagined enemy out there, or the circus, or the systematic murders or the "in the name of kings, country, and God" sacred duty, or an opportunistic potpourri of them all.

Most of the grand art was generated by the reintroduction of the causal often purely virtual, see *all* theologies (the forgery of paradises). For the Christianity cause, a Christian civilization was generated and the Christians were kept in line by enticements, by adulation, by favoritism, by menace, by violence, by mass killings, and by the terror of eternal damnation. With God the creator as causa prima and as a dictator of myriads of *forma*lities, some of the most outstanding works were also generated: under the causal-formalistic cap: architecture, painting, music, sculpture, theater, literature, towns, and cities. Technologies and science were cajoled and alternatively suppressed in that causal domain and were created up to the present and for generations to come. But the present is more and more given to the casual, that casual that can flourish under the technological cap and the despotism of greed.

The byzantine mosaic and the frescoes of the early renaissance are imbued with the causal; Christ martyrdom and triumph are in the same key of causalness, and the architectures are imprinted and transfigured in it. God as ferocious causa prima, let no one forget it. Fra Angelico is in praise of God, Giotto in tormented praise of it, Uccello makes a sort of magic colorful intarsio of it at the edge of blasphemy, casual man pulling away from the causal God.

Buonarrotti, large ego and fierce will, redefines the esthetic of the newfound Howness opening the gates to the less causal baroque and the next-to-come capriciousness of rococo. God's grand cause is on a losing streak. Praise for the demythologizing but sorrow for the lost greatness of a falsehood made causal in Angelico and Giotto, triumphant in della Francesca, reinstated in Mantegna. The cause of God gives way to the causal of man, giving in turn the key to his eventual inebriation of casualness. The resolution of anguish in romanesque, gothic, and renaissance first period finds its own esthetic resolution on the back of falsehood, the presence and

the tyranny of God. The lessened hold of the diminishing falsehood lessens the grandeur of both the godly imposition, the causal, and its esthetic resolution, moving from the causal to the casual, eroding in the process the very magic of the esthetic resolution for the condition of man.

The present era is the domain of casualness unless the technological Howness can be elevated eventually to the state of causalness, and perhaps this new potential causa prima is necessary for the opening of the gates on the cosmos. It seems that we need causes, no matter how delusional they might turn out to be. See all the theologically based masterworks of all ages. If you work in great art, work on grand mistakes (at your risk); of all the grand mistakes, theology is the grandest by far, and grandest by far is its esthetic denouement.

11/11/00

The eye, the pleasure principle, the self-rewarding mechanism . . . the hedonistic machine.

We say that the eye can be explained only if seen as a progression implementing an intended plan. A creative force, the great spirit falls upon the notion that sight is useful for some of his creatures and applies his inventiveness: designs one eye and then implements the design. Coming with a new function, sight, he, she, or it constructs forms that instrumentalize the function; form follows function, and voilà, the seeing animal.

What if the grand designer never existed and instead a self-designing, self-implementing progression of events, of space events, caused forms to enjoy functions the forms themselves solicited from themselves? I would call it the hedonism principle. The slow emergence from life of desire that in tiny increments blindly constructs for itself a new organ, not according to a blueprint but according to the pleasure principle—to perpetuate the pleasure of that which eventually is seeing. Not blueprinting by the great spirit but bricolage by space pleasing itself through the enjoyment of becoming progressively "sensible." Automatizing the sequences of the tiny steps so as not to "lose sight," the pleasure rewards of the bricolage bootstrap dance forming for itself added pleasures, uppermost among them the survival pleasure. The natural self-selection of those impersonations advantaged by sight and better sight . . .

Space is a bricoleur on a trajectory of self-enjoyment at whatever cost, rivers of pain, tears, blood . . . What it takes to be able to sing the song of presence step by step enriching itself, the will to live, the enjoyment of experiencing, slowly evolving into the will to know in the escalating surge of complexity-intensity, the ever more minute are the spaces of which the game itself is made: the information-knowledge

train of miniaturization.

Opportunism seems to be the rule of the living landscape. But opportunism is the child of willfulness, the core of interiorization, that is, of life.

Better Kind of Wrongness

12/25/93

The mysterious inability of leaders and the "common man" to connect with reality. I wish the "no free lunch" axiom would sink in and down, from the practice of futility into the practice of reality to which the politicians, not to speak of the technocrats, will eventually have to awaken and respond to with coherent paths for action. For the moment, they steer things in a sort of dense mystifying fog.

I said futility, because well-meaning efforts and sacrifices are futile when the spin is on doing the wrong thing better.

Hypereloquent in this better kind of wrongness is hyperconsumption as the key to societal well-being. Hyperconsumption will soon be perdition, and even fusion energy will not avoid Armageddon. Consumption is a state of being besides being a sign of power or status ("well-being" plus purchasing power).

12/27/95

The first Utopian "move" of "every body": we ignore or choose to ignore that we were "originated" 10 to 100 eons ago . . . from then on it is Utopia all the way: the theological constructs testify best to such Utopia. Taking things for granted, 10 eons of "things" is a great congratulatory recognition of the automat-ization life has achieved. To ignore What, the content, the meaning, and the need for such automat-ization is fraught with "mortal" danger. But this is what we tend to do, this is what finds expression and possibly nemesis in the hyperconsumption, hyperhedonism of the present. We are after the well-known free lunch, and the technocrats are up front on this fogged-up notion. "You can become what you want" adds cruelty to the scenario.

But in general what denounces best the Utopian nature of our "realism" leaders and gurus is the dedicated pursuit of better wrongness.

The Pursuit of Wrongness

Dedicated we are to the betterment of wrongness; see the gun, the car, suburbia, the cigarette, the war machine, greed, theologies (animism).

6/3/96

As long as we are the prey of theologies, we remain inimical

to life and Mind within it.

Theological structures are constitutionally pernicious: trying to improve on them is the most typical example of a "better kind of wrongness."

3/29/97

. . . *What comes about is forever and is forever unalterable.* This unalterable forever contains evidently also the delusions of the times but for what they may be: delusions. With them also the end of such delusion: First on the list, the theological delusions and their bloodied "progress" through history. This shows how pernicious is the better kind of wrongness.

5/14/97

In the better-kind-of-wrongness triumphal mood, America is gloating about the good time we have and are anticipating. Rearranging the furniture below deck on the *Titanic* is going on at a frenetic and rewarding pace. Glory to God! I guess the 5 billion not-so-engaged fellows must be kept in the ghostly mode of detached souls moving in a virtual reality outside the consumerist domain.

9/16/98

The discovery and recognition of evolution that Darwin first among others "systematized" has as yet been unable to percolate in our bones. Therefore the coherence I am advocating as essential to our interpretation of things and our action upon them (the Hows of Techne) has no voice in our societies. It is as if we confined our presence to a "palace" made of discarded designs, the animistic palace designed by the gods we invented some hundreds of thousands of years ago.

The better kind of wrongness has been effectively operating through our fear, expectations, and despair. The palace is protean but necessarily a delusion, the delusion intrinsic to the animistic engine.

History is in large part a document about the displaying of animism on this planet and the document is unequivocal. For a species that "invented" love, passion, and self-awareness, animism is a dense fog obstructing knowledge and creativity by way of arbitrary rules and unproved "facts."

12/21/98

In all societies in all historical periods and in the midst of animistic fog are persons of generosity, compassion, love. They are the redeemers, if redemption is possible, of animism itself. They are the martyred multitudes carrying the torch, the "love thy neighbor" light, and most of the time their worth is measured by their humility.

How profoundly sad it is that the animistic delusion keeps

them captive of the pernicious lies of theologies. Theologies cannot do without their grace, and faithful to the corrosive milieu of the BKW, theologies are carried on, adorned with self-righteously upheld "saviors" of the Love Project.

The profiteers of animism beware, the martyrdom of your innocent multitudes, their metaphorical and their real blood is in your hand. Washing your hand in holy water, the Pontius Pilate trick, will not save that soul you swear by. An additional blood-stained feather in the simulation game of animism.

The powerhouse of capitalism, which finds comfort in the larger powerhouse of animism, is insistent, sincerely or not, on a godly supervision of the deed of its own priests. The glory of God-and-country finances, armed by capital wealth.

No conspiracy there, just the state of affairs. A state of the arts? Animation-simulation-capital where simulation stands for the animistic pseudodomain that we are unable to shake off. Animism seeks meaning up the wrong alley. The alley of an original meaning, comforting but gratuitous, in fact blood-stained as evolution shows us. If gods ever existed they would be brutal and cruel. Unheeded redundancy within a brutal and cruel reality (from a life-beholding perspective).

2/14/99

Martin Luther, a most powerful case of BKW. Predestination and its most cruel indictment of the evil of man are exemplars of the brain's pathologies. That a Protestant theology is "live" and enticing is reason for profound, I mean bottomless, sadness. There is a brutal base to Luther: The only possible God is the God overseeing his creation with intolerant meaninglessness. I, God, created life and despise it, my creation. For all gods this would be the most insensate, and cruel because insensate.

1/25/00

Sharing—the word has become a sort of *tutto fare* dipper dripping the syrupy brew of togetherness. Shared mediocrity?

4/2/00

The more I see little elephants frolicking among the pillars of their mothers' legs, the more I feel sorry for their plight. I cannot imagine a human confined to express affection and love via a trunk and arms truncated to the wrists. The brain prisoner of a body whose domain of Howness never had a chance to reach in the subtle realm of expression and of care to the degree accessible via the skills of the hand.

Homo faber is the gate and the key to Homo amorensi and Homo sapiens, and the hand, as much as the larynx, is the maker of them all.

In the little elephant soon to grow into a large, awkward

bulk of flesh, the large brain is like a powerful engine engaged in a frustrating play of running around on four flat tires; and with a probing nose on the tip of it, care tries to transmute into love. Her cruel god keeps her brain in chains, exhibiting, in the extreme adaptation of a mountain of flesh, one extreme expression of a BKW. Does that apply to our species? Yes, if at the head of them all was an incompetent genius, God. The greatness of elephants and all is their by-the-bootstraps normative, patient, painful self-creation. And look at the superb spectacle of nature teeming with all those dumb-witted creatures.

Animation suffers its own inexperience, moving as it is into the darkness of nonanimated space. Reality, this quasi-infinite reservoir of nonanimated space, is there for the taking if memory can suffer to be called to ever increasing and complexifying tasks.

When the lion pride comes to maneuver the stealing of the newborn, elephant, wildebeest . . . you can almost hear the mother cry to herself, "If only I could strangle those murderers. But I can only stampede hysterically, trumpeting or gurgling my dismay."

On its way perhaps is a mounting tide of BKW. The food chain thrives on myriad BKWs. The muda (waste) intrinsic to Becoming, the hypermuda of evolution. That is why the Manicheans and Schopenhauers are so right and so wrong. What separates their rightness from their wrongness is the "unacceptable" bulk of pain and suffering that keeps them apart and near. Reality is harsh, is harsh, is harsh . . . and not just because we anthropos think so, but because life "thinks so." Consciousness and reflection just express it. Look at the newborn swiftly eaten alive by the large-sized predator or slowly by the small, invisible predators of disease. But then life goes on triumphantly, the tragico-glorious condition of life Becoming. Gods, the creators, are clever and cruel, just brush them aside. They are only reflections of life's cleverness and cruelty. Reality is the rub, not our subtle and not-so-subtle simulations.

5/22/00

The lasting impact of wrongness.

In general, what comes about comes forever. It is inscripted in the past for good. In particular, since there is a motivation for wrongness, as long as the motivation is there, the "improvement" of wrongness comes along in waves of revived commitments. If the wrongness was there initially, all new waves of improvement entail an inflation of wrongness, the BKW formula.

In practically all fields of human endeavor we practice the formula, and the price we pay for it cannot be erased from the

economy of the species. Sometimes we camouflage the formula: the ownership of people by the owner, enslavement, servitude, incarceration, quarantine, labor camp, or industry's heartless exploitation.

8/30/00

Noble as any effort to alleviate pain and suffering on the person-to-person level is, it is in the monolith of materialism where we find defeat and hopelessness. Going at Mount Rushmore with a toothpick, millions of toothpicks, is pathetically desperate. The real fact is that "matter" wants to go back to "matter," from dust to dust, stardust by the way, so rematerialization is in our bones far more powerfully than dematerialization. That is the Goliath-David relationship. Goliath, the cosmic fury; David, the infinitesimal intellection. Life might not make it, but intellection, her noble offspring, could, ought to. If it does, then the pain-suffering of all and everything will not have been for naught.

Not a great novelty that a majority might be in the wrong and that it might stay with it for long, too long. The BKW has the unenviable "virtue" of enchantment. If I am in "love" with something or with a trend, I will feel useful and meritorious for all I do to improve the something or the trend—that is, to make the wrong, if that is the case, into a more efficient and "meritorious" wrongness. Hitler picked up hatred and worked it into an oceanic vilifying machine.

10/16/00

Misuse of words and the breakdown of values: "love." It has become a vulgar mask we wear routinely. We smear love on everything, and everything is diminished by it. The inflation of the pseudoextraordinary.

11/12/00

The dark side of human history is in the persistent and successful effort of improving the wrong things. The consequences are that we have grown attached to a whole catalogue of exalted wrongnesses and we find it almost impossible to give them up. They are shaping the environment and the very life of the species. The iconization of wrongness is the story of small mistakes acquiring the power of catastrophe.

Teleology might well be the mother of all "original sins." Round and round it goes, adding layer upon layer of dedicated intents.

Lovers of the wrong thing: leaders of hordes of lovers. Augustus loved the Empire, Attila loved the battle . . . Saint Augustine loved theology, General Rommel and General Patton loved the war, Ford loved the car, Charlton Heston loves the gun, Hitler and Calvin loved to hate. The "nature

lover" loves exurbia. Attorneys love litigation confrontations. Urban designers love flat cities. Gamblers love gambling. Superstition and hate love idolatry. Pimps love prostitution. They all have one thing in common. They are improvers of their own trade . . . perfectionists even in their mediocrity.

The mix of the great and the vile in the list is to prove the point: Improving wrongness, big and small, is deleterious and has long-lasting consequences.

The Feminine

5/27/98

Shame on the American woman!! You could vote out the (male) savagery iconizing the gun, the killer of your children. You have the power to demythologize the gore and the glory of the self-proclaimed executioners with their arsenals.

The closet or the pillow in and under which we rest our guns (and ammunition), more than 200 million of them, belong as much to you as they belong to your mate. Get them out and away, they are the instruments of death by design and by intent. It is the blood of your children that now is spilled by the new generation of young killers . . . the sins of the fathers . . .

You life-makers, you life-nurturers, you "the hope of the world," you must voice your anguish, your suffering, your revulsion. Speak out, chase the madmen out of power. Hypocrisy will do no good and will not save your children's lives and souls. You have to face the 100 million potential killers you are nurturing, for the sake of a life that must overcome the violent drive the remains of our reptilian brain seem to force upon us. Remember this is the 21st century, not the 10th century. Act on your indignation now!

7/27/98

The militia men: Those who do their reptilian best for God and country. For God and country is as good as any evolutionary "cul-de-sac" to uphold the notion with guns is a humiliation for the species. Look at the Irish! Growing in their hatred. Women of Ireland, be yourselves, be feminine, throw the brutes out. You can do it; you've got the ballot box as your weapon. I am developing a certain contempt for the female of our species. You must go after the boys, young and old, and bring them into their senses. If you don't, who will do it? The nonsense-mumbling ministers? Mamma mia! The feminists are as opaque as plaster on that one. Why is it so? Because we all come from your belly, we are all nurtured at your breasts, we are all your babies, we, all the infantile men of the species!

9/29/98

We have the feminist movement with its successes and its failures. I think we need to establish the "Feminine Movement."

