PHYSICS-POLITICS-SKEPTICS

NATURE-CULTURE-NURTURE METAPHORS

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ABSTRACT

This study attempts to compare three apparently distinct but related areas: physical reality, political society, and human mentality. The significance of this comparison brings out the crucial interdependence among *physis, polis, skepsis*, which determines not only the perennial human condition but the eventual global evolution.

The present juncture of history is characterized by increasing anachronisms and discrepancies between the relatively slow evolution of nature and the fast development of culture. The social impacts of technology and the environmental symptoms of industry raise grave problems which presently test the limits of our planetary habitat. In this critical situation, human minds and social groups experience increasing difficulty in comprehending, let alone controlling, the complex dynamics of large chaotic systems.

This essay discusses this global problem in a systemic and systematic way based on the recent theory of Sociophysics. Assuming that social progress and environmental evolution are correlated, the thesis here proposes that a dynamic equilibrium between nature and culture is the prerequisite for the sustained development of both. To effect such homeostasis, our argument concludes that political morality, economic efficiency and skeptical mentality are the necessary and sufficient conditions of planetary survival.

In order to manage such large subject matter, the study will proceed by a brief outline of the physical conditions within which all activity must take place, the political contradictions which presently threaten the global system, and the new skeptic attitude required to reestablish the desired holistic balance.

Paris Arnopoulos,
Concordia University,
Montreal, December 1993.

MATRIX OF CONTENTS

		0.1	0.2	0.3
	ANALYTICS	PATHOLOGY	ETIOLOGY	THERAPY
		DIAGNOSIS	ANAGNOSIS	PROGNOSIS
		PHENOMENA	LEGOMENA	THEOREMA
		ENTROPY	ECTROPY	SYNTROPY
		THROUGHPUT	INPUT	OUTPUT
	DIALECTICS			
	THESIS	1.1	2.1	3.1
1.0	ECOSYSTEM	Debilitation	Pathogeny	Naturalism
	PHYSIS-COSMOS	Anomaly	Chaos	Reactionism
	MACRO	Impotence	Abuse	Pessimism
	ANTITHESIS	1.2	2.2	3.2
2.0	SOCIOSYSTEM	Disintegration	Hypertrophy	Technism
	POLIS-NOMOS	Anarchy	Industry	Modernism
	MESO	Incompetence	Development	Optimism
	SYNTHESIS	1.3	2.3	3.3
3.0	EGOSYSTEM	Disorientation	Hyperbole	Skepticism
	SKEPSIS-LOGOS	Atomy	Hubris	Holism
	MICRO	Incontinence	Ambition	Positivism

INTRODUCTION

At the threshold of the third millennium, increasingly serious problems create growing concerns about environmental entropy and social responsibility. As the human impact on nature becomes overbearing, social institutions try desperately to deal with the accumulating problems they have created and which are now coming back to haunt them. In this critical juncture, humanity is rediscovering the crucial relation between nature and culture.

