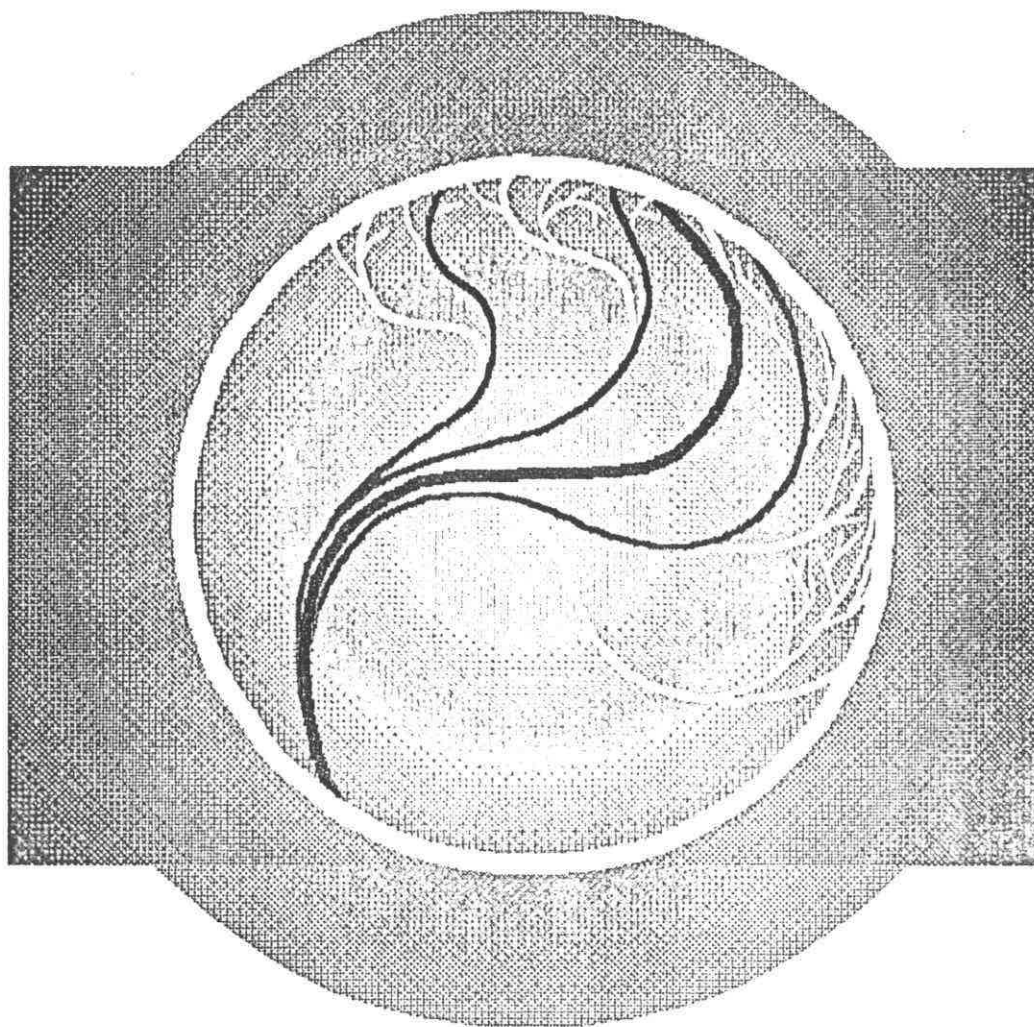


COHERENCE AND CHAOS IN OUR UNCOMMON FUTURES – VISIONS, MEANS, ACTIONS –

**Selections from the XIII World Conference of
the World Futures Studies Federation
Turku, Finland, August 23–27, 1993**



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Chaos in Culture, Science and Politics: New Synthesis or Spencer Revisited?

Less concerned with attempting to provide empirical proofs for and of chaos theory, this article takes a postmodern sensibility and attempts to better understand chaos theory by locating it in various historical narratives of chaos and coherence. To do this we conduct a textual analysis of myths from various cultures. We particularly focus on efforts by Chicano culture to negate the chaos wrought by American hegemony. We then discuss how classical Western and Eastern philosophical traditions have attempted to resolve the classical antinomy between chaos and coherence concluding, of course, with chaos theory and its claim to have opened up a third territory outside of "chaos" and "disorder." Taking a broader view of chaos theory, we link it to general evolutionary theory and argue that even though it claims objectivity, it continues the scientific mythification process giving us new myth, a new story. We also analyze chaos from the perspective of social theory, asking: how has chaos historically functioned, has it indeed meant randomness or is it closer to the modern meaning of pattern within disorder? To do this, we use the works of Pitirim Sorokin and P.R. Sarkar. We conclude this article by framing chaos theory within the larger framework of modernity and postmodernity