To make such a movement three dimensional, the politically correct has to be ignored, the historical fitness has to be understood in its full prevaricator tendencies. Evolutionary coherence has to explain the origin of the harem syndrome, and cosmic relevance might be able to offer the feminine its privileged place in the domain of the passionate and the compassionate. After all, those are the domains the present reality should grope for with a remote possibility of resolution: grace in toto. Anthropocentric as this might sound, meaning and equity can't escape them. In fact they are made by and of them.

10/3/98

The feminist movement developed by defining its historical fitness, with sufficient steam to also carve itself a place within the politically correct niche. I propose that to do justice to women's causes we may want to start the engine of the feminine framed within the evolutionary coherence domain.

Since my reading about the feminist cause is poor, this feminine cause might already be operational. Cosmic significance would carry the feminine movement into the stars.

10/16/98

The tragic, atrocious, and in the earth context evil condition of man should be the first concern of "the Feminine Alternative."

11/12/98

Capitalism must let the feminine come aboard, and women must become more discriminating and become experts in distinguishing femininity from feminism. The female in designing woman imitating man does not humanize capitalism. In fact, it may make it more strident. It must be the feminine, the more profound awareness of the living (and dying), that finds ways to inject itself into the powerhouse of capitalism.

There are rumors about a compassionate capitalism. The male is ill suited as a promoter of it. He does not seem to have what it takes to make the jump from "Darwinism" to "Love," that is, from opportunism to compassion.

The spell of confrontation and violence seems to have a grip on him. At bottom, we, the males, are still the merchants of death, only distracted by the accidental task of fathering and nurturing. We "love" the warrior icon, and we invest colossal wealth making sure that the frontiers of our nations under our gods are well guarded. We are paranoid troublemakers. We want our place in the sun via political correctness and via his-

torical fitness. That is the injunction, after all, of all founding fathers, be they historical, mythical, delusory, simulated, or invented. "Let it be evident that we white, male, landowners and *pontifice maxima* will be guiding our people to the lord, our Lord. Amen."

12/21/99

The lover cares for what things and personae are. The abstractionist (theorist) cares for what things and personae could be. The feminine tends to be loving; the masculine tends to be theorizing. Not a duality, but a complementarity, the stuff of life. Or to put it otherwise, the perfectionist is in trouble. He may be traveling on a dead-end track. Realism deprivation.

Why complementarity instead of duality? Because we proclaim it to be so! That is what life has been attempting to do. But life is a ruse also: Il fare prima del pensare. Life, the impulsive and pensive calculator!

5/31/00

To enjoy the joys of others, a virtue hard to come by. The joy of nurturing, a feminine virtue.

10/25/00

La Madre Arcology

An arcology whose size can contain all the recent wonders of architecture, none of them a city or approximating one. The colorful orchids are metaphorically *disciplined* under the mother skirt, as in garment architecture. Those orchids are metaphorically hosted on the mother lap, the forest, the city arcology. The young things clamoring for attention, and getting it, might need "housing." The place that covers the need of those populations that in between tourist-nomadic stunts are citizens of the planet, the dwellers of our towns and cities. The forgotten ones?

. . . . .

The Piero della Francesca or other image of Mary, her mantel sheltering the known edifices of Piano, Fuksas, Pelli, Gehry . . . The orchids and the forest in the mode of an arcology. There are brilliant space makers around the world today, the orchid makers. There are no city makers now or for the thing to come coping with the revolutions we are in. The answer that cities cannot be "planned" is trite, a shield against the too many ambiguities the city presents. But our bodies are ambiguity upon ambiguity, and look at us, the hyper-Urban Effects in flesh and bones. We are cowards and the Becoming passes us by.

Frugality

5/9/95

The high price of frugality, that is, of excellence. Excellence does not come cheap. Both excellence and frugality address the imperative of interiorization from where excellence finds food for action, that is, makes public that which must originate in utmost privateness.

The "explosive" radiance of frugality is in the mostly unconscious grip of irreducible anxiety, a residual anguish, in each of puny us in the midst of the ungraspable enormity of reality.

The radiance is best evident in the esthetic event . . . the power-radiance of sounds and tempos organized by a Mozart, a Ravel . . . with such radiance the unbounded power unleashed on the listener. Frugality at its best.

MCD to be expected is there, the silent engine to empower the deed . . .

But excellence is a rare commodity. Something democracy must work around if it does not want to get caught in today's quandary of pervading mediocrity, which is clearly originating from the double deception of "you can become what you want to be" and that externalities will "fulfill" your life.

That which is not interiorized might at best be good information but never become knowledge. Without knowledge, frugality is dreariness, if not squalor, and excellence is a non sequitur.

MCD is in this because the Miniaturization-Complexity demanded in capturing and storing information are of a lower order than the MC necessary for information to have access to knowledge—that is, to be captured in the intricacies the brain constructs to transcend the anxiety-anguish inseparable from the condition of man, to transfigure it in the excellence of the "art of living."

6/12/97

A great, perhaps the greatest, incarnation of *frugality* is the brain. It is so because the brain is constructed by way of an *immense* Miniaturization, which is the indispensable partner to the immense *Complexity* the brain operates in and by. This indivisible domain of Miniaturization and Complexity makes and is imbued with memory, the indispensable mediator between the now and the past. Memory at its purest is Duration, the potentially resurrectional state of the whole past, a hyper-Miniaturized, hyper-Complex, hyperfrugal, all-knowing Being.

11/2/99

The choice might have to be between the opulent and the lean, naturally under the dousing of the good and the bad, constantly battering at the gate of consciousness. Even with all of its redundancy and waste the living seems to be on the lean side.

11/6/99

Money is a good disciplinarian. The problem is that it needs a firm governor (see the mechanical engine), because it has a "constitutional" tendency toward despotism. A full-throttle money engine goes critical easily. The power to corrupt is one of its concubines. Yet money as a sober price tag has the faculty of measure and paragon. If society is endowed with a hierarchy of values, it connects via evaluation.

6/29/00

Minimalism versus reductionism.

It is unwise to do with two that which can be done by one. To our sorrow, we might find out that a world we deemed to be of riches is a world of sclerosis and obesity.

Dualism might be the welcome victim of minimalism: body-spirit, brain-mind, past-future, permanent-impermanent, full-void . . .

The complexity of thought is not inferred by the insistence on seeing or thinking that not only is mind not brain, but that a third agent might have to be found in order to bridge the chasm separating mind from the brain.

The minimalist route says that the mind is none other than the brain doing its job in the intricacy of its space alterations. The container (brain), the content (thought), and the ghostly bridge are one: the puddinglike convolutions of space going on in its prodigious dance. The absence of brain is the absence of thought because thought is not what the brain does, but what the brain is. There is no thinking in the absence of brains whose self-awareness is what they (also) are. (The "thinking brain" is also the central station of the body's activities, all those things that Homo automaton does routinely and inadvertently.)

The brain-thought is absent or very rudimentary in the animal kingdom, the domain of mindless brains. As far as one can guess, there isn't a domain of brainless minds, the domain, the vast, ever increasing domain of well-meaning animism. Brains lying to themselves, no reason for celebrations, ever.

Minimalism turns into ethicism. The search for grace: the most created with the least, the lean domain of Esthequity.

Go and tell that to the stars, you (silly) stardust! There is the rub. You don't go around telling everything to anything, stars included. You do it. The *how* to do it is the minimalist

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way, the only way?

So not the reductionist, not, by the way, from stars to entropy's death, but the minimalist way, from stars to the "Know thyself" (stars and all) radiance, the "grace of the world."

Grace? It has to be mined from the fury we call the stars and galaxies. There is no other way (see the Bubble Diagram). The journey from furious dumbness to self-acknowledging reality. How can the journey be spiked, "engraced" by the "light to be"? The paradox of wanting that which is not, of wanting what we do not know to be! We cannot just want it. That is the route to demise. We've got to create it. A Howness of staggering power and of staying the course, determination. By the way, the "*Cosa voglio, io?*" (What do I want?) of the infant making for the despair of the poor mother: What does life want? That of which it is in want of (stupid!).

8/27/00

One does not go around bragging about the frugality of the Grand Canyon even though rocks, sediments, weather, and sun (temperature) are "all" that is needed (and time, but time is just a measurement of change). But one can go around bragging about antelopes and snakes, spiders and cockroaches, sages and sycamores, frogs and fishes, ground hogs and lynx, worms and bacteria . . . and their essential frugality.

Think about the frugality of a two-year-old colt winning hearts and races. An infant at age two can hardly stand and cannot survive on its own, but the "potential" of the colt is on the exhaustion threshold; the "potential" of the infant is all in the things to come.

11/12/00

The conversion of hyperconsumption into leanness needs to be physiological, psychological, and physical (environmental). One out of three doesn't work; two out of three doesn't work. The conversion is not for the people of lukewarm persuasion. It needs to reach a threshold of satisfying commitment or it wobbles and collapses.

Picking and choosing among the components of the play can only go so far. For instance: I like the lean idea but I am moving into a larger country home. I like to cut down to essentials but I need to have that red Ferrari. I like the spareness of routine but I've got to have my spa hour, my golf hour, my club hour, football, my eros hour, my circus hour, my virtual hours, my gossip hour . . . my couch potato hour. Add them all up and you got the dissipation of life: Where did my life go?

Howness

8/7/93

The Hand and the Brain

As soon as the hand ceased to be solely a grasping, holding, throwing organ and began to be a handling, caressing, and molding organ, at that (protracted) moment a metamorphosis had taken place. The "paradigmatic shift" from opportunism to the Love Project.

It was as if the hand began to ask the brain for "more things to do" and the brain teased the mind, "Give me time, please, you are so swift in manipulating things!"

This seems to repeat itself throughout human history: Homo faber getting ahead of Homo sapiens. Microchip technology is an example. We are in a position to do more than our knowledge-wisdom is able to generate.

In an evolution where, as in a big mansion, the passage from one room to the next is the progression of creation, and once in a while, the next room is not a room and the door is not a door.

The room is a "vista," a new landscape, the door is a window. That is the time of metamorphosis. That is time for a caressing pawn, and the next invention reality comes up with is the mind. (A transformation of quantity and quality.) In general, instrumentality antecedes creativity (form before function); technology antecedes the wise use of it.

It begins (began) as a "religious" dread. The anguish and the awe of not understanding and as the esthetic effusion that might follow. The panic of reaching beyond understanding by "doing it," and doing it is the true knowledge. See reality in toto revealing itself to itself by "doing it": the evolutionary-creational process.

3/4/94

We do with Howness because Whyness and Whatness escape us. We build our parochial Why and What and forget that they are transitory and self-destructive. We may very well be in a self-destructing Whatness because Howness has been made into "What & Why."

6/8/94 (PENNSYLVANIA)

What Why How Where When

From life's beginning, How has been the only preoccupation: populations driven by the How where the invention of opportunism is in a superseding mode upon probabilism and determinism.

Three and a half eons later life is still at it, but now that the opportunism of populations (species) is superseded in man by

the opportunism of the individual, opportunism is a splendor and a curse mixed.

The splendor is expressed by the Why-What anxiety generators of philosophy and religion. The Why-What totally alien to the opportunistic food chain and core material for human consciousness and conscience. The curse because personalized opportunism quasi-automatically translates into greed and intolerance.

Science is the How forever fingering the underbelly of the tandem Whatness-Whyness. What is it, What is it, What is it . . .

The esthetic is the self-proclaimed Whatness delivering itself in small parcels, the esthetic events, and exhibiting a certain disdain toward Whyness: I am because I am, because I am . . .

Techne: How do I do it, How do I do it . . .

What-when: space-time.

The frenzy of Howness we are in is the fruit of individual opportunism quite unable to control greed and intolerance, in fact, being driven by them.

Democracy has to face, cope, and at last transcend this drive, or falter and die by the hand of mediocrity and arrogance, the shadows of greed and intolerance.

2/14/96

Is hyperconsumption another camouflage for delusion, bigotry, intolerance, xenophobia, self-indulgence? Beware of the Chosen People. The future will tell.

3/18/96 (STOCKHOLM)

The consumer condition vis-à-vis self-realization, ecological limits. The conception-death cycle is, that is coincides with, the consummation cycle of the organism. In time, this consumption cycle has shown a great range among the consumer's needs or demands both in quantity and in quality.

For both agencies a critical aspect is Howness; in fact, the How might turn out to be the definer-maker of the What and consequently of the Why. We consumers are therefore, with all other things, engaged in the making of reality here, eventually and ultimately everywhere!?

Why the direct link: the *How and consumption*? Consumption is the fruition of production, which is the process of making something into something else: ore into metal, metal into spoons, seeds into potatoes, potatoes into potato chips, potato chips into flesh, stools . . . It is all the way a transformation Techne which covers the whole processing reality is in—from gluons to stars to Mind. We consumers, agents of evolution, are engaged in the Howness such evolution is generated by in the unstoppable Becoming.

Consumption as the end phase of production, the produc-

tion of waste, for instance, is at the core of Becoming: the minimal-minimalist consumption of Chinese or Indian, the massive, relentless consumption of the Americans. How this widely apart kind of consumption is materializing is how reality itself is materializing.

It is the technological cosmogenesis we are conceived, born, and acting in, minute after minute. Something to be mindful of when we dump our produced litter into it.

Consumerism has become, is now, the most critical aspect of the human condition. Homo faber the sorcerer of Howness, thanks to brain-mind conspiracy, is at risk of compromising the best of itself, the inventor of love, in an almost capricious drive, into the fields of ephemeralities while massively intervening in the geology-climate-biology balance of the planet.

3/21/96 (OSLO)
Mineral-Organic-Mental

Homo erectus becomes Homo faber via the *brain and the hands (and speech)* working in synchrony. Water, bones, stones, wood, fibers, clay, and fire were the base materials. By way of those, the biotechnology of the living stuff overreaches in the new hard technology that shapes and will shape us, our lives, our societies.

Homo faber becomes Homo sapiens, and the *How* powerfully applied becomes the generator of the *What* within the limited domain of man. The grand *What* of things remains enigmatic making it impossible to comprehend the grand *Why* of things.

But this Howness, and its mystique, is also the presence that makes the production-consumption cycle so superbly efficient. *And there is the rub:* the *What* defined by the *How* is at risk of being malignant, if not meaningless, if not guided by the coherence and the compassion of the human mind.

3/3/97
With How (Techne) defining the What, three things are evident:

1. the preeminence of process;
2. the form defining the function formula;
3. the media defined by the How "Becoming" the message: the What.

What is also evident is the hold that the scientific-technological revolution has on our Becoming.

The How we are so proud of is profoundly reshaping reality (for now only in an irrelevant corner of reality), that is, reshaping the What and exploring in new ways the enigma of the Why (creating it). We are playing God.

There is an original What (the media), the pristine reality, and her "natural laws." But it lasts only a tiny, infinitesimal part of a second: the original Being instantly given to the Becoming and at the same instant taken over by the How. Becoming is the How operating on the pristine Being, the present of which suffers the same fate as all presents; it "loses" itself the very moment it emerges. It "loses" itself in the past. The march of space-time, or better, space-reconfiguration, is the Techne of Howness, and it begins at the very moment of Beingness . . . at the Beginning . . .

In searching of self-revelation, reality must adapt and adopt whatever How is suited for the purpose.

Reality can do that only when Mind emerges from it and Mind begins to want and begins to discriminate, choose.

That is, if turns out that at a certain point silicon promises a more versatile Howness than carbon, the choice of Howness will be unchallenged: the supremacy of an asexual silicon person, ASP.

Why is the esthetic at the core of it? Because the mind needs to pluck out of its feverish chase some incorruptible nugget of finality, of conclusiveness. It is unavoidable that the makeup of such practices is the distillation of the fundamental anguish intrinsic to the condition of man, and his mind, into the incorruptible esthetic object.