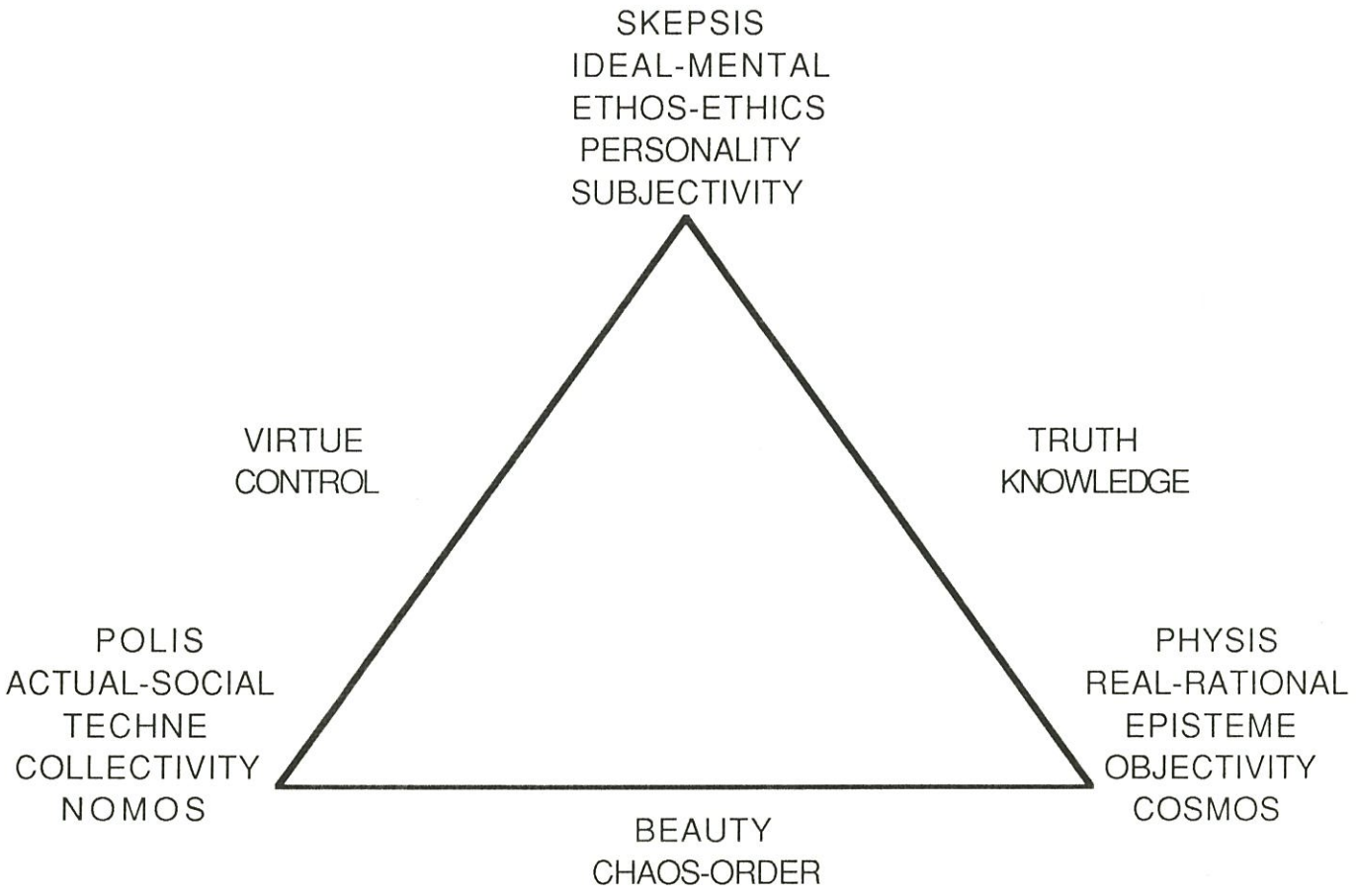
On that basis, this study explores the issue, explains its causality, and exhorts its alleviation. Our thesis here is that the fundamental contemporary ecological, sociological and psychological problems are due primarily to the overconfidence and overextension of modern culture at the expense of nature. From this description follows the prescription that any viable remedy must involve more self-criticism and less self-confidence, as prerequisites to any responsible and sustainable action.

Based on the recent Theory of **Sociophysics**, our universe of discourse is depicted in the schema of the next page. In both triangular and circular perspective, these structures represent the nature-culture-nurture or physis-polis-skepsis system adopted here. The study will show how these three sectors of our reality and their interconnections overlap in space and overrun in time. As a result, we shall argue that a form of **neoskepticism** as the proper philosophical position in the present critical world juncture.

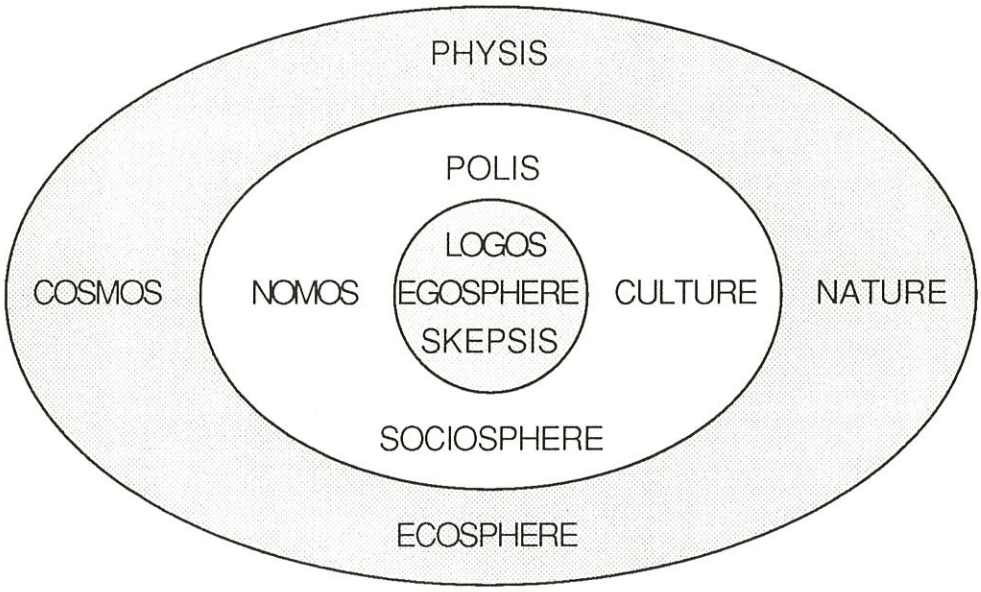
The detailed exposition of this rationale juxtaposes the schema with a model and method in a two-dimensional conceptual framework. The first parameter involves the substantive content and proceeds by inquiring into three relevant realms according to a **dialectic** relationship:
1.0. Physical Thesis: posing conditions of ecosystem arena;
2.0. Political Antithesis: opposing contradictions of sociosystem actions;
3.0. Skeptical Synthesis: combining considerations of egosystem actors.
The triangular structural relations among cosmos, nomos, and logos are shown in the schematic diagram on the next page.