We thus examine chaos from five perspectives:

- (1) Culture and meaning in opposition to chaos, that is, chaos as the end of culture.
- (2) Myth and chaos (from chaos came meaning), that is, chaos as the first stage in pre-history.
- (3) Chaos as part of the Western project: the search for patterns, and the need for structure so as to predict and tame nature even the wildness of Chaos itself. Chaos theory is then the final net thrown over nature, making nature but Man. Chaos theory is also the final net thrown over the Non-West, Herbert Spencer revisited but in disguise.
- (4) Chaos theory (with evolutionary theory) as resolving classical dichotomies. Chaos and Evolutionary theory is then the latest scientific model intending to save science from post-structural analysis and from cultural humanists who want to remove the idea of progress from discourse.
- (5) Chaos and social change theory; chaos as an intermediate stage between ages or eras.

Chaos as Lack of Meaning: the Great Silence

Chaos for many cultures has meant a loss of their tradition, a loss of a unifying center a whole from which meaning and history spring. In this sense chaos exists in opposition to civilization and tradition. Chaos then results as cultural sovereignty breaks down.

Chicano literature for example can be understood as a reaction to the threat of chaos of their culture disappearing into something other than itself" argues Bruce Novoa in his Chicano Poetry. For the Chicano "chaos is the sense of being outside of one's familiar circle of being in the Other's territory forced to act according to rules that do not arise from one's own form of life. In [this] alien space the images offered by the Other as indexes of value become dark grotesque mirrors." (Novoa, 212)

Not having a sovereign self is a problem for all colonized people. For muslims Edward Said among others has shown how meanings internal to Islam have been rendered invisible to muslims such that they see themselves through the eyes of others. It is not surprising then that this chaos of meaning leads to a chaos of violence of alleged terrorism of attempts to strike back at the modern.

But where to strike when chaos is all around? Obviously then at the simplest representations of sovereignty: trains for the Native "American Indians" in their lost battle for sovereignty against the encroaching manifest destiny of the West and airplanes for the Palestinians in their struggle for sovereignty

Indeed, political, cultural and economic sovereignty becomes the vehicle to fight the chaos of the Other, of a world with no boundaries, that is, no meanings. Sovereignty attempts to create a bounded historical space in which chaos cannot creep into, that the foreign culture in question can have no access to.

For the Chicano, it is through his or her literature that salvation is found. The poet attempts to retreat into another world, a world that is familiar, in this case a Chicano world, "to find and rescue the primordial hierophanies, the basic defining and cosmicizing actions and beliefs preserved in the collective cultural consciousness of the oral tradition" (for the oral tradition retains its categories unlike the text which can be borrowed by the foreign). (Novoa, 212) Feeling that they are "not yet completely lost, not yet entirely absorbed," (212) Chicanos believe that through their historical culture, they will be able to control the surrounding space and order their life.

Against the threat of chaos, of exclusion by a world made silent, those forced into prehistory, into desolation, shout for meaning, for silence knows no history.

Chaos then is avoided by repeating the historical works of the poet. Unlike post-structuralists where words have no ontological depth, for the Chicano, words evoke the presence of the signified. This is similar to the Indian mantra where by repeating the mantra – the symbolic representation of the infinite – the eternal self becomes known, there is an ontological, indeed, an alchemical transformation of the mind. Meaning is thus rescued and chaos is avoided by evoking historical culture, by evoking sacred spaces, of the mind and of the body, personal and social. While this might be problematic from a secular scientific view it is important to remember that the great merit of myth making is that the cosmos becomes a community of known forces. In the world of myth, there can be fear from demons but never desolation. Indeed chaos theory itself does precisely this, for within the scientific chaos paradigm we are no longer desolate, we have direction, the world is now ordered.

Poetry and art then arise from humanity's efforts to overcome the forces of disorder or chaos. Art gives meaning even if its own form may be often difficult to decipher, argues Sachchidanand Sinha in *Chaos and Creation*. Morse Peckham, in his *Man's Rage for Chaos* goes a step further and writes that "art alone reveals the order which lies at the heart of reality beneath the chaos in which the world comes to us." (30) From this perspective, chaos then is more than disorder, it is meaninglessness. Chaos is full of fear and loss; chaos is danger but not death, for death is void of experience, while chaos is experience without meaning.