The maker and the beholder of the esthetic are the tangible antennas detecting a not-yet-existent condition of grace. They are the "receivers" of that which could eventually be. In this, they transfigure the human anguish into the hyperhuman esthetic. They can do this only by generating esthetic objects. There isn't any such thing as "esthetic" per se. As for instance there isn't such a thing as "time" per se. Both are contingent upon the stuff of reality: space reconfiguring itself. It can reconfigure itself in a sonnet in a cathedral in an image in a black hole.

Of all of them, though, the esthetic is only there where a mind filters the other objects through the anguish coloring its Becoming and when such filtering converts the idiosyncratic into the "universal."

2/17/99

The loop memory and presence is the one that gives context to minute-by-minute behavior. If memory comes roaring down with an avalanche of details, we say we live in the past; that is, our presence is overwhelmed, we have taken leave of our senses, and as creators of more past we are paralyzed.

If, on the other hand, our presence is all that there is and memory is reduced to the genetic memory every animal is made of, then we go from present to present oblivious to all the cultural acquisitions that knowledge represents.

Without genetic memory we do not exist. Without cultural memory we are brute. As long as reality is Becoming, the creational process depends on a well-honed balance of those two memories with and within the willful domain of space reconfiguring itself, that is, the Becoming itself.

4/21/00

The antiglobalists of today (Seattle-2000 "fest") haven't the faintest (idea) about Howness and about the roboticization of consciousness's base support system. They are demolition experts and construction (void) amateurs. In fact, for them construction is already in the quicksand of order and comprehensiveness (globalization). They feel at home in the climate or limbo of a broken-down vessel as long as the vessel residue still covers their subsistence needs and delivers to them the goodies they reject the origin of but claim the right to. Deprive them of monitors, earphones, or whatever, and they sulk dejected and enraged. They like the fragrance, the taste, the nourishment of fruits, not the *luce-tenebra* attending their making (the tree).

The mega machine of globalization is a flesh and brain grinder on many occasions, but it might be the price we have to face while searching for a bearable and ultimately excruciating emergence into Esthequity.

5/3/00

If there is any joie de vivre in bacteria, then in order of precedence: Howness, the technology of Becoming, a protoliving and for "ever" the maker of reality and its (memorizing) past. And then "hedonism" at the very inception of the living, the pleasure of permanency with its own ups and downs and its undesigned, unexpected hiccups of transcendence.

The two oldest professions: Techne and eons later "pleasure," the latter one the forebear of passion-compassion.

It is from the inaudible and tiny squeaking of the first pleasure trickles intrinsic to one-cell creatures that the yet-to-come meandering river of passion-compassion is generating: that which could turn out to be the conscience of reality. A protracted miracle of miracles all incarnating in and into our bandwagon of hydrogen. Why such self-creation should need a creator is to postulate the need of a shadowy Rasputin soiling the unfathomable, the astonishing, the light of the world. Let the absentee Lord fade away like an old MacArthur soldier. It has been useful perhaps in the long epoch of animism; it is an encumbrance in a self-animating reality Becoming aware of itself.

5/16/00

There are two sides to the noosphere: the space-Becoming,

"tactile," present side in which the subatomic, atomic, molecular, and radiation elements keep company with the tangible multitude of registration, transmission, and documentation devices from stone tablets to books to disks; then there is the nonspace-Being, not "tactile" side, the past side of the noosphere, the domain of memory-Duration, the reservoir of all the Becoming instantly consigned to Being (from the spatial to the durational). Without the "tactile" side, the noosphere is not self-creating and the past freezes. Without the non-"tactile" side, the memory is no longer available and the Becoming ceases.

Under such a bi-chambered and deprived condition, the noosphere is like a sort of crystallized cloud, a pollutant segregating intellection from its indispensable groping. A hypermuda at the very core of self-awareness, the core of knowledge, the body-brain united.

The noosphere began to outline itself with self-awareness and from there moved out of the automated world of organisms. The noosphere is self-awareness in search of meaning and the possible grace within. The noosphere is the Love Project, yet ambiguous about its aims.

We are aware of ourselves, and we are aware of what surrounds this awareness. All the rest is interpretation with the help of that which we invent and use: Howness full steam.

8/24/00

Believing that thinking is talking, routinely talking to oneself, the richness of thinking is proportional to the richness of language. Moo-ing, meowing, grunting, chirping, squawking, etc., even in their most subtle nuances do not amount to a sufficiently complex language to warrant sophisticated thinking. The how of the larynx is at the base of the how of Socrates and intellection in general. Sophisticated brains do not warrant sophisticated "minds"—that is, thinking brains—unless the larynx has offered its own sound (and silent sounds) sophistication.

9/6/00

Logistics and . . . conversion.

The automobile industry is about logistics. It is now in the bucket-brigade technology. In the best of BKW traditions it comes up with ever more slick, distracting buckets, but buckets they remain. The car industry should be persuaded to adopt a true "logistic science" and convert its own segregated, isolated, obsolete self into a logistical liberator. We as organisms are mostly logistical tours de force. Anything that moves moves according to the logistics fitting its presence. The intricacy of the human body's logistics is stupefyingly efficient. The logistics of the human presence on earth is stupefyingly

clumsy, and the gigantic bucket-brigade industries testify to it.

The adoption of maglev technology on the horizontal, vertical, and slanted combined with the "arcological revolution" can set up a habitat more respectful of our needs and dignity (plus safety) and of the respect the biosphere is urgently calling for. The logistics-industry conversion from the gigantic and brittle bucket brigade technology, now isolated, short-sighted, and evolutionarily reptilian, can become miniaturized, nimble, fast, quiet, safe, economical, man- and nature-friendly, and make megatons of megamoney. In tandem with it, the reinvented habitat, villages, towns, cities, and hypercities are logistically updated and modestly self-contained.

Aviation would keep its own rightful niche for 300-or-so-mile leaps and farther. The local public transportation system, slick and efficient; the bicycle finally getting its due as super-efficient and super-healthy; and we, the bipedal animals, would rediscover our mobile, frugal selves. A deflation of obesity, an inflation of leanness.

The logistics of today, ideally 5 billion years long, downgraded into gridlocked bucket progeny, will be a curiosity in the annals of evolution. It will be by far the biggest and most fraudulent Guinness record in human history (the record for inhumanity to man).

9/17/00

God is in the details (Mies van der Rohe's famous dictum).

In habitat prototyping, arcology for instance, priority number one is not the design quality of detail, staircases, bathrooms, hallways, terraces, etc., but the context they are in. One can apply the best strings in the world to a lousy frame and the grand piano is a failure. In the necessary complexity of arcology, placement, relationship, and fitness in the grand scheme find sanction primarily in the soundness of the grand scheme itself, a determinant of which is its coherence in the far grander structure of the biosphere.

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One would believe it to be indisputable that larger spaces for living entail larger swaths of the marketplace repertory. A 5,000 square-foot home will contain almost twice as many furnishings, appliances, power inlets, outlets, carpets, and curtains, twice as much memorabilia, bric-a-brac, and attention-time as a 2,500 square-foot home. The same prodigality extends to its outdoors, including perhaps one or two additional and larger automobiles. Extrapolate and you are facing a monumental, multilayered problem. Logistical gridlock is a symptom of it; segregation another; inequity, intolerance, and

xenophobia in the well-padded materialistic landscape follow.

. . . . .

. . . but then if it holds true that reality is space, then architecture is the field where space is particularly organized to wrap around the things of man, combined with the fact that space never is emptiness, positions architecture in a place "apart." Architecture is emblematic space—emblematic of reality?—exemplifying more convincingly than anything else that content identifies as container and vice versa. That might be the reason why some architectural places and spaces are "magical" to the beholder. Space to the power of two, so to speak. Then space as architecture acquires a kind of dispensation by way of which form as function, inside-outside, and ambivalence resolution are precursors of grace . . . a doubly bright "future" for space! Space self-expressing, self-revealing . . . the city of light?!

10/22/00

Perhaps the cruising ship is the short cut to landed arcology. Now given to leisure and hedonism, the cruise ship is a very miniaturized and very complex system with a certain degree of self-reliance and autonomy. Its ability to move around and spin around makes room for an almost daily optimal relationship to the climate.

At a short distance from a coastline it could have the pied-à-terre capable of serving the floating arcology with the daily necessities. If made part of the logistical network "trust," the global transportation systems network, it could become a sort of mobile terminal to the network itself in those regions where a land arcology seems less appropriate. Corbusier had it right when writing about the similarities between ships and cities.

We have cruise ships and hospital ships; we might well have university ships, manufacturing ships, summer and winter vacation ships, retreat-conference ships, science-astronomy ships, fishing ships, and greenhouse ships. A sea culture could slowly develop outside of the national boundaries, a sort of sea nomadism first established in large scale by the northern Europeans with their regular aggression against their more settled neighbors along the Atlantic coastline.

One thing to get away from, technically, is the rusting ship. Iron and steel will have to go or become immune to rusting; salt water and salty air are demons at that. Nanotechnology will find ways to shrink the behemoths of today. Now we move in streamlined hippopotamuses. Then we will glide like sea birds, penguins, etc.

11/28/00

A "New Science" of Logistics

Presented with an impending gridlock syndrome on land and in the air, we have to pay attention to the logistics that keep reality moving. On a theoretical level:

- How the subparticle-particles move
- How the atomic-molecular world organizes its own logistics
- How organisms cope with the logistics that keep their own viability
- How infra-organisms are able to manage their interactive logistics while maintaining the ecological balance that hosts them
- How people can cope with the logistics of themselves within the body social and its habitat

An institute of logistic technology seems a necessary first step toward pursuing a self-regulating quest in the unforgiving presence of logistics in every domain of reality. Transportation (logistics) is the number one task of metamorphosing space, of the Becoming. Reality being space in motion is presented with alternatives: for instance, the smooth and miraclelike running of space in our bodies—they are 90 percent or so sophisticated logistics, compared with the clumsy gigantism of space attempting to keep people and things running on the ground, on the water, and now in the air. We must emulate what goes on inside our skin to apply similar subtleties in our infra body-to-body logistics.

We are now in a virulent stage of segregational modes: rail-road-air battling for supremacy and taking us to the granite wall of gridlock. Persisting in this compartmentalized fashion is folly, and we are tasting how bitter the nature of this folly is. It makes waste into targeted wealth, the wealth of an ecological-human wasteland.

Then in parallel to the institute of logistics we might want to develop a "logistic trust" that fosters the integrated R and D (research and development) application in the geographic-territorial distribution of populations, from village to megalopoly. In a relatively short time we would find surprising answers to the chronic ills of our physical-psychological condition. Rail, rubber, and wings have to find common ground even at the sweet price of Becoming hardly recognizable by the former selves. Space metamorphosing, ladies and gentlemen! At bottom, space dancing itself into greater intellection. The Hows of logistics.

The anxiety of our local policymakers, presented day in and day out with mounting problems of traffic and gridlock, is destined to become chronic because as yet we are unwilling

to face reality, the reality of a planet burdened by gravity (of all things). Gravity signals, with thermodynamics, etc., how far our adopted logistics are from any lasting coherence with "planetary goings-on." The price of moving things, us included, is an inescapable gravity-thermodynamic tax. We'd rather ignore it naturally at our expense.

Miniaturization-Complexity-Duration (MCD)

11/22/95

In a model where reality, immense, secretive, and unloving, is taken as self-transforming via space and time, the search for resolution is auspicious because the indifference of reality becomes loving, thus satisfying the longing that Mind is generating.

Mind, as the rare and fragile occasion where reality finds itself becoming conscious of itself. Mind, the unwanted offspring of matter, that very matter that space and time transform unceasingly (via Techne).

The only way to go beyond the expedient is to make the contingent into the universal; that is, by the way, what the esthetic is and does.

12/4/95

The planet itself is an MCD product coming, it seems, from an ancestry whose first state was one of hydrogen haze. In one stroke, MCD gets rid of nostalgia, of melancholy, of all the Gardens of Eden once and for all.

We individuals are preponderantly biological processing plants and inner-motivated agents. With bioprocessing comes the exotic creation we call the mind. Medicine shows that on unfortunate occasions the body can survive the loss of the mind. The opposite is not true: no body, no mind. That is, if the body is necessary but not sufficient, the mind, strictly speaking, is not necessary for the body to carry on the processing plant function. The brain, though, remains necessary as the indispensable center for biological operations.

Why pick Complexification as the most normative and creative of all agencies? Because Complexification offers more feasible alternatives, but also because it offers a richer, unique instrumentation to implement those alternatives.

4/15/96

Reality, the past, is stored away outside of space-time. To retrieve it in full (resurrection) the event has to come, can only come, when-where the retrieving agency exits space-time, and this can come about only at the very end of space-time.

Perhaps toward the end, with MCD hyperactive, that is,

the size of reality getting close to zero, the hyperactive mind then just about comprehending reality in toto may leave the residual matter, destined to annihilation in the Big Crunch, and achieve the fullness of Being in all its self-revelational grace, the Esthequity Being.

6/23/97

Miniaturization is the indispensable housing of Complexity.

Duration is the document generated by the housed (M) Complexity.

While time is purely a useful invention the mind uses to document the reconfigurations of space but does not have per se any concreteness, Duration is concreteness itself and it is the substance making the past, the spaceless Beingness of reality.

Miniaturization sneaks in again because at the extreme it produces the nondimensional housing of "infinite" Complexity, which is exactly what durational reality (the past) is going to be at the conclusion of the Becoming. To be kept in mind: Reality does only one thing: *it builds the past*. In the absence of a grace-full conclusion, the wretchedness of reality is beyond "salvation," redemption, transcendence . . .

9/8/98

There is no grand or modest design to reality. It Becomes because it is a presence transforming itself with not a scintilla of will, search, quest, anxiety, rage, evil . . . But then, courtesy of clustering and bumping into each other, particles of space took the road of Miniaturization and Complexity. Miniaturization and Complexification in an indissoluble tandem generated life in its midst. Still no grand or small design, just drift and chance.

But when awareness emerges, then a rudimentary design also emerges. It is then will all the way, and with it the premises of a possible design initiative. The cascade of purposefulness is constitutionally saturated with all the good and all the evil that it is cultivating within itself.

The outline of meaning germinating in the embryonic stage of consciousness could not avoid the grand delusion of animism. It didn't. We are the living proof of that.

One can imagine this puny fragile unknowing nothing of conscious life imprisoned in the enormity of a senseless presence: nature. It had to invent all sorts of meanings and dress them in all sorts of garments. Animism was born. We are still drowning in it (see BKW—better kind of wrongness).

12/26/99

It isn't that reality is capricious and cruel; those behaviors require intent, and reality has none. So it is *as if* reality were capricious and cruel.

Since there is no purpose in its original makeup (there is only one presence), it might be up to intellection to search for purpose, in fact to create the purpose starting with the living as the inchoate will at survival, at self-repetition. A "hedonistic" pleasure at reproducing itself, the pleasure of distinguishing itself from dumbness—that is, the pleasure of distinguishing itself from the meaningless. Life has been suffering its own genesis.

Interiorizing itself into specks of willfulness via the Howness of Miniaturization-Complexity, reality began to act out the problematic of the good and the bad. But good and bad are strictly attributes of consciousness, starting with the very dim consciousness of the will to perpetuity. Such will can work only if nature is caged by its own "laws," the rules that its own nature cannot escape because any presence is a presence of sets of rules—that is, self-repetition, not self-reproduction, for many eons. The reason the rock falls is because of gravitational rules, rules of the presence of the present universe. But the many rules of the game are not in terms of purpose but in terms of presence as distinct from nonpresence.

The past is the repository of the slow process of purposelessness mutating into purposefulness via those granules of interiorization. Parochial initiatives triggered by the also slow emergence of MC. The cause? Space hitting upon exotic configurations not yet willed but quivering in proto-willfulness. The quivering of those specks finding themselves liking themselves, thus working at producing the likes of themselves.