This structural order of inquiry intersects with the second parameter which contains a three-phase process in the following **analytic** sequence:
0.1. Pathological Diagnosis: examination of actual problems (Entropy);
0.2. Etiological Anagnosis: explanation of historical factors (Ectropy);
0.3. Therapeutic Prognosis: exposition of optimal solutions (Syntropy).
This analysis of entropy, ectropy, and syntropy, together with its orthogonal dialexis compose the nine (3x3) sections which constitute the corpus of this work, as shown in the Matrix of Contents.

TRIANGULAR PERSPECTIVE



CONCENTRIC PERSPECTIVE



PHYSICS-POLITICS-SKEPTICS

1. ENTROPIC ORDER

The multiple malfunctions of institutional and environmental structures in this generation suggest that they have deteriorated to the extent that they may have reached the limits of their tolerance. Without sounding unduly pessimistic, this first chapter presents the problematic aspect and critical picture of the global situation at three levels of generality The following sections treat each of the macro-ecologic, meso- sociologic and micropsychologic aspects of our concerns.

1.1. Natural Debility.

Even a cursory look around our environment shows many grave anomalies and dangerous dysfunctions characterized by three widespread and worsening symptoms: resource depletion and raw material scarcity; environmental pollution of air, water and land; as well as physical mutilation of natural infrastructures threaten the viability and habitability of the planet.

Although such entropic tendencies are entirely natural, the current rate of degradation has sped-up, spread out and span-off to unprecedented extent. This acceleration, globalization and mutation of normally slow, low and local processes, has transformed gradual erosion into rapid deterioration.

Those recent changes of age long continuities are so dramatic that they endanger the entire biosphere. This threat is all the more serious because it may be irreversible and incorrigible, thus putting humanity in an irrevocable course to its ultimate doom.

The multiple indicators of this deterioration point to the diagnosis that the Earth suffers from premature debility. This condition makes Gaia unable to respond adequately to disturbing inputs and thus cannot reestablish its normal homeostatic equilibrium. This decreasing potential and increasing impotence of nature to heal itself indicates the progressive destruction of its immune system which leaves it open to impunitive attacks by all kinds of pathogenic agents.

Accordingly, present conditions spell out a dangerous pathology of global proportions. Since humanity is the only self-conscious species on Earth, it behooves us to recognize the problem and find some solution. Our concern is unique because it is obvious that what happens to nature also happens to us. Although Gaia can certainly exist without mankind, human existence depends entirely on the sustained viability of the planet. So, as we elaborate next, the present ecological pathology translates directly to our sociological malaise.

1.2. Political Inefficacy.

A cursory *tour d'horizon* show that the world is a gigantic global arena composed of many collective actors, whose conflicting interests play various roles in a game of power politics. Their overlapping jurisdiction creates a chaotic situation which produces a deep social malaise comparable to the already diagnosed natural pathology.

Recent developments, of course, are still mixed, threatening problems as well as promising solutions. Here, we can merely point to some salient phenomena in three levels of aggregation:

Local: parochial independence movement, centrifugal cultural fractionalism.
2000 ethnocultural units or traditionally distinct nations creating conflicts of traditionalism vs modernism.

Regional: cooperative confederalism, centripetal political integationism.
200 geopolitical units or legally sovereign states creating conflicts of democracy vs tyranny.

Global: corporate mondialism, competitive economic functionalism.
20000 socioeconomic units or functionally operating corporations, creating conflicts of consumerism vs conservationism.

These ongoing phenomena send mixed signals as to where the global system is at and where is it heading. What is beyond dispute however is that the world is undergoing strong but uneven:

-Geogaphic accommodation by an expansive spread of urbanization;
-Historic acceleration by an extensive speed of modernization;
-Materialistic accumulation by an intensive growth of industrialization.

As a result, the global system, characterized by political liberalism, economic industrialism and cultural urbanism, shows a striking:

-Incompetence of political power facing global anarchy and local insecurity;
-Injustice of economic of wealth distribution and capital accumulation;
-Intolerance of cultural values in exclusive identification and tribalism.

From the above symptoms, the diagnosis of our social pathology is economic hyperactivism, political anarchism and cultural traumatism. The world is suffering from wild-uneven productions, random-violent confrontations, and conflict-changing traditions. This chaotic sociodynamic creates deep contradictions which destabilize the whole system and thus cannot go on indefinitely.