We thus have traditional unified culture (existing outside of chaos) in contrast to peoples lost in the culture of modernity, of the Other (in chaos). While the battle for sovereignty has historically been lost to exchange relations (to commodification and modernization), can cultures resolve this antinomy and create new more resilient cultural formations? Or must the words of poet be merely attempts to recover the past; words that offer little for new futures ahead?

Cosmos and Anti-Cosmos

Staying within this model of chaos standing in opposition to ontological order, Toshihiko Izutsu in "Cosmos and Anti-Cosmos: From the Standpoint of Oriental Philosophy" argues that from the Western view Chaos is best understood in opposition to Cosmos. Cosmos is Being, order and meaning while chaos is that which falls outside this order. In the original Greek, chaos meant something which had its mouth wide open. In this definition, chaos is a cavern, unclear and fathomless. Chaos is the space where Being cannot be grasped, while Cosmos is clarity and order.

Within this Greek model, it is chaos that existed first. From chaos came the earth and the heavens and the stars. Chaos is then not a heterotopia, as Foucault would write--a series of other spaces, nor is it a utopia, a non-existence place or a eutopia, a good place; rather, it is the original space from which we came from, the preceding state.

Chaos becomes the external reality that threatens the ordered world of Being and meaning. If cosmos is light, chaos is darkness, if cosmos is goodness, chaos is evil. "The ontological space of Being called cosmos finds itself threatened by the possibility of the primordial power of the chaos, bursting into it at any moment and disturbing its internal peace. Thus, the existence of chaos is always threatening." (Izutsu, 108) Within modernity, chaos comes to the system in the form of the periphery – as the irrational feminine, the fanatical Asian or Oriental, the mysterious African – and threatens the ordered world of science, State and technocracy.

Chaos then is to be feared. But this fear is paradoxical, for chaos invites us as well. Even if, by nature, argues Izutsu, we love rational order, we also possess an impulse for disorder; a human being intends to destroy every frame in which one is enclosed. Long before the post-modernists, Shiva understood this contradictory nature of humanity. As the god of destruction, his dance between life and death, order and disorder reconciled both positions. His one foot was always in nature and the other outside of nature. We thus seek to flee, to go away, to another space, no matter how dangerous this space might be. It is this that the shamanistic experience evokes (at a far more existential level than mere post-structural epistemological deconstruction): going beyond our normal ontological order and entering in another space, often a chaotic space. The prophet leaves the familiar city and wanders to the mountain, the desert or the cave. Civilization, however defined, is left behind and he or she breathes the primordial. However, when we return from our dance – from experiencing the mysteries of the Divine – with Shiva, then through language and other forms of creating shared meaning, we enter ordered spaces.

Buddhism, as well, attempted to reconcile the spaces created by order and disorder, cosmos and chaos. Being was for the Buddha neither this nor that. For Lao-Tzu, too, the nameless is not feared but embraced. Nothingness in Zen is also embraced. Indeed Mu becomes an emptiness that is full, both chaotic, yet ripe with meaning. In this sense, classical Oriental philosophy breaks out of our traditional antinomies of sovereignty and exchange, of cosmos and anti-cosmos. The Buddha remained silent when asked about the existence of God. He understood that the contradiction could best be resolved by silence (and at the same time he did not want to privilege a force that then could be reclaimed by the Brahmins), by not entering ordered spaces of discourse.

Thus, in contrast to the classical Greek position, nothingness is not prior to Being, it is not the origin but it exists in Being. Anti-cosmos and cosmos, chaos and coherence, are not binary opposites, rather, they exist together. At the level of metaphor this is similar to the position of modern chaos theory: that is, there are deep patterns in randomness – order in disorder.

Chaos and General Evolutionary Theory as the New Paradigm

As with the case of Shiva, modern practitioners of chaos theory argue that they have opened up a third territory outside of the cultural position of the humanities and the ordered position of the sciences. In the arts and humanities, the emphasis has been on destabilizing previous notions of order, on questioning enlightenment grand narratives and notions of totality, on stressing indeterminacy, fragmentation, discontinuity, and disorder. The emphasis in the sciences has been rather on destabilizing the very distinction between order and disorder. Chaos theory sees both as hidden in each other, allowing for a third territory that opposes previous totalizing (sovereign, logocentric, grand theory, teleological theories) theories.