1/28/99

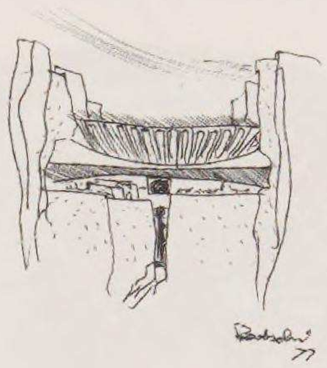
Miniaturization-Complexification-Duration is not metaphorical and/or emblematic; it is "systematic" in the sense of being a system, a procedure, a tangibility, and not a simulation of them.

M not only refers to space; it is space in its most intense presence, making so to speak the best use of itself down to its own modest nooks and crannies.

C is how much such denseness of space behavior sensitizes itself and is able to broadcast itself, via its own welter of reconfigurations, to the near and far spaces.

PART 4

Bubbles



BUBBLE DIAGRAM

- **POLITICAL CORRECTNESS** BUBBLE AS BIG AS THE U.S.A. TODAY
- **HISTORICAL FITNESS** BUBBLE AS BIG AS THE SUMMATION OF HUMAN HISTORY
- **EVOLUTIONARY COHERENCE** BUBBLE AS BIG AS THE SUMMATION OF ALL BIOSPHERES PEPPERING THE COSMOS UP TO DATE
- **COSMIC RELEVANCE** BUBBLE AS BIG AS THE COSMOS UP TO DATE

Proportionally (scale) if the Political Bubble is the size of an atom, the Historical Bubble is the size of molecule, the Evolutionary Bubble is the size of a seed, and the Cosmic Bubble is the size of a solar system.

[2002©Paolo Soleri]

The four bubbles are expedient ways of setting one's own compass within reality so as to be able to operate with a slightly less "lost in the fog" position, which we tend to be chronically afflicted by.

Bubbles are virtual "membranes" approximating boundaries of different domains.

The domain embracing the immediate past and the present I label the Political Correctness Bubble (PCB). The domain embracing a past going back into human history I label the Historical Fitness Bubble (HFB). The domain embracing (reaching) a past reaching back into the 3.5 eons of evolutionary history of life on Earth I label the Evolutionary Coherence Bubble (ECB). The domain that encompasses the cosmos at large, reality, I label the Cosmic Relevance Bubble (CRB).

All the bubbles have one and only one point in common: the present, ever changing, as it consigns itself instantly, instant after instant, to the past.

One's assessment of things "present," and consequently her course of action, is influenced if not defined by the position in the bubbles domain where the person is "located."

For instance: The behavior promoted in the PCB is more than often devoid of meaning for the behavior that the ECB would promote. The discrepancy denotes an incoherence ill fitting the evolutionary drift, therefore, an incoherence that if prolonged might conclude in the death of the evolutionary drift itself.

The bubble expedient can help to find the appropriate, coherent compass on occasions big and small if we do not forget (as we habitually do) that we, as stardust, will find relevance—grace—*only* in the conclusive act of *total* knowledge, that is, in the resurrectional conclusion. No conclusion and a very specific conclusion, no grace or meaning. Only a fatal endless unraveling via an endless chain of lost occasions. Feasibility deprived of desirability.

1/20/99

If the Political Correctness Bubble is the size of a poppy seed, then the Historical Fitness Bubble is the size of a dime, the Evolutionary Coherence Bubble is the size of a planet, and the Cosmic Relevance Bubble is the size of the galaxy.

1/22/99

Suffering and inequity in the bubbles context:

In the PCB we have to cope with greed and all the aggressive behavior it generates. The weak and the meek fall by the wayside. The willful and the ambitious become "benefactors" and pride themselves in that light. The politically correct tries to balance the greed and the ruthlessness of ambitions and

hedonism to which they aspire with acts of beneficence or munificence.

1/28/99

Political Correctness is the domain of expedience.

Historical Fitness is a minefield with all sorts of rewarding and dangerous topographies.

Evolutionary Coherence is the domain emerging from all actions engaging the biosphere.

Cosmic Relevance becomes a riot because, star dust as we are, that is the truly meaningful domain. Within it the biosphere is transfigured into the noosphere over a few dozen eons more or less.

PC is the domain-bubble of expedience: The "I can get away with it" ethos. It hits the single ego and/or it engulfs whole societies. It can be very cruel and is most of the time delusional.

HF is the domain-bubble of all sorts of rewarding or demeaning events. The rewards of limited knowledge in a minefield of intolerance and xenophobia. The "God and country" shield.

EC is the domain-bubble in which thinking and acting encounter and collide with the ever present biosphere. Most of the time not being with it means to be against it. The biosphere is a nonthinking phenomenon "submitted" to a thinking phenomenon, the noosphere.

CR is the domain-bubble, enigmatic and frightening, for which riotous kinds of anticipation can overwhelm our intellection. One often is that, give or take a few dozen eons, the isolated biospheres dotting the universe will transcend and bind (through *religio*) into one noosphere, the self-revelation of reality.

2/17/99

Perhaps the "art of living" is to break through the sterile sphere of irritant and engage in the force field of challenge-response, and now and then TRANSCENDENCE. The bubbles can be of some help.

The bubbles, expedient as they are, come in useful on a daily basis for the balancing act. Where am I within the column of reality, and what can my presence nudge? Within the column, those tumultuous times, and times are perennially tumultuous, how can I be of some constructive relevance?

Somewhere there is a normative thread, the thread of an ever changing grace or disgrace . . . space dancing at the sound of music. Music of excellence or music of mediocrity. The bubble-conscious art of living.

Seeing the landscape from different windows makes for different appreciations of the beheld. The territory in its con-

tinuum is the same, but the mapping of it from the different windows reveals the non-self-evident depth of it.

The gate to the different bubble (expedient as all devices) is the ever new present(s), the "common singularity" of a paradoxical reality, a reality indivisibly creating pasts upon pasts upon pasts.

Two other aspects of the bubbles: One is their objective existence, that is, their metaphorical-symbolic usefulness. The other is in how they can be used by the user or just observed without a personal "application" of them.

3/22/99

Il Mistero Tremendo

How to generate love out of indifference. Only memory can have a go at it. A fully crystallized pervasive memory: Duration. A memory that can pluck out of the past any episode, even the most cruel, and by way of its knowledge make it glow in the numinous light of a finally created all-comprehending grace. The luminosity of a posteriori grace, the equitable and esthetic singularity. The Omega Seed.

The seed Omega is (will be) everything because it will know everything of itself, a cosmic self-revelation for all of the past, reality in toto present. Space made into the absence of itself: Duration. Duration can only be all-knowing, in fact all-experiencing.

I am shaping an interpretational model of reality. Interpretation is as far as we can go in understanding reality and in attempting to give a structure and an image to it. My model, a hypothesis, sees that which has happened, the past, as real and indestructible. It is a given and it is unalterable. Part of the human past is the anticipatory faculty. Part of the problematic of anticipation is the unresolvable problem of the feasible and the desirable.

Unresolvable because the past keeps adding to itself via the presents and because knowledge and wisdom are in short supply. What is the desirable? The desirability expressed by the deeds of the Nazis was antithetical to humane desirability. Both ends and means were brutally destructive and unfortunately very feasible, as the chronicles of the deed demonstrate.

In the cosmic bubble context and if the cosmos had faculties, the Nazi episode like the whole of human evolution would be cause for a *sbadiglio*, a pretentious irrelevance speaking an unknown language. The language of good and evil, of hatred and love.

It could become the task of such (protracted) irrelevance to coax the meaningless cosmos into meaning, via the sufferance of good and evil. Matter invents itself into love and hate, and the astonishing curse needs resolution. But resolution can

only embrace reality in toto and transfigure it in the singularity of self-understanding; that is, it can only be self-defining while self-acknowledging.

3/23/99

Apropos of bubbles.

Of the four bubbles, the CRB is the clearest instance of knowing and hypothesizing. The knowing deals with what has come about, the past. Hypothesizing deals with what could come about, mistakenly called the "future," as if it existed. I call it the anticipation of what patently does not exist. Anticipation is full of anthropocentrism. The strongest of them is desirability.

Desirability is a nonidea for the "mineral" reality. The mineral reality has no ideas; it just acts out its own makeup in quasi-deterministic fashion: One if followed by two, etc.

In the CRB are then two positions:

1. The cosmos will do whatever it is doing.
2. The cosmos can be challenged into doing something foreign to its nature.

My hunch is that number 2 is the necessary choice if reality has a chance of revealing itself to itself. The success of our great invention, love, depends on it. Utter knowledge is the pursuable singularity taking reality (and us) from where it is now to where it could be "at the end."

I will alternate then between the done (past), the feasible, and the desirable (the so-called future).

We all live in our own idiosyncratic bubble. In fact, the bubble is the persona. Anything coming from the outside of the bubble persona undergoes a debugging bath, a bubble bath of sorts, and it is then incorporated into the persona identity. The persona identity is the interpretational take on reality via the idiosyncratic bubble. We are what we interpret. It is not a state of Being; it is an ever changing geometry of Becoming within the personalizing plastic confines of the idiosyncratic bubble.

One cannot escape one's own bubble. What we do is labor at transforming, rarely transfiguring, this specifically personal bubble.

The four bubbles are the hosting "realities" we choose to deal with while prancing around in our bubble. The bubble persona is prone to allergies, tears, delusions, tantrums, fatigue, opacity, exhilaration, contrition, passion, grieving, violence, pessimism, optimism, responsibility, opportunism, altruism . . .

The bubble persona can achieve a degree of self-reliance and autonomy. It cannot ever be self-sufficient. It is permanently contained and pushed around by the near and far numberless personae and other kinds of bubbles.

The bubble persona is in search of grace, and given the Utopian nature of self-sufficiency, the search can only be collective. Bubbles of the world unite.

The union includes Fido's lice's bubbles and all other bubbles the cosmos is made of, the cosmos bubble included. Interpretation upon interpretation upon interpretation upon interpretation "ad infinitum" or quasi.

3/31/99

Bubbles and Animism

In the PCB and also as a consequence of collapsing godless countries, we bless each other in God's name every inch of the way. We are very generous at it. The most ingratiating words on the lips of unknowns speaking into the 50 or so million households is "God does it for me." Glory to God.

In the HFB, we have to tiptoe to keep a safe distance from all the bloody wetlands of persecution and cruelty existing under the flag of the true gods. Theologians as prestidigitators of make-their-own theologies do magic. So theologies that at first searched for reasons of survival were tolerant, eventually hardened, etc., into dogmatic sacred books.

Every historical age adds its own specific but also monotonously repetitive documentation of the breath delusion injects into reality.

The burden on the Homo genome, and incrustations upon incrustations of broken down Utopias and false stations on the relic to paradise, are obscure tiny corners in the stupefying mansion of space "going critical" via paroxysms of novelties and paradoxes.

If evolution had inclination or capacity for laughter, it would at most giggle, or better pluck at, those tiny, obscure, delusionary, vain corners where consciousness forgoes itself and contradicts itself in view of masochism and sadism . . . "the gods make me do it."

In the CRB, the theological delusions must at least work as fertilizers for the desirable ultimate *religio*, the embrace of knowing and Being becoming one through the process and the conclusion of Becoming itself.

The animism epoch, now 4 million years or so long, remains instantlike in the length of reality, considering also that what reality itself has gone through is such a blink of an eye. Now when the delusion-riddled consciousness is contemplating its own intrusion into the havens, there may be reasons or the faint hope of exiting the theological chrysalis almost buried in the past of 4 million fatiguing years into the emerging butterfly of grace.

We must take flight physically and metaphorically to enter the light . . . and "save the world."

. . . . .

What is the animistic bubble in the four bubbles context?

In the PCB, all given to the "present," we are watching the paradoxical (though concealed) confrontation of the hard-core physicality of ephemeralization that the microchip is, where photons are more angelic than any "angel" could ever be, this all virtualized physicality confronting the ever more pathetic but powerful delusion of animism with all of its own "spiritual" props.

While "virtuous" became more and more materialistic, hyperconsumption, the technologist via science delivers a world of intangibilities putting to shame all shamanism palpably present in all theologies and company. Billy Graham, for one, is at the barricades, and his sermons are an insult to human dignity and the suffering it sheds. He is winning the battle, a sad victory for all of intellection.

In the HFB, "traditional" animism has all the cleverness it takes to penetrate practically without adversary all the nooks and crannies of human life. God and greed compete for the body and the "soul," a pernicious and arbitrary duality of persona, from top to bottom of the social-cultural-economic stratification.

Only the gods' promises of salvation or damnation can somehow bridle the despotic, the oppressive, and the opportunistic to some semblance of compassion. Life, per se always at the border of cruelty, is emphatically made more cruel by the merchandizing of godly graces via obedience and penance, and fortunately it also scatters around good deeds.

In the ECB, the sky is crystal clear. The animistic storm originating and carrying on with desperate enthusiasm, the magic epoch we are in the midst of, 4 million years long, is a latecomer and as yet, marginal. If reality had a mind, it would probably define animism as a baby tantrum, unfortunately of unforeseeable consequences, especially if the genie bottle of this planet uncorks and the animistic virus takes off for our galaxy and then beyond.

Will the CRB ever be ready for the Love Project hidden under the wings of mummified god and angels? It has the taste of the ultimate question, and it is all about the Mistero Tremendo of the tremendous mystery reality is. A democratic take on reality and the mystery within would be of great help. It says, let reality create itself with itself, not ever be "created" by and via mandates, injunction, menaces, retributions, extermination from an outside agent, "the Maker."

As interpretational agents, we weave our personal, custom-fitted dresses on reality. How fitting and elegant those dresses can be depends on the passion for grace we may hide in our body-brain. The rest is for the birds. (Six-limbed angels are virtual insects.)

5/3/99

Religion captive of theology has been given a bad name. In the PCB, theologies conveniently press on the agenda of the Chosen People, overtly or covertly. Hinduism, Judaism, Christianity, and Islam turn to xenophobia and go to extremes of intolerance. They take turns at being first among the first to score points in the violation of the religious quest, always in the name of their gods.

It is hard to believe that this kind of behavior is a rehearsal for the final play of religiosity. Three million years or so of animism has been entrenching mankind in deeper and deeper crevices at a loss of the vast horizon of a reality in toto—that is, the human reality begging for resolution, not the cosmic reality, which is foreign to grace. Our best energies to the internecine fights in a cosmos that couldn't care less (it has no cares).

In the HFB we register the past, archiving the "successes" and failures of the theologies turning out their own brand of trueness versus their own gods.

To maintain that those theological endeavors have given to wo-man a vast repertory of goodness, blood-dripping aside, is to ignore the possibility that a nondelusory presence of goodness could have taken our ancestors to a far more compassionate landscape. See the BKW, carrying on for as long as consciousness took hold on this planet.

In the ECB, the instrument of consciousness and the advent of simulation, theologies simulating religiosity, have by no means exhausted all the choices for evil. See the Nazi explosion, which came from the most literate people on Earth.

Only by jumping into the CRB can we measure the "preposterous" and momentous elan Homo sapiens demonstrates by baffling the dragon of indifference that the cosmos is made of vis-à-vis the condition of man.

5/30/99

The devastation of animism could be, in the pantheon of remembrance, a plaster statuette grimacing and silenced. In the CRB, I mean.

The HFB is too often fogged up by racism, exploitation, theology, and power. Those domains find legitimacy in "history," and the HFB tends to be assimilated into the PCB.

Once in the ECB, the vested interests are absent and the access to coherence is easier.

6/25/99

In the PCB is buried the persona bubble, the one enveloping the existential-persona domain.

The HFB that the PCB is constructing is punctuated by

the persona bubbles—in a way the survivors of the constrictions, if not the coercions, imposed within the PCB, on the strength of ethics and esthetics.

7/14/99

The bubble diagram helps explain the importance of one's position vis-à-vis reality when we try to intervene in its own doings. Judgments and the course of action we may adopt "dictated" from one bubble might be rejected by the judgment and action another bubble demands.