Both our communities and their environment are under tremendous stresses and strains whose complexity we cannot understand, let alone control. It appears that social problems are multiplying faster than they can be solved, because our destructive power is far superior to our constructive potential. As such, political cybernetics have lost control of social dynamics, because local governments have surpassed the limits of their competence to shape global events.

This global drift, slides humanity towards a catastrophic fall, which we can see but are unable to prevent. The obvious elements of Greek tragedy contained in this condition boil down to an inherent defect in the human character which will be discussed in the next chapter. Meanwhile, we conclude our diagnosis of the present conditions.

1.3. Human Disorientation.

In the face of the tremendous natural and social problems, people feel increasingly unable to comprehend and impotent to apprehend the momentous events taking place around them. It seems that the large and complex systems we have created now overshadow us. The irony of this situation is that as institutions grow bigger and powerful, individuals feel smaller and powerless.

From an individual point of view, the present malaise as a combination of increasingly incomprehensible contradictions; incompatible controversies; and incomparable confrontations. These ongoing problems of modern life have grown so much as to overwhelm and belittle the individual who has become atomized in an indifferent and indifferent world. Rapid social change has displaced, disillusioned, and disoriented the average person, who thus lost both identity and perspective.

As a result, people are now suffering from three symptomatic maladies which may be diagnosed as:
-*Anomy*: lawlessness, disloyalty, anarchy, uncivility, barbarism,
-*Alieny*: loneliness, disorientation, exclusion, isolation, nihilism.
-*Apathy*: lovelessness; inactivity, insensitivity, passivity, autism.

The combination of these pathological conditions sow doubt in personal self-esteem and ability to face life. Human intelligence does not seem to measure up to the megaproblems it has created. Whether individually or collectively, man's problem-solving capability lacks behind his problem-making propensity. Thus, mankind's illness is a fatal combination of great power and little wisdom.

As described in its three aspects above, the catastrophic conditions facing us presently are reflected in ecospheric impotence, sociospheric incompetence, and egospheric incontinence. Taken together, the natural, social and personal problems of modern life add up to an incomprehensible magnitude which boggles the mind. Overarching reality presents us with such intricate puzzles that challenge human reason and demand some explanation. This, we shall now attempt.

2. ECTROPIC CHAOS.

The above demonstration of the apparent incapacity, incompetence and incontinence of contemporary actors needs some explanation. Yet, the difficulty in explaining such complicated and diverse phenomena is evident. Thanks to the new theory of Chaos, however, we are now in a better position to understand the behavior of complex structures such as the global megasystem.

Accordingly, we predicate the etiology of our pathology to be found in the combined contradictions of a hyperexploitation of nature, malindustrialization of society and superaspiration of humanity. The following anagnosis elaborates on this theme, keeping in mind that complex cause-effects are nonlinear processes containing many feedback loops which often result in inescapable vicious circles.

2.1. Natural Abuse

The picture of the situation painted above is the result of ongoing deterministic processes, punctuated by periodic random events and human interferences. The primary characteristics of natural processes combine checks and balances, mutual compensations, and holistic interactions. The servomechanisms of Gaia normally manage to equilibrate the opposing statics-dynamics (permanence-alternance); entropy-ectropy (death-life); cosmos-chaos (determinism-randomism); thereby maintaining a viable and vibrant planet.

From the cumulative effects of these processes however emerge evolutionary progress which increases: structuration and interaction or sophistication and interrelation; diversification and distinction or specialization and speciation; as well as intensity and activity or self-conscience and self-consciousness.

As a result, the continuing existence of any species depends on its capacity to fit in its environment. The Darwinian "survival of the fittest" thus means one's indefinite procreation in a given niche. This feat requires the proper degree of spatial adaptability in a hostile environment; temporal fertility over many generations; and existential competitivity with rival cohorts.

Given the above requirements, humanity has come a long way, in that not only it survived so far, but multiplied and dominated the Earth. Ironically, it may be this unprecedented success that spells its eventual downfall, because mankind is now fouling its own nest to such extent that it might make it uninhabitable.

Nature is a large homeostatic and chaotic system which is self-correcting up to a point. As long as human interference with natural processes was insignificant as was the case in the past, nature could

easily compensate for man's indiscretions. But as artificial creations became intrusive and recursive, natural reactions become more ineffective and inadequate.

The rapid and gigantic growth of human constructions is presently overwhelming the carrying capacity of its natural infrastructure. This artificial overload has added so much extra burden on nature as to threaten it with irreparable damage. For that reason, the analogy that humanity has become the cancer of Gaia is not far off the mark.