Chaos theory then resolves the two arrows of time, Erwin Laszlo and others argue: the arrow of progress and the arrow of entropy. (Laszlo, 15–17) That is, living systems define their own evolutionary trajectories: knowledge and information can lead to progress. We can learn from the past. On the one hand we have Darwin and Spencer (and Durkheim and Comte, Smith and Marx)

arguing for differentiation, complexity, classes, and stages, that is, Progress. On the other hand we have entropy: the classical model that argues that our time is running down, that there is a downward cycle. However, within the framework of evolutionary theory, evolving systems are not closed, the universe as a whole is not mechanistic, cosmic processes do not move toward universal heat death, and life is neither an accidental aberration nor the manifestation of mysterious metaphysical forces. It is knowledge and information that provide a way out allowing for new stages of civilization.

But for classical thinkers: the goal has been not total knowledge or power but balance, not epistemological exclusivity but harmony between different ways of knowing. Knowledge can only help us understand our human limits; knowledge can help us understand that in the face of history, of the rise and fall of men, women and nations – and evolution, the only appropriate response is humility.

For Eric Voegelin, attempts to forge linear theories of history forget the ancient principle of humanity: that all things under the sun follow the rhythm of growth and decay. To everything there is a season, and a time to every purpose; A time to die and a time to be born.

The cyclical view restates the natural, of good and evil, and of our human limits. But with the cycle we are forever doomed to repeat our past. Of course mere linear theories of social change allow for "end of history" views, where those in the periphery are viewed with scorn since they are the victims of history who deserve evolutionary castration.

But for evolutionary theorists, the cycle can end. It is human intervention that can provide this new direction. The long term trend is not a return of ancient myths but increased complexity, differentiation, and size, as well as improved use of energies and the ability to store and access various energies.

The current social chaos is merely symptomatic of the system being readied for a dramatic bifurcation into a new type of system: evolution about to occur! For evolutionary theorists, through punctuated equilibrium society moves to a higher complex system. For others, such as Indian philosopher Sarkar, there might be progress at one level, the biological or even the spiritual; but, at the social, the level of the political, there are still cycles. More information about history and evolution leads to an understanding of what is cyclical and what can be transformed through human (and divine) intervention.

For Sorokin, history and society can be described as a pendulum moving between sensate societies and ideational societies occasionally managing an integrated both physical and spiritual perspective. But during the end of the sensate world, there is one factor that is everpresent, that is chaos – in the sense of disorder – before the next integrated stage is reached. But this "chaos," now using the new framework of chaos theory, is a pregnant chaos, for embedded within it is the new society, the new civilization.

For Sarkar as well, it is chaos that is everpresent as the world moves to a new social stage. But for him while there is evolution at the level of individual spiritual growth and there is evolution as we struggle with the environment and with ideas (leading to new technological developments and theoretical advances) there still remain deep cycles. Each new form of power over time exploits other forms of power. This powerful view of history reminds us that while through human agency and divine guidance we can limit the stages of exploitation, we cannot create a perfect society – the battle between opposing metaphysical forces and between material forces is endless – we can hope for a good society.

Clearly we need a spiral theory of social change that can tell us what grand patterns move in a linear direction and what patterns are repeated. Chaos and evolutionary theory begin that step but remain dreadfully naive of culture and politics, of attempts by the periphery to create sovereign spaces so as to rid themselves of social and political inequity. Moreover by taking a limited empiricist view of reality, chaos theory leaves out the spiritual. Perhaps it is Cosmic mind or some higher intelligence

that creates new levels of organization thus allowing not for a new arrow of time that defeats entropy but a new space for individual realization and creation. For example, the physical might be nested in a larger spiritual system, there might be other forms of interaction between the two, as Richard Gauthier has alerted us with his interpretation of Sarkar's theory of microvita and of Rupert Sheldrake's theory of morphic resonance.

The Politics of Chaos Theory; Yet Another Orientalist Grand Narrative?

But we should not be surprised at the inability of modern chaos theory and theorists to appreciate the cultural or the spiritual. From Laszlo's *Evolution: The Grand Synthesis*, we can better understand why the cultural is silent. "We can begin with the ancient Greeks, the first to examine the myths of creation in the cool light of reason" (Laszlo, 10). Evolutionary theory in this case merely reaffirms the Orientalist position that "civilization" begins and ends in the West. Other cultures have not developed the capacity to harness information or knowledge. They are too fatalistic or cyclical in their belief system. The entire history of the West is then seen as an upward movement with only the middle ages as a minor reversal. Because social structure were smaller and theology instead of science was developed, evolution had a minor regression. However, Johan Galtung with his alternative macrohistory argues that the middle ages should not be explained away as a short term disorder but understood as an integral dimension of Occidental Cosmology: expansion and contraction. In any case, evolution and chaos theory are both constructed with the eyes of the West.