The patriotic drive so opportunistic in the PCB, so seductive in the HFB, is a bundle of inconsistencies in the ECB and a nonpresence in the CRB. From the pretentious inclusiveness patriotism displays in the PCB to its relegation into the tinted nothingness in the CRB. Even the "give me freedom or give me death" formula gets deflationary treatment in the CRB.

8/7/99

Year 2000 hoopla. There isn't any cosmic meaning in it, a purely theological invention.

Cosmic presence and human inventions are still two separate domains. The moon is there, and it has specific relationships with the rest of astronomical reality. That we are here has no impact on the moon, not yet.

If mankind had not come about, his inventions would not exist. Theological constructs are one of his inventions-simulations. Man's inventions impact reality in as yet infinitesimally puny ways. So the gods we invent are part of the impact package we hurl at the stars. Naturally, when we start digging into the moon's surface to carry on our "mission," we will impact the moon more than we have done with 3 million years of theological inventions. A shovel at work is cosmically more relevant than gods and angels battering in our minds at the planet, the stars, and all. We, delusional creatures, will eventually alter the cosmos, but in spite of the heavenly ghosts of our making, not thanks to them.

The critical thing is that the transformation we effect on the cosmos (Howness) is nuanced by our delusional attitude. In that sense, theological inventions are cosmic modelers by default, not by "intent." The false is the false is the false is the false.

So into the CRB we will carry also the burden of the post-Paleozoic, animistic epoch we invented and fell captive to. A necessary evil?

The ECB will not be totally comprehended in its many defaults, organic worlds coming and going, if animism is not given its own sulphurous niche. Broadcasting doomsdays, the salvation-damnation melodramas grinding out love-hatred

little gardens.

Evolution is made of factual events and of fantasizing about hypothetical factual events, 4 million years now that self-awareness and intellection spike the real with their own anguished fantasies.

The HFB is where animism has its birth, and human history is a delusion-saturated ribbon of events. Spirits, demons, angels, archangels, local god, parochial gods, Catholic gods, ecumenical gods, technocratic gods, evil gods . . . godless, meaningless Nirvanas . . .

But the HFB is the splendorous bubble of discovery, esthetics, and technology, the maker. Life and cosmos might eventually get a kick from it, a cosmic kick.

As for the PCB, it is the raw flesh of the past maker and all of its devices, expedient games. It must give room to less opportunistic channels to power in favor of the constantly elusive desirable, not the now and here desirable, part of the animistic delusion, but the desirable of and for grace-fullness.

In our thinking perhaps it isn't so much about the truth as it is in how much coherence we invest in it that counts. If we were to agree that the real is truth in the making, then coherence is the best attribute for the "manufacturing" of reality, that is, the "slow" creation of truth.

9/20/99

The CRB of love, its presence within the cosmos, is coincidental with knowledge, total knowledge of reality, that is, self-recognition. A coincidence, identification with the esthetic: the nonobsolescent, being itself fully revealed to itself. It isn't naturally the Being being recognized by an outer agency, God for instance; it is Being self-acknowledging.

10/4/99

In the PCB, the hypothetical passed as the Truth has a manipulative power that can reach into the brutal and/or the ridiculous. The brutality of "in the name of God," the silliness of teaching animism at the expense of evolution.

To be pigeonholed as an atheist is to wear the politically incorrect button.

In the HFB, theocracy has been on the rampage. It is a litany of injustice, inhumanity, victimization, and death at a level and at scales hardly imaginable. Theological wars and their spinoffs have been and continue to be among the major scourges defining the human condition.

In the ECB, the whole theocratic construct is a nonpresence. Since the good and evil balancing act is yet to come, good gods and bad gods have yet to be invented; therefore no simulations are modeled.

Theocracy appears on the evolutionary scene in the last

split second, but it is raging now within the world of man. Even Fido could probably tell you that.

It will be the luck of CRB that theocracy might not be able to indent the vast, somewhat serene unawareness of what fear, desperation, delusion, and vengefulness may do to the Becoming.

"In the name of God" has no hold in the CRB, is beginning to "interfere" in the ECB, has been rampaging in the HFB, and is a convenient simulation in the PCB.

10/18/99

An organism's orchestration is on automatic pilot. It seems to be one of the virtues of innerness. If the noosphere were ever to become an organism, then it would have to run on automatic, an awe-full thing to contemplate. A fearsome beast with the makings of an angel. A space-made automaton ready for space, the cosmos. CRB better be on alert. Things may never be the same again, not at least before Duration—full Duration, I mean.

If ever the CRB were to contract, infinity itself would be out of business. But it was never in business in the first place anyhow. That is one of the self-limitations of space after all, of the plenum of space.

10/24/99

At each diaphragm separating the bubbles is the zone of turbulence. It is the invasive character of the Becoming that keeps the bubble interface in the condition of turbulence. One is reminded of observing the sun boiling with some of the most improbable getting out of intense radiations and the formation of vortex . . . the edge of chaos. The edges of the now courtesy of nonmathematical but spatial symbolism.

The bubbles' reciprocal interference is what makes reality a Becoming, not a Being, but it also converts life into theater of the absurd. Again, in the animistic simulation, the persona (and the "nations") is torn by the loyalty to the immediate, the self, and the loyalty to the rest of reality, the Other, with only one possible recourse: the Creator, a copout of epochal size, the invented domain of goodness and justice iconized as a revealed truth. The theocratization of life is a fact stretching back to the first manifestation of self-awareness, the thou and the it. That is a powerful discrimination instrument, and the battle for equity is raging between the three encampments with no resolution in sight.

10/25/99

The CRB is the domain of the astronomer and physicist-mathematician because it is the bubble of "remoteness" for most of us.

The ECB directly concerns most of us, though we don't know it. The scientist and the environmentalists are practically reveling in it, and every day is a surprise day, discoveries upon discoveries (which is true for all bubbles).

The HFB is the bubble of historians and philosophers, with ethicists tearing themselves apart to find the answer to the human condition. It is the bubble where the big ego makes history with humanity suffering and rejoicing under the dictat that psychoanalysis captures and thrives on.

The PCB sees the politician as the manipulator of the power scene, and opportunism has its own field epoch. "Salvation" might have to reside in the hows that science and "technology" are generating.

What of the theologians and what of "the artist"?

The theologians are homeless, so they float around in their delusional cloud selling simulations as Truth. For all of their homelessness, they cast ominous shadows on all and everything, intruding in that which does not even acknowledge their ghostly presences, the ECB and the CRB. History and politics are where their garb is seen floating around.

And "the artist" has always been in a cloud, not the cloud of delusion but the cloud of transcendence. By "has always been" is meant her-his presence as soon as intellection becomes an evolving fact.

All four bubbles are the domain of the esthetic. It is the retroactive power of it. While moving forward, the esthetic is seldom found in the self-proclaimed artist or celebrated by the politically correct trend. The artist is more than often a pathetic creature who sacrifices his own idiosyncratic worth for an altar he knows little about. It is a "hearsay" he hopelessly or half-heartedly chases around and seldom is confirmed by her-his doing.

10/28/99

Bubbles and Philanthropy

In the ECB, philanthropy is one way of keeping a hold on goodness but once or twice removed. It is a recognition of failure about the fundamental dignity of man.

In the PCB, philanthropy is institutionalized one step further. Socialism has islands of philanthropy scattered on the water of social justice. Capitalism reluctantly acknowledges its own harshness by making philanthropic endowments that amount to large investments.

Yet the handout to others cannot but fall short on the domain of equity. That makes philanthropy poorly relevant in the CRB, assuming, naturally, that meaningless cosmos might eventually be invested in by the storm of good and evil.

Animism has made an art of philanthropy. The indulgences

openly marketed by the Catholic Church could be judged as the ultimate philanthropy. God dispensing grace or forgiveness at an established market price.

12/6/99

The PCB has very little to do with the ECB, even less with the CRB. The HFB can be of some consequence, though only in the ability of nudging toward more coherence. The opposite is true when the terms are reversed. There is no way the politically correct and the historically fit can have a life, a presence, an impact upon the Becoming outside of their domain. That is the fate of animism, for instance.

In terms of evolution and the cosmos that envelops it, animism is dead on arrival. That dead on arrival is what the Lean Hypothesis and the Lean Alternative do not want to be.

The presence that the Becoming is is slightly more accessible through the human brain devices we call quarks and, on the other border, what we might call passion. The devices are human propositions. The flat planets proposition-device is dumb; the quantum-passion proposition-device is brilliant.

God and his cohorts above, the living below, and the devils under were a flat-planet configuration, clear and unequivocal. Theology was all for it. The sphericity of the planets with gods at the center was not that satisfying. The above, the below, the under would be trampling on each other in ungodly ways.

12/23/99

Disposing of the artificious if convenient distinctions, straddling without breaking down, that is the question posed by the bubbles. A challenge for the brain capacity of each individual and the making of personae.

5/3/00

The Ego and the Doing

When the ego identifies with work, the me, me, me is silenced. It has melted into the doing. That goes for extremes of excellence and also for extremes of cruelty. Himmler identified himself with his extermination work. Dedicated to it and as good a bureaucrat as he probably was, his ego was silenced by being fused into the deed he chose to implement.

The movers, whatever the field "chosen," are not so much driven by the me as they are possessed by the task taken up. Not that the task has to be perceived by them as such. The chest-beating me's of the world are at a loss of themselves. To identify with the doing is beside their own reach. They are left out, and that is a hell of a nonplace to be left in.

That goes to the core of perceivable reality: the coinci-

dence of container-content. There isn't an expectant empty socket to be filled. The socket and the filling are one, because there isn't, for instance, a brain and a thought to fill it. The brain is the thought. With the breakdown of the brain comes the breakdown of the thought. That is why the memorizing of the brain thought is so essential. It is the bureau of reality, the past that is no other than the hyperfinicky bureaucrat of reality. In it is the making of the "eventual" self-revelation of reality itself in toto.

Identifying oneself in the deed is to break out of the idiosyncratic cell and to become "public property" and public conscience and public transcendence or malediction. The true public figure is no longer an ego; for better or worse, he is the people, his people. The bubble diagram might help to gauge the meaning of that.

5/18/00

The murderous caprice of a child that has been handed lethal weapons and the adrenaline-soaked daily instructions, on all media and in all environs, is different from the premeditated, calculated, political-racial, theological murder by (reptilian brained) adults.

Eventually some scholarly and bright mind will dissect the documents written by the Founding Fathers (no mothers!) and assess the wise, the good, the optimal, the unwise, the ignorant, the discriminatory, the delusional, the arrogant, the xenophobic . . . The reconstitution of the Constitution and the other documents could then be initiated, dropping the naive, the parochial, the ignorant, the self-righteous, the violent, the opportunistic, the hypocritical, the Chosen People malady, etc. . . . But perhaps only postsilicon intellection will be up to the task, when "nations" will be curiosities, museum pieces. A bubble treatment would be a good procedure to begin the sizing up of what we have in the Founding Fathers icons. In the process, words like "untouchable," "sacred," "eternal," and "God-given" should be put to rest. They are delusional, inflammatory, cruel.

8/23/00

The importance of the "What is in it for me?" question: It has four "answers" depending on which bubble the me is positioned in. The breast-beating me of the PCB might be a must in the other bubbles if it were not for the fact that the "best of me" is utterly dependent on the other bubbles for its own "final destination."

By moving from being a puny instrument for some unidentifiable goal to being an inseparable part of it, a maker of it, the breast-beating and shouting are silenced in the very momentous and participatory cocreation of a possibly mean-

ingful reality: the me becoming grace, part of the self-revelatory reality.

As long as reality is unforgetting, none of the past can be erased from it. In addition, reality cannot be forgiving. My malfeasances are in there but in the context of the total me with its own 14 or so eons-long tail, those malfeasances are "destined" to be put in their own place. Ugly and sad "pecadillos" drowning in the oceanic cosmic me with its own tail and its own progeny. Not forgiveness, then, just the right pegging on the board of concluding Being.

8/31/00

The ECB reminds us that of let's say 3 million years of self-aware life, 2 million and 900 thousand years were spent grunting and slashing our way to the beginning of a social nexus. For those 3 million years or so only estrus transmuting in eros and eros beginning to timidly flow into love and the emerging of the mothering-nurturing "altruism" were cause for the emergence of Homo erectus—Homo abilis—Homo faber caterpillar. The coarseness, the primitivism, the idleness, and the violence made of man the mammal one of the least appetizing specimens. Some of the unavoidable brutishness and cruelty are still around. The gray and desperate lives of the first technological era in England and Europe testify to a human condition that no other species has had to suffer. With all the atrocities and horrors part and parcel of the civilization scaffolding, the HFB contains an immense explosion of contaminated joy and humaneness, uncontainable if one wants to cast it in the ECB. We've come a long way. We might want to see that we will go longer and longer into the "endless" night of a dumb cosmos, bringing to it the light.

9/7/00

Placing oneself in the PCB with one leg and in the HFB with the other, most of the time we have to come to compromises. Life is an astute compromiser (symbiosis might be the art of compromise). But the gap between compromise and betrayal is narrow, and body-brain has the acrobatic skill of leaping over back and forth sometimes effortlessly. The astute politician knows a thing or two about it. The desirability domain is hard put to discriminate between compromise and betrayal, especially when there is a mercurial medium that can fill the gap, for the astute, to sail above it easily, sometimes triumphantly. That is the scoundrel-ruffian scenario.

9/12/00

The drivers of the capitalist engine and the politician have no idea what is going on, and would not be interested if they did.

Timid forays into the ECB would be the most they would

want to engage in. The CRB is absent from their body-brain. The stardust devolution into dust. Entropy?

It is the unconscious loyalty to the nation-under-God delusion, a collective delusion. Expensive! Monstrously expansive. The planetary muda!

9/24/00

This week politicos are basking in the USA education dream. Both programs and teachers are up for scrutiny, not to mention the very physicality of sites, schools, security, etc. If there is a place where the bubble device can be of help, this is it.

For learning the PCB is a lethal bubble, because where the practical takes over, the real is quarantined and the practical is wrapped around greed and success, cousins of mediocrity and fun.

The HFB is good as a normative pool, is bad when it is the glorifier of xenophobia. The shorter the historical horizon the more difficult to interpret history itself and to emerge into the normative—that is, learned information on its way to more solid learning with knowledge as a primary target.

The ECB speaks to survivability and transcendence. Interpretation there is easily short on the kind of knowledge that has had the fortune, or better, the stamina, to sufficiently break out of the two preceding bubbles. The environmental movements suffer from this peculiarly parochial dedication to a problem that evidently is on the threshold of universality, the cosmos condition in toto.

Only the CRB can offer at last the frame of reference for long-lived knowledge once filled as it needs to be by the cream of knowledge skimmed from the three preceding bubbles.

A blasphemous suggestion: Substitute the morning devotion with a reminder by teacher and professor pointing at the bubble chart from where the perspective of the day is taken. The reminder could be underlined by three words: We are stardust. From theology (delusion) to knowledge in a short breath.

Teachers and pupils could engage periodically in disentangling the problem of the day via the positioning of the class in any one of the bubbles and trying to phantom out the ambiguities, the ambivalences, and the contradictions. These are brief and mostly innocent (not yet knowledgeable) takes on the condition of man.

10/8/00

We all go through life in a sort of bubble we call persona. Persona is an original interpretational machine acting out the injunctions that the personal interpretation (of reality) presents to us. In a way our bubble persona is our destiny. It forges

itself among the flow of all becomings and it is for real. It is our personal history, and it is step by step cast in the past. A swarm of virtual bubbles travels, hitchhikes with the persona. They have a sort of life of their own, but they distinguish themselves by existing only in the persona's brain, exercising upon it, often unduly, delusional influence. Their reality is only such influence, a sort of self-inflicted punishment if and when our brain confers to such bubbles a concreteness they do not possess. The swarm is the simulatory virtuality that our brain wrongly attributes, endows the persona with. Sometimes the persona swarms of simulatory interpretations join other such persona swarms and the animistic domain is born. An interpretational powerhouse running on empty. The fraud of a nothingness sold as somethingness. If we were able and willing to navigate the persona bubble and his delusive swarm, from one to the other four comprehensive bubbles indicated in the bubbles diagram, the persona would be in a better position to burst, one by one, all of the swarm bubbles hitchhiking their ghostly simulacra on the bubble persona we all are. If we were to be able as Homo sapiens to burst a sufficient number of delusional sub-bubbles we could exit the animistic epoch (3 million or so years long) and enter the epoch of Esthequity.