Therefore, the predicament exposed in the previous sections along with the evolving dynamics explained here lead us to the conclusion that our global pathology is due to the human abuse of nature. This hyperexploitation has now reached such proportions that not only threatens the survival of our own species but of the ecosystem as a whole. Human parasitism has gone beyond symbiosis, to put Gaia in mortal danger.

2.2. Social Hypertrophy

Compared to the slow pace of natural evolution, social development moves very fast. The velocity differential between these two processes creates intersystemic contradictions and contains the seeds of our malaise, so it is therein we should look for its causes.

The macrohistorical process which led to the present predicament stems from three successive revolutionary waves by which civilization changed the face of the Earth:

-Agricultural domesticity: post-primitive existence ten millennia ago;
-Industrial urbanity: conversion to mechanical power two centuries ago
-Technical modernity: sophistication of artificial intelligence right now.

As the only culture-creating animals, humans have moved away from their natural disposition towards artificial civilization. By doing so, they upset the natural balance and overwhelmed their personal psychology. Their cultural development at the expense of natural evolution exacerbated individual differences by promoting the social values of:

-Possession-Wealth: economic inequalities (private property).
-Prestige-Worth: social distinctions (class hierarchy).
-Power-Weight: political orientations (party authority).

These new collective values, attitudes and attributes of humanity make society greater than the sum of its parts. In addition to the natural values of the quantity of life (survival and procreation), culture determines the criteria for its quality (leisure and influence). Thus, social values depend not only on natural needs or necessities, but on cultural wants or preferences.

The predisposition of civilization to grow and spread makes is a clear danger both to its natural ecology and personal integrity. Cultural hypertrophy makes inroads into natural space and destroys everything in its path. Thereby, social progress can only be predicated upon natural regress.

Moreover, since complex systems, such as modern societies, are difficult to understand and predict; as societies become large and complex, they get out of control and their governments becomes ineffective. This explains the present abnormal condition of the global system which has reached such complexity that the multitude of its local governments are incommensurate to their global tasks. The looming problems of runaway inflation, economic depression, widespread unemployment, epidemic diseases, civil wars, organized crime, nuclear threats, etc, all indicate the utter failure of our social institutions to measure up to the challenges of the modern world.

This tendency of increasing social power and decreasing political control is very dangerous because it unleashes the furies of explosive and convulsive revolutions. Straying from the natural evolutionary path is thus done at the risk of traumatizing, destabilizing & disorienting the entire global system.

Reaching too far and too fast brought down many men, as the historical downfall of great civilizations is overextension. But, whereas the legendary human folly so far only hurt people locally and sporadically, now it is becoming fatal in the long run to the whole ecosystem.

2.3. Human Hubris.

To the above anagnosis of natural evolution and social development, can now be added human progress and correlate all three functionally into a single system: i.e. $\mathbf{H=f(N,S)}$. In spite of that positive relationship, modern society has become so intrusive as to affect nature and humanity negatively.

This triangular relationship among humanity, society and ecology, has become a vicious spiral in which each factor degrades the next. Beginning with human nature, the creation of culture is so pervasive and perverse that it is now threatening both its creators and creatures. The great human ability and willingness to intervene or interfere in nature also makes for a misconception that anything physically possible is also morally permissible. The attitude that technical knowledge should lead ethical values then is at the center of abnormal psychology.

The conclusive etiology of our malaise stems from the evolution of human self-consciousness into excessive self-confidence, thus falling into wretched excess or hubris. The growing power of human technology caused an explosion of social aspirations, resulting in megalomania and utopianism.

A little knowledge and power is a dangerous thing because it creates delusions of grandeur, based on dreams of omniscience and omnipotence. Human intentions and interventions, however, are now reaching their upper limits. So, although man proposes, nature disposes and illusions eventually come to naught in the face of an unforgiving reality.

Moreover, the complex system dynamics combining deterministic-randomistic-intentionalistic modes of comprehension and operation, require sophisticated rationalism to conceive and mechanism to control. But, as Heisenberg's Uncertainty Principle, Godel's Incompleteness Theorem, and Sorokin's Law of Limits prove, the material, mental and moral limitations of human beings are not sufficient to withstand or understand such complex systems created by chaos, cosmos and nomos.

These recent theories should dampen the technical hyperbole, intellectual arrogance, and ethical sophistry of humanity and may help correct our ways. It is on their translation into human action that we have to count the reversal of our present catastrophic course of action.

3. MODERATE SKEPTICISM

On the basis of the foregoing diagnosis and anagnosis, we can now attempt a conditional prognosis. As shown, the proximity-propinquity tropism of human psychology makes it prone to shortsighted and narrow vision. The former is a temporal problem of accelerating change, whereas the latter is a spatial problem of broadening horizons.