It is in Alex Argyros's *A Blessed Rage for Order: Deconstruction, Evolution and Chaos* that we gain more insight into the politics of knowledge assumptions of chaos theory. Argyros' argues that chaos and evolutionary theory provide a new ontology and epistemology that both deconstructs the past and lays waste to poststructural theory. He argues, for example, that post-structuralists who argue that the Copernican idea that the sun goes around the earth is not an improvement over prior positions (it is a matter of level of theory, site of observer, the frame of the larger episteme, they argue) are wrong. Copernican cosmology is indeed more accurate, faithful to nature, and valuable than the earlier Ptolemaic scheme. For him, "deconstruction wrongly conflates falsifiability with an inherent and atemporal internal falsity; to describe the position in its most abstract form, deconstruction equates the possibility of error with the necessity that truthful statements be impossible in principle." (Argyros, 109) Thus deconstruction leads to action paralysis. There are totalizations and there are totalizations. Capitalism is different from Marxism or Fascism. And chaos/evolutionary theory is an improvement of traditional Darwinian theory. For example, can an effective campaign against human rights be mounted without an appeal to a universal human rights, he argues. (107)

Of course, in retrospect, we have seen how the discourse of universal human rights is used as a political weapon, particularly, how it is used differently depending on the power of the nation in questions. Human rights are less universal when other economic interests or geo-political interests are more immediate.

In addition, just because truth is impossible to achieve does not mean we cannot have guiding metaphors or mythologies. Instead informed by post-structural thought, we become more conscious of their use and abuse, what they shade and what they highly, who is privileged and who is silenced by a particular truth claim.

But Argyros is worried about the chaotic ability of post-structural thought to unground any form of truth: "From the perspective of deconstruction, there is nothing upon which we can ground an argument for evolutionary biology as opposed to fundamentalist creationism, since both are discourses, with their blindness and their insights, and neither one can be said to be more or less accurate than the other, there being no pathway open from the text to the world." (5, quoting Scholes)

It is ontological relativism that scares him. However, he confuses ontology for epistemology. In

contrast, we can argue that the task for the intellectual is to see what the politics of each theory is and then given one's political preferences to argue how one theory might lead to a more preferred society than another theory. This perhaps is a far more honest approach than an appeal to universals that Argyros wishes to rescue. True we need a closure from interpretation when it is imperative to get on with the task of policy formation, of social design, of creating alternative futures, but this can be a will to closure (and hopefully with one eye at ever at interpretation) rather than a closure based an empiricist universal model of the real.

But Argyros does not give us that and yet when we deconstruct his position, we see that he too speaks from a clear political position which he is oblivious to. For Argyros, modern chaos theory is closer to truth (in the sense of fidelity to the material world) since it rejects scientific fundamentalism thus healing a four hundred year old schism between science and the humanities. It also solves previous problems of necessity and chance, between metaphysics and dissemination, replacing them with a dynamic theory that encompasses both local unpredictability and global order. "But perhaps most significantly, chaos theory and an evolutionary epistemology may provide the theoretical framework necessary to rehabilitate the concept of progress, a concept that is almost universally dismissed in today's academic marketplace. Only orthodox Marxism has the courage to define progress; unfortunately it gets its science, history and human nature wrong." (7)

Clearly, Argyros has not read outside of the narrow scope of Western social theory, knowing nothing about Gandhian perspectives, Sarkarian cosmology, Buddhist Sarvodaya, Confucianism, Korean Han, Japanese views of progress, and native Hawaiian perspectives on time, progress and evolution. Writes Argyros: "Except for Marxism, the intellectual world is inhabited by various kinds of textualisms, relativisms, constructivisms, and antifoundationalisms whose axiomatic rejection of the idea of progress makes them, in my view, at best politically marginal and worst ideologically reactionary." (7)

The costs of progress to the periphery – how the intervention of progress closed off their futures – are not accounted for in this reading of chaos. The cyclical view and post-colonial critical views that challenges the dominant West are for Argyros mere reactionary perspectives.