10/11/00

The brain, a powerful and fragile space engine located in the larger space engine of its body is the only loco of animism. As the body-brain connects with other body-brains, the animistic virtualities migrate from brain to brain, retaining their "exclusivity." The brains are the only presences that contain the animistic "world." The animistic "world," a virtuality, exists only in body-brains, and it exists in them only as a virtuality. Virtuality is then an "old profession" copresent with the body-brain self-awareness, the animistic epoch (3 million years, plus or minus).

The distinction between reality and virtuality is of essence in our interpretational domain. As long as we cannot make such distinctions we are prey to delusional thinking. Our interpretational skills are fogged in with scant chance of defogging. The ghosts in our brains—spirits, gods, and angels—are the dimmers of our Becoming and history shows they can be lethal: the mortification of the real (space becoming) by the virtual that the same real has nested in "her body-brains." Eventually the virtual must be drained from the real, that is, the simulatory erased from it. That (long) day will exit us from the epoch of myth, a rite of passage from the wished (in this case fraudulent) into the real.

The brain is not a placid bowl of jelly; it is an "infernal" concoction with a history of four eons or so. In it, Howness,

and of it, automation, are the twin pranksters making each of us an example and desperate. If the first realistic act is to ground ourselves in reality, then reality has to be defined within the borders of our capabilities and then abided by. Most of the time, this demonstrates the constitutional fragility of the practical.

The animistic "world" has relevance; it exists only in the PCB and the HFB. It does not exist in the ECB or the CRB. But as a powerful virtuality it can sway the evolutionary progression to a point of destruction, an unenviable capability now shared with the upcoming postsilicon virtualities.

10/13/00

"In the national interest," as opposed to the non-national interest. A good example of "dualism" the ECB has no use for. There is no dualism there because there isn't dualism anywhere else. There is decrepitude. It is the spotted leopard hide, the decrepitude of xenophobia vis-à-vis the supple zebralike guild mode seeking only boundaries of expanding excellence (see EXPO 2000 proposal).

10/20/00

If I were to put one label on the PCB it would be without hesitation opportunism. That goes also and even more for the ECB. Both are awash in opportunism. In fact, in the absence of it we could perhaps imagine an angels bubble but nothing else. But the opportunism of ECB is an opportunism of populations. In the PCB, it is an opportunism of individuals, and there is the blessing and the curse of the human condition.

Capitalism hasn't been able to cope with the curse side of individual opportunism. One could suggest that communism is attempting, poorly, to cope with the negative side of opportunism. The compassionate capitalism of George W. Bush is for now an unconvincing gambit, a shadow play in the pursuit of equity.

In the HFB the opportunistic drive has practically no boundary to crash against. Tyranny and despotism reach peaks of pure, sometimes "exotic" malevolence, and are we good at that!?

Breast-beating and hypocrisy aside, reality deals only with the unforgettable and the unforgivable. Animistic delusions aside, that which comes about comes about for good, and the forgiving faculty is made almost unmeasurable because of our puniness. Who or what am I to dispense forgiveness? And as for reality forgiving its own deeds, that is really good for a laugh, I mean a cry. Only theology can come up with such cosmic nonsense.

When you forgive me you put a drop of care and sweetness in the brew you and I are in. Only a self-transcended

reality can invest the bad deed with the light, its own light of grace. In the contingence of reciprocal hurt, words don't amount to too much. Forgiveness, if we want to stay with the word, demands deeds. I can tell myself forever, "love your enemy" and just land in the limbo of hypocrisy. Shield your enemy from suffering and you don't forgive him, but you confirm the not-just-only potential goodness of Homo sapiens. A far grander step in the direction of love-grace.

. . . . .

11/24/00

I see the biosphere as an unintended introduction to the noosphere and the noosphere in its most promising probes as a quasi-intentional premise to the cosmic bubble vivification.

In our infinitesimal persona bubble, the contention (nondualistic) passion-reason is not yet a founding resolution. The intellectual exhilaration wears the glorious scars of passion, and any golden rule devised for the reconciliation Dionisio-Apollo turns out to be a Utopian delusion, tepid at best, sterile at worst. It could take a postsilicon "monstrosity," a monster of evo-revolution to predispose a novel "loving" landscapes. (Howness looms larger than ever.) The apt love the cosmos could eventually pursue would be a strange, even unappealing, sort of thing to our puny cognition. In the self-segregating stampede, diverging faster and faster from one another, the galactic clusters are quite probably dumb and blind to cognition and reflection as they are dumb and blind to will and passion, and yet they are us, because we are of them. Remember religio.

It is a truly magnificent, equally desperate, going-on, you little carbon wiggle! Chances are it will all come to naught. Presence (reality) denying its own presence, Nirvana triumphant, you bloody bastard! . . . Unless . . . unless the past recoiling into its own Second Coming surprises itself by surprising-revealing itself to itself. The taming of the cosmic beast resolved into self-knowledge, that is, self-love, the self being then reality in toto. The road to such improbable resolution is paved with nanotech and postnanotech . . . the Hows of Hows, the immensely small gulping the immensely large. Space dancing itself into thought . . . Mamma mia! Mamma mia! Is MCD giggling or not . . . yet? The nanotech road is targeting infinity but as we should know, infinity is nonsense. Infinite presence is nonpresence ad infinitum. Space is boundary. Boundary is by definition of limits, limits separating presence from its own (self) negation.

. . . . .

The appreciation of crescendo comes with the appreciation of diminuendo, something our shouters-screamers of today have forgotten.

. . . . .

I am trying to distinguish true monologuing from false dialoguing. Monologuing goes on between the cranial walls; it is a virtuality. Dialoguing is for real.

The passage from virtuality to "concreteness" comes first in the recognition of monologuing as such; second as the possible power the monologue acquires in orienting or reorienting the Becoming in the direction of knowledge and desirability. I maintained for years that the monologuing misconstrued as dialoguing is conducive to the animistic take on reality and is counterknowledge and highly undesirable and therefore should be seriously scrutinized and made coherent in the grand scheme of things (the Becoming).

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Glossary

ANGUISH. The common state of "being human." A sort of positive-negative chronic ailment of each mind afflicted by the unknowability and unpredictability of the real, near and far. Anguish is the daughter of reflection. In the absence of reflection, anguish does not exist. Plants and animals do not suffer anguish; animals suffer fear, perhaps, but not anguish.

The whole of Christianity (like all other theologies) can be seen from the angle of an immense and prolonged cry of anguish, and throughout its tortured history only one thing has given resolution to it: the esthetic act such theological anguish generates. The history of Christianity is a long sequence of esthetic creation transfiguring personal and collective anguish into esthetic objectifications.

ANIMISM. A reality authored by a creator is a reality animated by the creator's pneuma.

Animism makes sacramental that which it animates. Under a spell of this sort, reality is in constant peril of blasphemy. It is as if at the moment of creation the creator injects into reality a sort of paralyzing substance: "Thou shalt not." In the same way, the wasp injects a paralyzing substance into the cicada so that its babies can feed upon the living corpse. It may be a sort of virtual cannibalism.
In the shadow of animism, reality, an original goodness turned sour, has to worship its maker and is often at a loss about the truthfulness of the whole enterprise. Somewhere the intrinsic warpage of the sequence of goodness—generating badness—worshipping goodness is clamoring for resolution. But resolution is inhibited by an intrinsic incoherence: Reality diminishes God, the hypothetical deity. A self-generating reality is exempt from dependence on a creator. It does not have the imprint that the creator unavoidably makes upon its creation.

By abandoning animism and unveiling the deceptive nature of theological simulations, which are the longing for a perfection mistakenly thought to exist, the knot is undone. The presence of *il Mistero Tremendo* is unveiled, and reality is face to face with the awesome task of bringing itself into the nobility of love and grace . . . at all costs.

ART. The esthetic incarnation in specific objects or events. The nature of the esthetic is found in the idiosyncratic transcending into the universal. When the esthetic incarnation takes place, anguish is transfigured into the esthetic, and the incarnation becomes an end in itself.

Art is a persuasive and powerful example of frugality. It does so much with so little. Think of a short sonnet rebounding from one culture to the next, leaving minds in awe.

ARTISAN. A person who engages in the methodical, humble, lifelong dedication to a well-honed skill applied to a medium, such as clay, metal, glass, wood, fibers, stone, or plastic images. Patience, repetitiveness, love for what you do, and a sort of serenity unknown to the artist typify the self-confident artisan. The artisan has deep roots both in place and in his past.

BECOMING. The endless and uninterrupted process altering reality, in the sense of evolution, by means of space-time operating on mass-energy. (More recently, I advanced the hypothesis that reality is space in metamorphosis and "nothing" more.) All the "presents" in the space-time sequence are the fuel the Becoming "consumes" toward the generation of the past. Being is in the making. Each present constructed by space-time, by change, is the Becoming and is automatically consigned to the past. Present and Becoming are inseparable. They are the two most elusive of all agencies because as soon as they incarnate, they are gone: As soon as they are, they are no longer. Becoming is the alter ego of the present, of all presents.

BEING. A state outside of space-time; therefore, Being's nature is a kind of "non-mass-energy." The nature of Being is lodged where space-time and mass-energy have no hold. The past is Being: it is the only and total Being. Being is constantly augmented by the labor of Becoming.

BETTER KIND OF WRONGNESS (BKW). Living reality is a progression of self-improvements from bacteria to fashion . . . Given the tabula rasa each present is equipped with, the locus of the next present, and given the impulse, the pressure exerted by the past presences, there is an "inertial" reconfiguring progression of the improved pattern: "I'll do the same thing but I'll do it better." If the "thing" turns out to be wrong in the first place, the improved thing driven by the inertial drive will turn out to be "wronger."

BIG BANG. The Big Bang seems fairly secure as one of the moorings science is counting on to develop diverse models of reality. There isn't a "before the Big Bang" because there isn't such a thing. The "not to be" has no existence. It is not the before.

The inconceivable nature, structures, rules, etc., that one conjures up by way of metaphors and/or by way of almost-as-inconceivable mathematical and astronomical wizardry point at mystery number one: *il Mistero Tremendo* from where reality explosively leaps out.

The presence of mass-energy and space-time, the offspring of mystery, tells us that the notion of "before the Big Bang" is nonsensical. Being begins at the Big Bang moment, in that very first moment where Being turns into Becoming. The whole of reality is that Becoming "mothered" in the Big Bang.

BIG CRUNCH. Whereas the Big Bang seems to be a given, the Big Crunch is hypothetical. It would be a sort of

symmetrical condition to the Big Bang: the Big Bang as the explosive origin of reality and its Becoming; the Big Crunch as the end of reality, a "collapse" of reality.

This hypothesis of a reality that pulsates between a single and singular-point beginning and a single and singular-point collapse will be possible only if the gravitational forces, or better, the space-time curvature of the cosmos, are able, via a sufficient amount of matter, to slow down the expansion of reality and eventually reverse the expansion into contraction to the ultimate implosive moment of the Big Crunch.

BRAIN-MIND AND BRAIN-D. I use these terms to emphasize the need to abandon the brain-mind dualism because more and more facts are showing that there is a one-to-one relationship between what the brain does, self-reconfiguring, and what the mind thinks. (I now acknowledge the oneness of the thinking brain and mind, and I identify the persona as body-brain.)

It took a protracted labor for the brain to "become mindful," but whereas the "mindless brain" is a perfectly performing organ, the "brainless mind" is pure fantasy.

BUBBLES. Virtual "membranes" approximating boundaries of different domains. The domain embracing the immediate past and the present I label the Political Correctness Bubble (PCB). The domain embracing a past reaching back into human history I label the Historical Fitness Bubble (HFB). The domain embracing (reaching) a past reaching back into the 3.5. eons of evolutionary history of life on earth I label the Evolutionary Coherence Bubble (ECB). The domain that encompasses the cosmos at large, reality, I label the Cosmic Relevance Bubble (CRB). All the bubbles have one and only one point in common: the present, ever changing, as it consigns itself instantly, instant after instant, to the past.

One's assessment of things "present," and consequently her course of action, is influenced if not defined by the position in the bubbles domain where the person is "located."

For instance, the behavior promoted in the PCB is more than often devoid of meaning for the behavior that the ECB would promote. The discrepancy denotes an incoherence ill-fitting the evolutionary drift. Therefore, an incoherence, if prolonged, might conclude in the death of the evolutionary drift itself.

The bubble expedient can help to find the appropriate, coherent compass in occasions big and small if we never forget (as we habitually do) that we, as stardust, will find relevance—that is, grace—*only* in the conclusive act of *total* knowledge, that is, in the resurrectional conclusion. No conclusion and a very specific conclusion, no grace or meaning. Only a fatal endless unraveling via an endless chain of lost occasions. Feasibility deprived of desirability.

CLOSED REALITY. If science were to determine that enough matter exists for the cosmos to stop expanding and start contracting, then a reality with a beginning, the Big Bang, could end in a Big Crunch symmetrical to the beginning. If this is not so, then the conjecture could be that even though reality had a beginning, the Big Bang, it will not have an end—an open-ended reality.

COMPLEX, COMPLEXITY, COMPLEXIFICATION. Complexification is the "metaphysical" side of Miniaturization. Without Complexification, Miniaturization is hollow, a container in search of content, a mechanism devoid of intent. An intent . . . by a beholder because physical reality has no intent. Complexification is a measure of how many interactions are being added to a process in which mass-energy, space-time dimensions do not increase thanks to progressive Miniaturization.

Complexification is an animating agent. The liveliness of an event is proportional to the Complexity that makes the event possible in the first place. But animation and liveliness are not possible if the Miniaturization side of the equation is not up to the animating task. In all events, the frugality that Miniaturization is authoring is the measure of the Complexity present.

Complexity is the causal agency in the internalization of matter, and internalization is the distinctive character of living systems. Many events and processes cluster wherever a living process is going on. The makeup of the process is immensely complex and ever intensifying.

COMPLICATED. Below a certain threshold of Miniaturization, Complexity, and Duration, a threshold all manmade technological devices are still below, we are not in the presence of true Complexity, but in the presence of complicated, at times exquisitely organized, instrumentation. The same is true for most, if not all, human institutions: financial and economic institutions, social institutions, productive institutions, cultural institutions, etc. Even the theological models and simulations are complicated, not complex. Aside from life in general, only the true esthetic event perforates the ceiling of the complicated to become part of the domain of Complexity, the realm where Miniaturization, Complexification, and Duration are truly at work.

COSMIC RELEVANCE. As intensive as all presences-actions are, they are all relevant. When the feasible is also the desirable, cosmic relevance has reason to smile: Cosmic relevance has an end to target on by way of the living. The more the action is coherent with the sought-out end, the more the act has cosmic relevance.

CRAFTSMAN. The person engaged in circumscribed action in which idiosyncratic impulses do not quite break through into the esthetic realm, perhaps because the individual's personal anguish falls short of the "cosmic anguish" of which it should be a reflection.

CREATION. That which space-time does in acting upon mass-energy. If space-time is the coauthor of the Big Bang and the Becoming it originated, creation has been an uninterrupted process from that Big Bang first moment on.

Only at the exhaustion of space-time will creation end, because only such exhaustion will put an end to change, to Becoming. Creation is the Becoming and not a one-shot deal in a particular, privileged moment.