In order to overcome these problems, it is obvious that humans must improve both insight and foresight. To that end, we propose that the optimal ideological solution to systemic chaos and atomic hubris is skeptical intellect, moral rectitude and civic conduct. Keeping things in perspective, taking everything into account and.acting cautiously, then becomes the theme of this final chapter.

This conclusion is the combination of two diametrically opposed options, both of which claim to solve the present crisis. The following argument presents each side as the thesis and antithesis of our dialectic, and ends by proposing a skeptical option as their transcending synthesis.

3.1.Naturalistic Thesis

The etiology explained above indicates three things: first, the incompatibility between natural and social values makes culture unnatural, so what is good for nature is not necessarily good for culture and vice versa. Second, the irreversibility of certain natural processes makes *posteriori* remedies largely ineffective, therefore prevention is better than cure. Third, the incomprehensibility of reality makes human action inconsiderate, thus cultural activities incur unanticipated consequences and should be undertaken vary carefully.

Since, these delicate systems abhor both rigidities and extremities, they must be treated with conscience and caution. Yet, they are not. Human actions come so fast and go so far that they overwhelm nature's reacting capacity, making it impossible to reestablish the status quo ante.

A combination of the above propositions leads to conclude that human reflection and restraint is the only way to allow nature time and space to heal itself. Thus, responsible action and dispensable caution are the best policy both for nature and culture.

This is a pessimistic attitude about humanity's negative impact which may lead to sociological minimalism, ideological conservatism or even theological fundamentalism. Such religious or traditional attitudes however need not disqualify its good points which could be well taken.

But, the point here is not whether naturalism is ideally valid, but rather practically applicable at this time and place. So even if a return to nature movement is a romantic anachronism, practically unattainable to any great extent, some emphasis on natural preservationism is altogether possible and desirable. It is then conservationism, rather than conservatism that this option promotes, without necessarily going to extreme lengths to attain it.

3.2. Technocratic Antithesis.

The antithesis of the above conservationist attitude is the technologist outlook. In contradistinction to its traditional predecessor, this modern optimistic prognosis of the human prospect relies upon the problem-solving potential of human ingenuity and social technology to correct the mistakes of the past and lead us into a bright future, if not a brave new world. This position affirms the unbounded nature of human potential and the unlimited expansion of its horizons.

Critical conditions like today's demand daring ideas and bold actions in order to open new windows of opportunity and create new policy options. Timidity only results in mediocrity, so great deeds require great risks, without which there cannot be any substantial gain. Such opportunistic rational-idealism puts its faith in human ingenuity whose innovations are the engines of social progress.

Even if human intervention into natural processes may be undesirable, it is also unavoidable. Anyway, even if we admit that such intervention creates many problems, it also manages to solve them. So much so that there is an undeniable net progress in the long run.

For example, although the increase of the global population from 3 b (1950) to 6 b (2000) and 10 b (2050) may be economically problematic, the GWP has also increased from $10 to $ 30 and $ 50 trillion during the same hundred years, thus at least keeping up the average standard of living.

Similarly, although two world wars and hundreds of regional conflicts with millions of casualties have been fought in this century, the political situation today is much better than it was any time before. Of the 150 major states in the world now, a third have never engaged in war with each other. These fifty are distinguished by their prosperous-liberal-democratic regimes, thus supporting Kant's optimism about the prospects of perpetual peace after all.

So, having tasted from the tree of knowledge, the only road open to man now is through advancements in science and improvements in technology. Instead of looking backwards into the nostalgic golden age of the past, we must therefore forge ahead into the beckoning adventure of the future.

3.3. Neoskeptical Synthesis.

The two above mentioned options may be restated to coincide with the following affinity paradigms. On the one hand, the inclusive, global, international, universal, capital, liberal, plural, classic outlook, leading to a Kantian *civitas maxima*. On the other hand, the exclusive, local, national, patriotic, ethnic, protective outlook, leading to a Hobesian *status natura*.

These alternative scenaria of either pessimistic (natural entropy) or optimistic (artificial ectropy), need not present us with an insoluble dilemma. Their thesis and antithesis may be resolved by a dialectical synthesis. Such eclectic combination is best represented by a renewal of traditional skepticism. The best remedy to either pathological pessimism or incurable optimism is a moderate dose of skepticism which reestablishes human perspective to its proper size.

Skepticism, which along with political philosophy was born 25 centuries ago, may help solve our problems now as it tried to do then; because turbulent periods of transition from one era to another, like that at the dawn of Greek civilization and the approaching turn of the Global millennium now, invoke doubt in current directions and provoke a widespread search for alternative orientations.

The history of skepticism, whose precursors were the Sophists (Protagoras, c.400 BC), taught us that human relativism abhors theistic absolutism. Its establishment as a distinct school of thought by Pyrrho of Elis (c. 300 BC), skepticism developed into maturity by the time of Sextus Empiricus (c. 200 BC), at a time of transition from the Greek to the Roman world. After the hiatus of the dark ages, skepticism was rediscovered by the time of Duns Scotus and Ockham in the middle ages. In modern times, Pascal (c. 1650), Locke (c. 1700), Hume (c. 1750), and Kant (c. 1800) brought it up to date in the various guises we know it now.