But when we read his conclusion, we should not be in the least bit surprised at this latest form of Orientalism. According to chaos theory, the universe values managed creativity above all else. This is fine and by and large unproblematic. Innovation is better than authoritarianism, he argues. This is also fine. New caring, culturally multi-ethnic, non-patriarchal societies that are democratic will do better in the long run. Fine as well. However, he does not explain why patriarchy has survived for a few thousand years. But this is the problem with evolutionary theory, what survives is destined to survive, the rest should not survive, they are the misfits. Thus, Nazism and apartheid are not evil because of some suspect appeal to humanism but because they are inefficient system (information is not processed well). What then is his conclusion. What has survived is the West: liberal capitalism. The West has survived because it is flexible, self-regulating, and its social organizations are chaotic hierarchies. That the West has flourished partly because sea-captains, military officers, international agencies have stolen material, cultural and epistemological wealth from the periphery does not enter his picture. That capitalist societies fail at providing the most important need of all, spiritual identity, does not enter his framework as well. We are left then with his vision of the practical results of the chaos perspective: the great cities in the world; which for him are obviously: Venice, Paris, Barcelona and San Francisco, obviously. It is thus Western capitalism that provides us with the next stage in evolution, that is our global future.

Chaos and evolutionary theory then is, as the Chicano poets warn us, but the same chaos that silences us. It is the same chaos that undoes our epistemological categories. It is the same chaos that denies the spiritual. It is the same chaos that places the periphery in the backwater of history.

While women's groups, spiritual groups, third world groups, tribal associations, indigenous people's networks may be fascinated with chaos theory (because it resembles their pre- and post-Western thought) and with punctuated equilibrium (because it promises a break with the present)

and may hope to use these perspectives, when all is said and done, it appears that Herbert Spencer is back with us but with a vengeance.

Chaos is ultimately that which has no meaning. It is not the Nameless One, it is not the word that will deliver us from centuries of being the Barbaric Other.

Thus, it can be rightly argued that when framed within the discourse of evolutionary theory, chaos theory becomes a new totalizing discourse. The goal is fidelity to the empirical, an assertion that has been made problematic with the poststructural critique of the politics of language and text, in the sense that the real is never wholly present to us but always mediated through discourse – language, culture, and practices. Far more useful would be to ask what new meanings has chaos theory given us? How does it give us new categories from which we can reconstitute an ever changing reality? This, we believe, is what makes a theory significant; not its ability to predict (almost all fail) nor match the empirical (dependent on how we frame the empirical and what myths we use to communicate it), but to create new categories of understanding. We thus need theory building and myth making – not to discover truth – but to help in the long struggle to create a new world. Without these new myths, we would tire, we would give up our grand enterprises. Theory building and social transformation become problematic when, as the case of modern chaos theory, we continue to believe our myths exist outside of history, that they are entirely grounded in objective reality. It is this placement of texts outside of their historical and cultural context that totalizes a theory and leads to exclusivity and a claim to universal universality. We should then not be surprised that both chaos and evolutionary theory are the latest Western enterprises and the West's need to ever create the universal.

Can chaos and evolutionary theory be saved and retextualized, made open to other cultures, to other evolutionary and cyclical perspectives? To the spiritual? To the native? Can it help with the reconceptualization of the past and the creation of the new based on these civilizational perspectives?

If possible, the transformation of chaos theory will again come from resistance, from poets and shamans, not from physical and social scientists, who claim to remain outside of myth even as they create the myths of the next century. If chaos theory is to become a new guiding metaphor it, like the West, will have to be saved by the periphery.

Alternative Futures

What then are the futures of chaos theory?

The first future is obvious. Chaos theory continues the peripheralization of the Other joining a long tradition of Orientalism. Evolutionism is successful.

In the second scenario, the forces of tradition in the form of sovereignty succeed in recovering the past and in using non-Western epistemological categories in creating new local forms of coherence. Chaos theory becomes one myth among many in culturally pluralistic diverse world.

In a third future, chaos theory, by resolving traditional dichotomies, aids in the reconceptualization efforts of New Age spiritual movements. Its scientific claims become less important than the popular metaphors that sustain it.

In a fourth future, chaos theory becomes less important as a new social order – based on global governance, spiritual in focus and bioregional in its economics – is born. Coherence then becomes the new vision of the future.

In this article, we are perhaps guilty of increasing the chaos within chaos theory. We have examined chaos from numerous perspectives: myth, as cultural recovery, as social change theory, as a scientific theory, as part of general evolutionary theory, and as a totalizing grand narrative. We

concluded with four futures for chaos theory, the last, and the most important, being coherence.

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