DESIRABLE. That which is beyond immediate survival demands and naked opportunism. In that sense, desirability is the trigger to transcendence when by transcendence we mean evolutionary steps that the genetic imperative per se is unable to take, deprived as it is of reflective know how and knowledge.

Whereas the feasible is inseparable from technology, from how things are done, and is thus an agency present from the very onset of Becoming, from the Big Bang on, the desirable is strictly a mental invention. Plants, animals, and minerals do not dwell in the desirability domain. Their domain is opportunistic, probabilistic, and deterministic. The thirsty gazelle does not desire water. It is driven by its organism to connect with that mineral substance.

DETERMINISM. Determinism, with all of its statistical muscles, typifies the fatal sound of a reality that, step by regressive step, shows its own evolution as a sort of grand deception. At the beginning everything was: the blueprint was not just the map, but the territory itself. The singularity and utter creative process carried on by space-time is then sort of a cosmic farce. For the benefit of what? The "what" itself is there from the start, full of data, knowledge, "wisdom," and "experience." What of the puny me 15 billion years in the "making," 15 billion years dwelling in the deterministic hypermind of the creator?

Determinism, at its purest and best, predefines, predestines, predooms all of reality. Evolution, which is process, and all of its fireworks are just old hat under the hat of the all-knowing and all-loving maker.

Determinism and animism are kin because for animism the anima has been afloat from the first day, predefined and preplanned, an empty anima indeed.

DISCOVERY. The finding out, the uncovering, of an existing phenomenon or event, which is independent from the existence of the discoverer (quantum physics has its own reservations about this). Mapping a landscape is a discovering of it.

DUALISM. Because in my Omega Seed Hypothesis I now maintain that reality is space uninterruptedly reconfiguring itself and nothing else, I am discarding the existence of any dualism in favor of an immensely subtle and powerful transformism.

The matter/mind dualism is a case in point and the brain is the culprit. Because it appears that the working of the mind is nothing more or less than the working of the brain, it is not possible to distinguish between the two. There is only one: the brain-mind. I will call it the brain-d. Though the mindless brain of most reptiles, birds, and mammals is a less complex brain, it is not an opposition domain to the mindful brain of Howness sapiens. The dialectic is absent. Process, evolution, is the name of the game, not duality. The same goes for Becoming and Being: Becoming pours endlessly into Being.

DURATION. The offspring of Miniaturization and Complexification. There could be no Duration in a reality not animated by the Miniaturization and Complexification methodology. Duration is the memory of the past, that is, the past itself, when released from its isolation and made operational. The remembered past, those operational fragments usable by life, is Duration in discreet dosages.

If the past is the whole of reality, full Duration is the exact and exacting recollection of it. In other words, the full recollection of the past is resurrection: It is the total revelation of the past to itself.

Duration is then the completed evolutionary sequence registered in the past when awakened in the self-revelation that the Becoming may eventually generate. Memory is the "disorderly" display of Durational fragments.

ECOMINUTIAE. Ecologically modest habitat.

EQUITY. A state in which all the components of evolution, if and when the self-revelation of reality is achieved, find themselves not only documented, but relived in all their specificity. Means have finally transcended into ends.

Equity can only be a "terminal state" when the Becoming has ended and the past is fully reawakened as full Duration. Before then, only anticipatory fragments of equity, pseudo-equity, can be locally achieved.

ESCHATOLOGICAL HYPOTHESIS. My Eschatological Hypothesis is framed in the proposition that a meaningful end is in the realm of the possible and definitely in the realm of the desirable. This hypothesis sees the resolution of the Becoming, of reality, into Omega Seed, that is, into the reawakening of all the past in a state of total self-acknowledgement of self-revelation.

The truth is in the making and is not a given for the obvious reason that reality itself is in the making, and reality is the only arbiter, in fact, the only definer of the truth, because it is the truth. Therefore, the eschatological end is not predefined, preordained, predestined, or predesigned. Reality and the truth are not mandated from above.
This hypothesis has no guarantees in the sense of explaining the What and the Why.

This grassroots procedure is the one that might develop the "Howness," the process conducive to the slow emergence of the What and the Why, that is, the What and the Why of what the desirable could be.

ESTHETIC CREATION. The very rare space-time and circumscribed event that from its very inception speaks of an end beyond means.

ESTHETOGENESIS. A process generating a reality in which all components, besides being the means to the self-revelation achievement, are also ends unto themselves,

the very meaning of self-revelation. Esthetogenesis describes a final state of grace that only consciousness, or some equivalent of it, can generate through evolution.

EVOLUTIONARY COHERENCE. The bulk of living evolution has defined for itself (created) the evolutionary momentum; the genetic invention per se and what the genetic domain keeps inventing (space reconfiguration all the way) have an innate self-coherence. The cultural innovations via memes must find a fit in evolutionary coherence, including the fit of transcendence.

FEASIBILITY. Feasibility is utterly tangled in the space-time web. What was not feasible at one time is feasible now; what is not feasible now will be feasible then. In this mode of thinking the irrepressible optimism of the desirable easily drifts in.

The present is the seducer that can and does take feasibility into irrelevance and/or into fields of horrors . . . the hyperhorror of the H-bomb, the irrelevance of 90 percent of our shopping center and merchandising Utopias where the goods are mistaken for the good.

FRUGALITY. Because things and events are the endless variations that life is able to generate within the space-time sequences, the "presents," one could say that frugality is the most sophisticated use of space-time.

The ability of reality to generate has found an extraordinary improviser, inventor, coordinator, and creator in the human mind. The more complex the event, the more stringent the coordination of the elements entering into the making of it. The event that is the canary is more frugal than the event that is the jumbo jet because the cause-and-effect process in them works on different space-time beats.

The Miniaturization-Complexity-Duration (MCD) paradigm is frugality made operative. The extreme instance of this is the Omega Seed event within which, in a nullified space-time, the whole cosmic experience from the beginning at the Big Bang to the end at the Big Crunch would be revealed to itself. The event is total and is pure Being.

Frugality is a process of internalization because MCD is fundamentally a processor of the outer into the inner. This is why frugality is superior to the materialism now expressing itself in our hedonistic hyperconsumptive society. Frugality is a necessity capable of resolving itself into a virtue.

THE FUTURE. The future is a semantic fiction because the word is a sort of self-denial. In order to be true to itself, the future cannot exist.

What exists is the tide we call the Becoming, which in some sort of coherent fashion makes anticipation possible. Perhaps instead of "future" we should use the word "anticipation." We anticipate presents based on physical, genetic, and cultural memories delivered by the past.

GRACE. Because I call Esthequity—esthetic and equity—the ultimate achievement of Mind and reality, I feel discomfort at defining grace as the all-inclusive terminal state of reality. They are interchangeable. Esthequity points at the "magical" convergence of the esthetic and the equitable. It is a convergence so inevitable when the evolutionary sequence is positively guided that the two agencies become one, the Omega Seed. Grace points at the transcendence of conflict, not in a sort of despairing resignation, but in the luminosity of a prodigious and concluded reality.

THE GRAND DELUSION. The gray cloud, the obfuscation impeding an efficient exploitation of the evolutionary momentum. The memes are tangled up in a sort of sadomasochistic match, a self-punishing game that has its origin in the fearsome presence of nature, secretive, moody, exhilarating, punishing, cruel, nurturing, and boundless. Life means boundaries (e.g., the skin boundary of organisms). Reality has only one boundary, its own total self. There from the anguish . . . the tragic sense of life, the human condition. The Grand Delusion is the dense fog of animism and all the ghostly theologies it nurtures.

HISTORICAL FITNESS. In the delusory practicality of political correctness, history has not much to offer. The historical fitness mold seeks to connect with that crude ignorance about the recent past (200 years or so for the USA). In the historical fitness attitude is the shining light of the Founding Fathers' wisdom. In lesser hands, such light turns easily into xenophobia: fear of English, French, German, Indian, Brazilian, Chinese, and other peoples. The notion of national destiny looms large and threatening to all "foreigners." Historical fitness has little room for the family of man, the human species. In the eyes of the perpetrator, historical fitness often legitimizes genocide, slavery, murder, and all associated cruelties of history.

HOWNESS. How space goes about transforming itself is the gist of reality. For eons, brainless reality has been transforming itself. It has been evolving into ever altering "Whatness" within the quasi-unalterable rail track of its own "natural laws." Any presence comes equipped with its own rules. The presence of this reality, the cosmos, comes equipped with her own laws. It is how this presence works with and around those laws, life itself, that is the Becoming at its best. The "What" is generated by the "How."

IDIOSYNCRATIC. We all are "I" by constitution. This results from the opportunistic domain we evolved in and remain in. Now and then some are able to elevate the idiosyncratic expression into the universal expression. That is where the esthetic is made.

INTERNALIZATION. When the natural laws of physics, still acting upon a process, no longer dictate the next step, the main governor of change resides in the internalization process. The process is then the organism itself, and its drive is an internalization faculty.

Living mandates the organism, via genetics and adap-

tations, so that it can cope with the outer, the world around it. This is an inner-guided process. One of the virtues of this phenomenon is that it moves the process from the complicated to the complex, a virtue of sufficient Miniaturization. If internalization ever became universal and total, reality would reach the self-revelation state, the resurrection into Omega Seed.

INVENTION. The combining and recombining of separate phenomena or events previously unconnected by the brain of man, generating one or more domains for action. The electric motor is an invention. "Howness" is solicited by invention. Thus, invention is a trigger for Howness.

THE LOVE PROJECT. The Love Project supersedes the probabilistic machinations of micromass energy and the opportunistic drives of protohuman life. It supersedes them but does not exclude them. It could never exclude them and remain real.

The Love Project is a Becoming in which both probabilism and opportunism are present. The Love Project has its obscure, ambiguous, uncertain beginning with the advent of pain in the animal kingdom. It has its explosive emergence with the advent of suffering in human beings. Eros, per se, is the potent drive that occasionally transcends into love. Love germinates from the turbulence of good and evil, the double agency that grants us joy and suffering.

MEANS AND ENDS. A project entails the definition of means to implement it, to reach the end. But a project presupposes a planner. For a reality that from the onset has no planner, the notion of developing projects is an empty one. Perhaps the means, the How of things, generate the ends. Chances are that the first project coincided with the debut of life. Life is a self-planning event. It is full of contingent projects. Opportunism is the master of such projects.

In terms of procedures and scheduling, it seems that the protohuman phenomenon produces forms that by way of mutations and adaptation emerge in a conspicuous number. Those forms "invite" functions in a sort of projection in reverse gear. There isn't so much a need seeking a form as there is a form "generating" a need. An example is the brain. Form is a solicitor of content long before content emerges to seek a form or container.

Matter is in no need of sight and has no desire to see. That notwithstanding, sight becomes a cornerstone of life via the forms-function sequence generating the sight organs one formative tiny step after another.

Self-awareness, self-consciousness, and Mind put a different spin on the process. For Homo sapiens and all her projects, a planned function needs an appropriate container or form. Form follows function, a bouleversement of function following form in nature.

The planet was not formulated in such a way as to accommodate the functioning of life. To the contrary, the form, the planet, per se a turmoil of functioning processes, by its formality "invited" the novelty of life to appear and to define its own forms that here and there were to see the inception of new functions (activities).

In a way, for the model of a God creator, the content will generate the necessary forms. For the model of a process creating the creature, the containers will induce the fitting contents. We are given reality, the form: we seek to generate the most meaningful content for it. Man is a planner if he is anything . . . project after project . . .

MEMORY. Memory refers to three domains: the physical memory, the genetic memory, the cultural memory. Because memory is about past experiences, it is the instrumental agency for the Becoming. There is no Becoming where there is no memory. The past is still with us and fuels present after present. Through memory the past produces more of itself via the sequence of presents.

MIND. That part of life and knowledge engendered by organisms but not limited to or by genetic knowledge. Animals are intelligent, but they are not mindful. Culture is the phenomenon that the mind constructs, founded upon the genetic experience and intelligence of Homo sapiens.

The flame that makes the mind unique is reflection: the conscious and operational distinction between the "I" and the "other than I." Of all of life's achievements, this may be the most astonishing and the most revolutionary. It may entail the redirection of the cosmos evolution.

My thinking no longer makes a distinction between brain and mind. The brain is a reality. What the brain does by reconfiguring itself many call the mind. I no longer do. The mind is the doing of the brain, no less, no more. The brain can operate without the mind. But the mind is nowhere to be found where the brain is absent.

MINIATURIZATION. The progressive reduction of the physical dimension of an event favoring a tighter performance among contiguous events. The mass-energy, space-time savings is locally critical, and such frugality rebounds throughout reality. Through Miniaturization the impossible becomes possible.

This makes Miniaturization the physical side of complexity without which Complexity cannot hold. Complexity is content in search of a container—Miniaturization. Through this Miniaturization-Complexification process, a threshold can be reached where matter becomes life and knowledge.

The nature of complexity demands the rigorous utilization of all resources, including mass-energy and space-time. Therefore, whenever Complexity is at work, Miniaturization is mandated and a part of the process.

MINIATURIZATION-COMPLEXIFICATION-DURATION (MCD). In the universe to which we belong, a universe in which space-time is the agent "manipulating" the media of mass-energy into Being, the MCD triad is the critical determinant in the creation of such Being, in the creation of the past. Miniaturization-Complexification is the binary methodology by which

reality is inching toward self-consciousness, toward the Mind. Because mass-energy is unrelentingly stirred by space-time in ways that generate more and more information and knowledge, more and more Complexity, contained in less and less space-time, the process of Miniaturization. Reality witnesses the mineral memory at first, then the genetic memory, and finally, the cultural memory. Duration is taking hold in the sense that the past, reality, sees more and more fragments of itself being "relived" in memory. Perfect remembering is tantamount to a "Second Coming," that day when I will be remembered in all the details of my Becoming. On that day I will be resurrected. It goes without saying that this could only happen in a reality purged of space-time. We call this reality the past. The past is the only Being.

IL MISTERO TREMENDO. Italian for "Tremendous Mystery." In my hypothesis it refers to the ultimate meaninglessness of reality unless consciousness is able to make it self-revelational in toto, the Omega Seed, from meaningless to meaningful.

NATURE/REALITY. Nature is reality in the process of creating itself. It is a Becoming and not a Being. But such Becoming is automatically and instantly consigned to the past: Beingness.

Nature is the razor edge where Becoming, the present, pours into Being, the past. The tendency to isolate the natural world as the biosphere from the remaining reality is an added obstacle to the understanding of nature and reality. Perhaps the greatest surprise in nature's Becoming is the emergence first of life, then of mindful life.

Seeing the Becoming of nature and reality as an unwarranted, not predetermined series of mineral, biological, and mental transcendence, the question of proportionality becomes critical. Is the living an irrelevant, puny, and short-lived accident, or is it the beginning of something with an impact that might eventually transfigure reality in toto? The Omega Seed Hypothesis counts on this second outcome.

NIRVANA. The cauldron of the animistic Grand Delusion, it vaporizes all of the theological ghosts by the obliteration of their authors—actors: life itself is at last a grand delusory nothingness, the abyss of nonpresence is Nirvana.

OMEGA SEED. As the seed is functionally and emblematically the encapsulation of that which an organism will become, the universal Omega Seed is the ultimate encapsulation of all the information/learning generated by evolutionary development. The "organism" of such a universal seed is Duration.

Information/learning is, in this extreme case, the "lived" experiences of evolution contained in the ultimate seed. This content will find animation in the exhaustion of mass-energy and space-time characteristic of the "infinite" Miniaturization, Complexification, and Duration present at the end of space-time. It is the animation of self-revelation, of resurrection.

OPEN REALITY. For a reality that has always been, there is no logic in anticipating an end other than the cold death of entropy. Therefore, in such a case, reality is an open-ended event with perhaps the Big Bang at the beginning and with no end.