Since it was conceived in classical Greece, the principal components of skepticism consisted of: *apoxe* (reserve), *ataraxia* (tranquility), *aporia* (wonder), *amfibolia* (doubt), *apatheia* (passivity), which properly combined led to the ultimate stoic *eudemonia* (happiness).

By now, neoskepticism may be summarized in its three aspects:
-Agnosticism: uncertainty, disbelief, doubt, ignorance,
-Relativism: subjectivity, conditionality, toleration,
-Criticism: opposition, contradiction, question, investigation.

These three facets of skepticism are fundamentally opposed to any absolutist or dogmatic ideology. This opposition to certainty and its incipient doubt about everything places skepticism between the polar extremes of rationalism and mysticism, as shown in the range below:

RATIONALISM	SKEPTICISM	MYSTICISM
<----------	----------	---------->
FORMALISM	REALISM	IDEALISM
SCIENTISM	AGNOSTICISM	GNOSTICISM
ABSOLUTISM	RELATIVISM	DOGMATISM
POSITIVISM	PRAGMATISM	ROMANTICISM

Rational action combines a broad, large and deep perspective, taking into account all factors and ingredients. Thus, human intentionalism and interventionism coupled with greater power and impact require great knowledge, prudence and humility. But since such qualities are in very short supply, and recalling that chaotic systems are difficult to predict, let alone control; human logic can only get us so far and no farther.

Accordingly, discretion would seem to be the better part of valor. A combination of recognizing differences by distinguishing fine points and adapting to changing circumstances by learning to be flexible is thus the best formula of survival for individuals and collectives.

Of course in the micro level of private behavior, liberalism decrees that anything is permissible as long as it does not affect others. Although an individual may risk and sacrifice one's life, nobody is allowed to make such momentous decisions for everybody. In the meso level of collective interactions which impact on the macro level of global survival, public affairs must therefore be much more prudent and circumspect.

As such, earth-shaking action should only be based on a studious and skeptical mentality which respects both natural laws and social values. Given the above constraints, the inescapable conclusion is that skepticism is both a necessary and desirable prerequisite for any socially responsible action in an age of great destructive potential.

Together with political modernization and economic conservation, a skeptical education is the necessary and sufficient condition for the sustainable development of humanity, society and ecology. The proper combination of critical thought, proactive policy, and preventive behavior is the best prescription for all our current social ills.

Since humans are not omniscient nor omnipotent, they must become skeptical, ethical and practical in order to tame their own folly and survive their exaggerated success. In this case, a skeptical positivism provides the optimal mix in dealing with the critical, chaotic and complex conditions of the modern world.

CONCLUSION.

As a brief summary to the preceding argument, we propose that the higher areas of human concern which intersect the realms of nature, culture, and nurture are:
-Art: beauty, perspective, imagination, creativity,
-Science: truth, validity, knowledge, rationality,
-Ethic: virtue, goodness, rectitude, morality.

In the above schema, skepsis occupies the center place because it is indispensable to all of them. In the sense of introspection or self-consciousness, skepsis characterizes our existence and if developed further can guide our conduct.

