

A BRIEF HERMENEUTIC OF THE CO-CONSTITUTION OF NATURE AND CULTURE IN THE WEST INCLUDING SOME CONTEMPORARY CONSEQUENCES

ERIC MARK KRAMER*

Where there is no vision, the people will perish.

Proverbs 29, 18

In 1986, the book A World in Crisis? appeared. In it R.J. Johnston and P.J. Taylor remind us that the word 'crisis' is frequently used 'today' to characterise difficulties and problems. They note that the use of this word is, 'understandable' because '... many of the problems called 'crises' are very severe, suggesting to contemporary observers that they might be major turning-points in the course of world history' (p. viii). Likewise J. O'Connor in his The Meaning of Crisis (1987) argues that, 'The idea of 'crisis' is at the heart of all serious discussions of the modern world' (p. 49). The Brandt Commission report titled North-South: A Programme for Survival, claims that, 'The crisis through which international relations and the world economy are now passing presents great dangers, and they appear to be growing more serious' (p. 30). J. Galtung in his book The True Worlds writes that, 'There is a crisis in the world today, now felt even by those of us who enjoy the power and privileges at the top of the world' (p. 1). Of course these and many other works are all extensions of an anxiety traceable to Aurelio Peccei's work The Chasm Ahead.

Obviously, to speak of 'growth', 'limits', 'chasm', 'turning-points', 'historic time', and things 'ahead' presupposes a spatial metaphysic manifested as causal-linarity: materialistic fatalism. The crisis mentality that sells so well is a consequence of the post-Renaissance Western perspectival attitude that panics each time the world cannot be rationally controlled, which is all the time. The modern idea of progress has become senseless because it has become a permanent fixture in the Western world. For the same reason, which is traceable to the modern spatial metaphysics that is presupposed by the current discourse, crisis has become a permanent condition. The modern is obsessed with control as exemplified by the rise of the 'cult of efficiency', technology valuation, and 'scientific management', as well as the dominant philosophy of will expressed by Arthur Schopenhauer and Fredrich Nietzsche. The flip side of an obsession with control is expressed by a fear of fear—the terror of hysteria. This side of modernity is best expressed by Sigmund Freud's obsession with this 'illness'.

Since the Renaissance, the perspectival mentality of the West has been intensely preoccupied with the conquest of space. This has also included the attempt to spatialise, and so control time. Thus we find the modern West obsessed with several fragmentations of the cosmos beginning with the subject-object dualism and continuing through a plethera of manifestations

^{*}University of Oklahoma, Norman, OK 73069, U.S.A.

including the division between absolutism (science) and relativity (historicism), the division between the diachronic and the synchronic, the division between descriptions of the structures of systems and process, and so on. The modern crisis is a consequence of an inability to control time. As the many doomsday books argue, time is 'running out'.

DIVINE SYSTEMATICS

It is important to recognise that the Christian eschatology spawned a sense of linear time that leads to a dead end. Since this mentality emerged, each generation has believed that it is in a 'crisis'. This belief in impending doom has been combated both on a spiritual and physical level. Physical science has been the favoured tactic for control since the rebirth of Aristotle's thought (Renaissance) in the West. Thus, Voltaire's pathetic Dr. Pangloss personifies the phrase 'merely academic' with his naïveté about the 'facts' of the world. The great European plagues and wars have consistently manifested an ominous sense of darkness threatening humanity's spiritual and physical survival. But increasingly it is the physical that has been the focus of the will-to-power. The Western sense of teleological stress infected the indigenous peoples of the Americas, with the consequent invention of the ghost dance and other appeals for salvation. The fundamental difference between the pre-modern mythical and magical forces of nature and supernature, and the modern sense of dread in the face of the ineffable is that the modern has rationalised the transcedent into systems theory with its attendant anxiety about linear time. Nothing is more narrow minded than a line perceived as a sequence of events dictated by causal necessity. A time line is like a road leading into the 'future', a road that one cannot leave despite the fascinating alternatives the vast horizon offers.

The presumption of omnipresent systemic forces gives rise to great anxiety because we have such unwavering faith in linear causality. Consequently we believe we have no control or (alternative) future(s). The modern believes in causal predetermination with the same deep sense of conviction that his premodern mythic ancestor had with regards to her belief in divine omniscience. The post-Renaissance modern is not only determined but pre- and over-determined. There is no escape from the causal metaphysic of systematics. The modern beelzebub travels under many causal aliases including 'social', 'economic', 'political', 'cultural', 'genetic', and 'ethnic', forces. Such systemic forces are perceived to be extra- or transindividually 'beyond' our best personal comprehensions. Wall Street, futures, leveraged buyouts, functional structuralism, and market mechanisms all speak a mechanical language that betrays the modern's temporal anxiety and mystification of fatalistic technique.