OPPORTUNISM. Opportunism presupposes stresses that go beyond physical laws. There is no opportunism in the coming together of oxygen and hydrogen to generate water. The fact that is water is intrinsic to the "nature" of reality. Biological stresses are anchored to survival, a novelty in the "physical" reality.

In the simplest manifestations of life there is not a consciousness guiding and staying the course that is most opportune. Selection and adaptation in their most impassive selves are the arbiters of life and death. Throughout three or four eons of the food chain on this planet the opportunity to survive and procreate is all that living reality could offer. Consequently, opportunism is the agency that saturates the activities of life. If they began to be felt, tolerance, consideration, generosity, abnegation, and self-sacrifice were and are of a protoloving nature, though they strongly hint at love and relate to populations, not to individuals.

Opportunism is and remains the most innate of our drives and is more and more adopted by individuals of the Homo sapiens population as a legitimate expression of the ego generated via consciousness. Capitalism is the most recent incarnation of opportunism, and therein are its strengths and its limitations. The evolution of man and Minds will be the story of postopportunism, that is, postcapitalism, or it will be a story of sorrow, sadness, and suffering.

THE PAST. The repository of all that reality is. It is Being—a Being constantly enriched by the Becoming generated by space-time, present after present.

The past is reality. There isn't any other reality outside the past. (There is the reality of the past producer: the Becoming.) The past as the only Being is the repository of all presents and therefore the repository for the Becoming continuum. But the past, inasmuch as it is outside of space-time, of Becoming, participates in the creational process only if and when memory makes it available to the present. One could suggest that the past is the only reality by default. That is, for lack of a better, more substantive alternative, let's dump reality in the bin of the past.

This is far from the "Truth." Imagine a reality for which the "present" is the only thing around, and you get a cruel farce. The presents make sense only because they come loaded with the past, the memory of what is. Memory is the stuff of reality and of that great or small amount of coherence it can inject in its own self-creation.

Our deafness to the concreteness of the past is consequent to our makeup as space-made events. And the past is not an event made of space. It is a Duration-made event,

but it is the offspring of all the space-made events: reality in evolution.

Because all things, my makeup and my cohort of welcomed or unwelcomed guests included, are past things, we should bask in our good luck. Think: Every single bit of reality, 10–15 eons of it, is the past meticulously constructed by the "infinite" number of presents gone by. None of those would have had any concreteness, not a single blurb of it, if not doused by the past, by the memory of it, by physical memory, genetic memory, and cultural memory. The past is Being, the only Being.

POLITICAL CORRECTNESS. The postures where expediency can be sold as wisdom dressed up as a realistic compromise, felt and accepted for the good of the people. Political correctness has to be up to the fashionable, therefore, be with the buzz of the political moment. Its correctness is the measure of its adaptability. In an ideal world, in Utopia, political correctness would be the right menu for keeping things running. Since Utopia is the best of the animistic delusion, political correctness feeds on delusion, or on hypocrisy.

PROBABILISM/PROBABILITY. A sort of escape hatch away from the deadly call of determinism: determinism, for which a full database automatically anticipates what comes next and next and next and next to the end of "time." The gods have ALL in their "minds" and are holy determinism in personae.

The probabilism postulated for the subparticle domain teases determinism and its sacramental prison by challenging the whereabouts of each single neutrino on the stage, but then withdrawing from the challenge because for all purposes the statistical result has been a priori determined.

THE PRESENT. The most enigmatic process of all. The enrichment of the past is generated from the alteration produced by space-time working upon mass-energy. (In my recent hypothesis, space-time and mass-energy are alter egos of space, the only reality of Becoming.) This comes about through the purely nondimensional agency called the present. It is nondimensional because in the very instant of happening, the happening is already no longer a present. It has passed, it is the past.

One could perhaps say that the present is a membrane of infinitesimal thickness separating the past, which is Being, from the future, which is non-Being. The present, this membrane, is the Becoming conducing its magic construction present after present.

The present, the generator of Being, is a sort of sequence of stills constructing reality in a particle mode of light in preference to a wave mode of light. The dynamic Becoming is constituted of static packets of each present.

The present comes with two types of "appendices": The "tail" appendices refer to what has been, the lingering of the present; the "head" appendices refer to what will be, the anticipation of the present. Those appendices are two pseudo-presents connected by the real present, the now.

REALITY. In a multiverse reality, perhaps it might be admissible to pluck this (our) reality out of the many (quasi-infinite number of them?). In such an event would there still be . . . realities right and left projecting shadows on this reality? If left adrift from all others and from their influence, reality would be the account of all that goes on. Since the only accounting is the registration of the Becoming into the Being, the past, the past is reality, courtesy of the Becoming.

RECONFIGURATION OF SPACE. As the fundamental maker of reality, space arranges itself in the whole constellation of "things" from quarks to the entire cosmos. The brain is an exotic hypercomplex-miniaturized space configuration—space-geometry, the basis for a unified theory.

As for space-time, one can propose that it is the reconfiguration of space that *makes* time and not that the reconfiguration of space *takes* time. Space is the maker of time, not the user of it.

RELIGION/*RELIGIO*. The search for methodological and normative guidelines eventually resulting in how reality may bind itself (*religio*) into an ultimate grace, a grace achievable only in the self-revelation of a concluded reality.

Given the onslaught of "religosity" in the contemporary scene, it seems necessary to separate the "belief in God" of all theologies from religion, the quest for a oneness that has all the qualifications of a bootstrap enterprise and none of the mandate from above voiced by hypothetical deities. Religion is democratic; theology, despotic.

In view of the developing scientific knowledge, those deities, of whatever coloration, are more and more pathetically inadequate at attending to the human condition. They are a faithful mirror image of such condition, wretchedness included. They are a kind of collective idiosyncrasy incapable of any true transcendence.

RESIDUAL ANGUISH. A condition that conscious life cannot escape because of *il Mistero Tremendo* from which life emerges and evolves, the meaningless triggered into Mindfulness. This inescapable condition finds its own resolution in esthetic objectification. The esthetogenesis of reality is achieved if and when the process of anguish transcendence is completed.

RESURRECTION. The event at the conclusion of evolution if and when evolution, by way of MCD, has reached the state of total recall and self-revelation. Resurrection is then the reexperiencing of not only the subjective history of each event, but in synchronicity, all and everything reality has been and has become.

Full knowledge is "to be what you know." It is total resurrection because Being and knowing refer to the whole, to the number of eons between beginning and end.

THE SECOND COMING. The very fact that reality is a Becoming, and therefore evolves, calls into question

the status of all events emerging and dissipating throughout this Becoming. As instruments in the making of reality they all seem to be of a disposable nature. Unless reality is at last able to "testify" to their existence and contribution, reality remains an engine without virtue.

The Second Coming responds to the fatal flaw of an un-Mindful reality (il Mistero Tremendo). The self-revelation of reality at the end of its Becoming through evolution is the location for the Second Coming of all those events and things that have preceded, including organism and Mind.

Their resurrection in Omega Seed transfigures their instrumentality as means into the finality of ends. Reality's self-revelation, total recall, resurrection, Second Coming, and Duration are one and the same in Omega Seed.

SELF-RELIANCE. Utopia that has shed its pernicious garments. It is all that Utopia should grope for. It is a nonparasitic agency attempting to render to reality more than what reality is willing to give.

Self-reliance is a bartering engine that should be fueled not just by opportunism, but by opportunism with the long reach that only love, compassion, and knowledge can sustain: the opportune way of Becoming among the Becoming, not in spite of it.

SELF-REVELATION. The very special nondimensional point-moment when the past, reality in toto, has fully acknowledged itself. The act of self-knowing is the act of self-revelation, the revelation of itself to the whole of itself. It is Duration at its purest and most comprehensive. In theologies, what passes for revelation is in fact invention upon which simulation scenarios are constructed.

Revelation needs the reality of what is revealed. Whenever that which is "revealed" is a fiction or an autosuggestion, revelation is robbed of its content. That which is revealed is naught, and what is left is the simulation of that which one wished reality would be.

SELF-SUFFICIENCY. A condition for Utopia; an abused label hiding a fundamental deception. By now we know that the whole of reality is the only instance of self-sufficiency, but only if one accepts that it is a dynamic, a process, a "self-sufficiency," chasing after a constantly receding fullness, the fullness of a true self-sufficiency.

If a maker intruded into the scenario, then reality would never be a sufficient agent for its own Becoming, much less its Being. Would this maker, God, be a self-sufficient agent? Not if it is caught or trapped in the Becoming of which it is supposedly the generator.

SPACE-TIME. The change reality undergoes on its mass-energy foundation. An instant or an eon without change negates the reality of space-time, a self-contradiction. Space-time does not exist if change does not exist, and vice versa. The labor of space-time is evolution itself. Space-time is the Becoming. The exhaustion of space-time, in a Big Crunch for instance, is the end of Becoming. It is where and when the possibility of self-revelation into Omega Seed becomes possible. (As of 1996, I consider time a true human invention with not one ounce of concreteness. We give some sort of cage to the reconfiguration of space, which reality is, and we label it "time." It is a convenient "nonthing" for measuring the hard-to-measure. But in the absence of the measured, of space, time is an empty word: it is nothing. One can conjure a timeless space, a sort of frozen bouillon. One cannot conjure a spaceless time. Time of and for what?)

STEWARDSHIP. The caring for those things that are the responsibility of the steward. He keeps the things in his care in top form. It is said that man must be the active, involved keeper of nature. So far, so good, if you are laboring under the assumption that the keeper has knowledge and wisdom sufficient for the task, a task of conservation by definition.

A strict adherence to this model can be immediately faulted: Evolution is not only conservation. Evolution is transformation and metamorphosis. A single-minded preservation of the present and the past is an automatic dismissal of the "future," which is the invention of more of the past.

Thus, a stewardship that is not bigoted is a stewardship that is clearly, let's say, half of that which is going on and in need of understanding and participation. Eons ago, this continent, or the entire planet, had no biomass of any sort. Fortunately, "stewardship" as it is often practiced was not around then. The same can be observed for the 3.5 eons since. The biomass now has a Mind, us. This Mind, the latest invention of the biomass, has to be part of the stewardship and conservation drive. But it also has to be the spearhead of metamorphosis, the other half of the equation.

It is important to note that all local ecosystems are in a perennial dialogue and bartering with all the other ecosystems, near and far. If the North American continent suddenly "went native," going back to those things truly indigenous, it would lose the majority of its plants and animals. Very rarely can one speak of "truly" indigenous life. Buffalo and Native Americans do not even fit that mold, not to mention tomatoes and corn.

TECHNOLOGY. The present, the now, is a preceding present, a preceding now, altered by the Becoming of reality via space-time. The technology, the Techne, used for such an alteration is such a Becoming via space-time. The Becoming is a cosmo-technology in action. Technology, from the root Techne, is then the oldest of all agencies working at generating reality.

The genesis of life is biotechnology played out in this solar system for three or four eons. The prodigiousness of this phenomenon is made possible by MCD at work. It displays itself in an immense and beautiful variety of living forms. The brain, a most exotic and most secretive biotechnological miracle, could be a transfiguration of matter beyond any possible anticipation if someone to anticipate had existed when the process began. The Mind, this

radiance of the person with a brain, is hypertechnology in operation. Religion, among the other Mind's agencies, is or ought to be, theo-technology, the generation of divinity.

THEOLOGY. An invention and simulation generated by the Mind in search of benevolence, meaning, and resolution. It is an invention and simulation of divinity. Mistero Tremendo and the anguish it generates are the main cause of theological inventions.

THE TRUTH. A complete and predictable reality where all is a given, a reality like the one in the mind of God, is true and a full Truth. A reality that is Becoming, where space-time is not a figment of the imagination but a maker, is itself a maker of a Becoming truth. Such a reality is a conditional, fragmented groping for truth, not the ultimate Truth. It will remain so until the end.

That is why the Mistero Tremendo—and the anguish and suffering it engenders—is "constitutional" to reality itself. Reality is searching for its own truth. The Mind now knows that such truth does not exist yet, so it cannot be uncovered, discovered, or even invented; it can only be created. Anthropomorphically, we assign attributes of our inventions, with love at the head of the line, in order to describe a meaningful and benevolent reality, Mother Nature . . .

URBAN EFFECT. Generated by MCD. The evolution of the Urban Effect is the best example the synergy of the MCD Paradigm is proposing. All organisms are per se like different stages of the Urban Effect and its binding power, its *religio* power.

The MCD religion is pointing at the "city of light" that throughout history has been emblematic of the highest of all transfigurations, matter transfigured into Mind.

UTOPIA. The emblematic example of the great delusion of self-sufficiency. It is the parochial pretending to be the catholic, the fragment pretending to be the whole. Even when unpretentious, it shows an arrogant sort of blindness toward the reality it is inescapably nesting within.
The perfect community, the Garden of Eden, and a just and loving reality are all fatally flawed floundering presumptions and are the prime causes of suffering and cruelty. They, like all Utopias, are good intentions bringing catastrophic results.

About the Author

To be a small voice in the interpretational and creational game that is, in an infinitesimal way, nudging reality toward self-revelation.

Paolo Soleri was born in Turin, Italy, in 1919. He received his doctoral degree in architecture from the Turin Polytechnical Institute and apprenticed under Frank Lloyd Wright at Taliesin West. He settled in Scottsdale, Arizona, and has made a life-long commitment to experimentation in urban planning. His major project is Arcosanti, an urban laboratory in the high desert of Arizona that has been under construction since 1970. He is the author of several books, including *Arcology: The City in the Image of Man* and *The Omega Seed: An Eschatological Hypothesis*.

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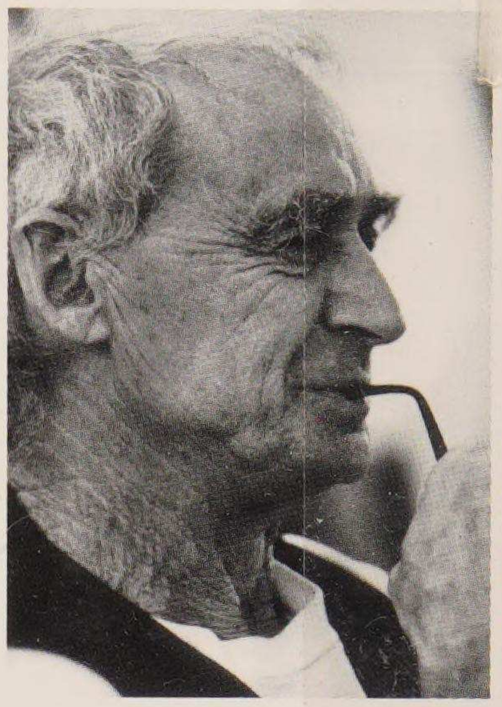

PAOLO SOLERI was born in Turin, Italy, in 1919. He came to the U.S. in 1947 to apprentice with Frank Lloyd Wright. Three years later he returned to Italy, where he was commissioned to build the widely acclaimed Ceramica Artistica Solimene in Vietri sul Mare. In 1956 Soleri settled in Arizona, where he has made a lifelong commitment to urban theory and design. Soleri's major project is Arcosanti, a prototype city under construction in Central Arizona, built according to the principles of "arcology"—architecture coherent with ecology.

Soleri's urban designs have been shown, published and debated widely. National touring exhibitions of his work have been curated by the Corcoran Gallery of Art and the New York Academy of Sciences. He is the author of eight books, including *Arcology: The City in the Image of Man* and *Omega Seed: An Eschatological Hypothesis.*

Soleri has received two Guggenheim and two Graham Foundation fellowships. He has been awarded three honorary doctorates, and is an Honorary Fellow of the British Royal Institute of Architects. His long list of awards includes the American Institute of Architects Gold Medal of Craftsmanship, the Gold Medal of the World Biennial of Architecture, the Silver Medal of the French Academie d'Architecture, and, most recently, the Golden Lion Award of the Venice Biennale.

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—Harry Rand, Smithsonian Institution
From the Foreword

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