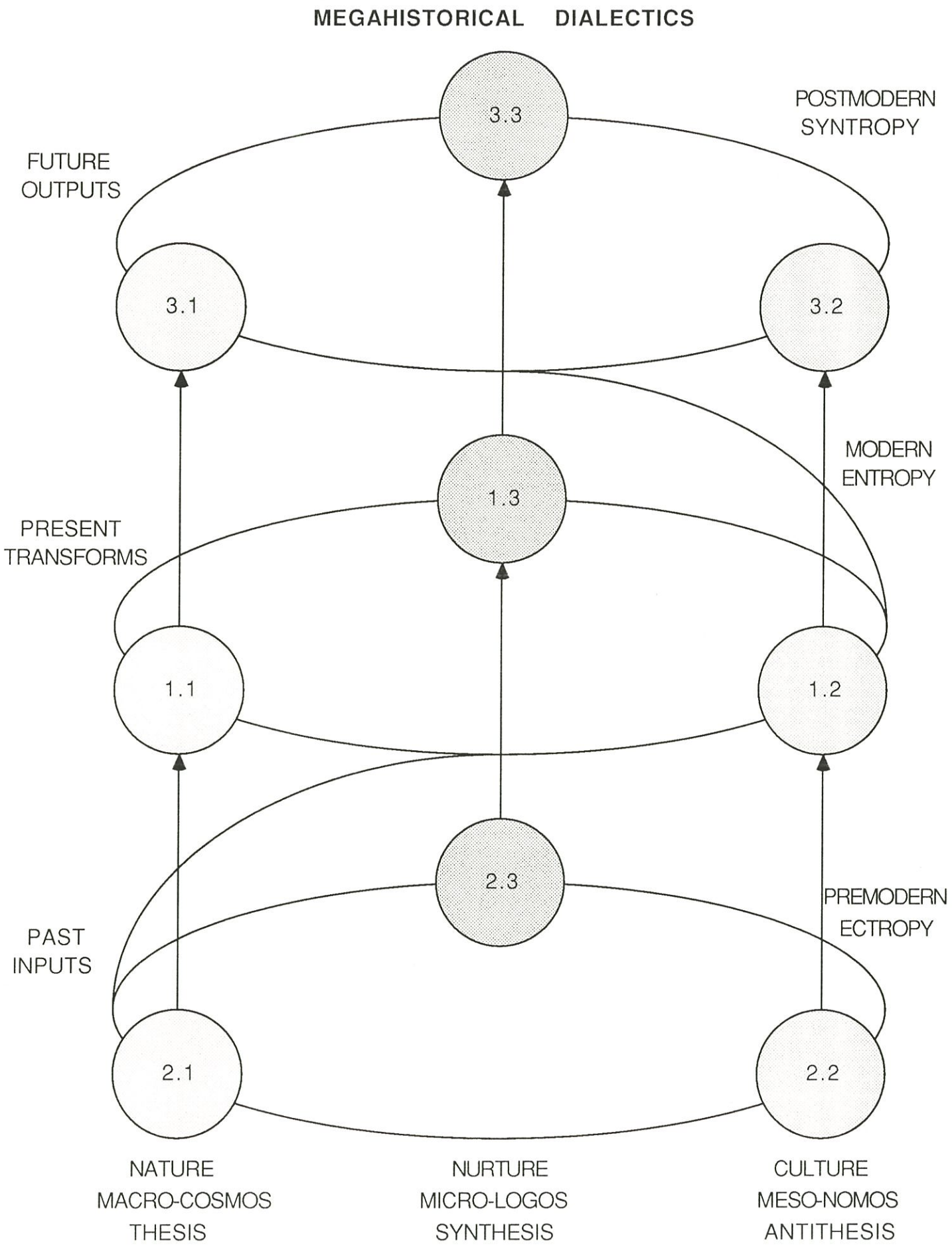
As a synopsis of our line of argument here, the Flow Chart in the next page presents the transition phases of macrohistory from the past to the future, via the present. This depiction should be clear enough not to need any elaboration, since this was already done in the main body of this work. All we can do now is recap the salient points made therein.

Since human problems with nature, culture and nurture are due to human reach running way ahead of its grasp, we must conclude that any solution must reestablish a balance between our self-assurance and self-abnegation. As the remedy for hubris (arrogance) is humility (diffidence), so the cure for dogmatism (certainty) is skepticism (doubt).

Critical situations, like the present, demand care and caution which skepticism provides by its modicum of doubt and prudence. As a mental state, the uncertainty of skepticism avoids extreme and rash solutions. As a cautious attitude, skepticism guides action on the basis of probabilities founded on pragmatic principles, rather than certainties based on absolute laws.

In this case, the fittest survive because they know what to do, where, when, as well as how and why. The fit put the right thing in the right place at the right time. Adaptive behavior, flexible response and creative initiative is therefore the most viable policy in the long run.

The challenge for mankind has always been to harmonize the contradictory goals of: naturalism by prolonging entropy, culturalism by sustaining development, and humanism by projecting evolution. These goals have now widened to include the whole world. The planetary extent of the present crisis therefore requires global treatments which only an explicit skeptical **socionatural contract,** involving both interpersonal cooperation and international coordination, can bring about.


MEGAHISTORICAL DIALECTICS
3.3
POSTMODERN
SYNTROPY
FUTURE
OUTPUTS
3.1
3.2
MODERN
ENTROPY
1.3
PRESENT
TRANSFORMS
1.1
1.2
2.3
PREMODERN
ECTROPY
PAST
INPUTS
2.1
2.2
NATURE
MACRO-COSMOS
THESIS
NURTURE
MICRO-LOGOS
SYNTHESIS
CULTURE
MESO-NOMOS
ANTITHESIS

In this respect, governments must accommodate their competing interests by preserving balance of nature in existence; conserving harmony of culture in peace; and reserving progress of nurture in education. Skepticism is the way to do that because it emphasizes flexibility, adaptability and creativity. In that sense it comes close to both moral and wise counsel. Moral because it takes into consideration those affected by its actions; wise because it sees things in perspective. Since skepticism is the point of view of relative perspective and considerate behavior, it is the closest that humans can approach ethical wisdom.

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