Modern systems theory is not integral. Rather, structural, functional, and systematical models express a specifically modern rationalism that excludes other modes of awareness thus prohibiting a true integration through all phenomenological attitudes including the magic, the mythic, and the rationalistic (perspectival). Current perspectival motives, for instance, that are encouraging so called European integration belie the contentious fear that marks the us versus them mentality of Aristotelian two-valued logical dialectics. But

more fundamental than the theory of argumentation analysed by Neo-Aristotelians like Chaim Perleman (The Idea of Justice and the Problem of Argument, 1963), Perlman and L. Olbrechts-Tyteca (The New Rhetoric: A Treatise on Argument, 1963), and Stephen Toulmin (Uses of Argument, 1958)⁵ is the tribal intolerance magically (emotionally) expressed from time immemorium and perhaps first canonised by the ancient logic/ethic of an eye for an eye. Justice is perceived as a ratio between opposing forces. This orientation also fails to reintegrate the post-Renaissance split between culture and nature most clearly articulated by the antagonists Giambattista Vico and Rene Descartes. Despite their vociferous differences, on the issue of dividing the cosmos into culture versus nature, both are unmistakably Western metaphysicians. For the perspectival modern, 'nature' is reduced to dead stuff—'resource base' for rational manipulation and instrumental interests.

The current attempt to consolidate the economic interests of Europe into a single centralised and hierarchical structure (market) is a reactionary strategy that unmistakably exhibits fundamental fears (of the Deutsche Mark, and the North American and Japanese market forces)—the same fears incidentally that motivated Gorbachev's revolution. This new Europe is envisioned as a stronghold from which economic ventures can be launched against North America, Japan, and other economic power-houses of the Pacific rim. All are seen as nothing more than markets and competitors—threats. This combative mentality which is also revealed by the rise of fascist behaviour in the face of possible mass migrations of economic refugees from the former East bloc, exhibits perspectival interests and fear-hardly integration. These fears manifest, for instance, as the confusion over what constitutes the boundary criteria for the European Community. Turkey exemplifies the resentful posture of an excluded 'member' which implicates the issue of criteria. Is being Islamic against the 'rules'? What is manifested in Europe today (and also in the North American Free-Trade Agreement) is a pseudo-integration which is strictly limited to techno-economic interests.

What we are witnessing is an effort at increased hierarchisation and centralisation (aggregation), not integration. Integration is the appreciation of the differences various systems present. What accompanies the increased inclusiveness of the European Community members is an increased exclusivity. The benefits of increased shared interests and clout are obviously in favour of the members and threaten the outsiders. Interests, as clearly explicated by Machiavelli, are by definition perspectival, meaning conflictive. Interests define difference as much as commonality. The attempt to forge a common interest group among the European nations is an attempt to subvert all previous systems to a suprasystem. The 'higher orders of complexity' that mark systems modelling, including the Janus Principle so well explicated by Gregory Bateson's work in cybernetics, is perspectivally rational and hierarchical, not integral. Of course rationalisation is a common emotional reaction to a perceived crisis. Rationalisation is not identical with reason. Instead, rationalisation is a reactionary tactic.

UNCERTAINTY, ANXIETY AND CAUSALITY

The awareness of this essential logic of the co-constitutional nature of the world is called 'interpenetration' by Edmund Husserl (Logical Investigations), and 'integration' by Jean Gebser (1984). To achieve an awareness of integration, one must come to see that one's own sense of being can be appreciated only by seeing oneself through the otherness of those who share our world with us. Integration therefore is quite the opposite of adaptation, which posits as its ultimate goal the illimination of variations defined as marginal by a dominating power. Indeed, given Darwin's original interpretation of extinction, adaptation to some condition is quite facistic. Wherever chains of causal imperatives are expressed, freedom is threatened. For instance, Marx's positivism claims that the 'liberation' is 'inevitable'.

The attempt to bureaucratise a common European interest group that arrogantly excludes or marginalises non-Europeans, is an attempt to gain greater control in a world of increasing global competition. Contrary to popular belief, our modern anxiety is the fear of the inevitable, not the unknown or uncertain as Berger and Calabrase (article 1975) would have us believe. Thus, as we struggle to gain control via causal analysis, we are at the same time creating the source of our anxiety—the death of time by materialisation. The seed of anxiety is a perceived lack of control. The unknown offers the prerequesit condition for choice, but the certain—that is, the inevitable—removes any possibility for control. As Kierkegaard so profoundly explicated, what causes fear and trembling is hopelessness in the face of the inevitable. Likewise, Nietzsche announced the death of the miraculous (freedom) at the hands of causal logic. Death, taxes, deadlines and modern causal determinism leave us with, as Sartre so clearly stated, 'no exit' and its lonely consequence, 'troubled sleep'.

Uncertainty, which is manifested as potential difference, is sometimes frightening but necessary for communication as the genesis of meaning. It is also often exhilarating. Uncertainty is a state of freedom and a prerequisite for choice and discovery. It motivates exploration and experimentation. Predeterminate certitude is the emotional expression of the unavoidable—fatalism. All sciences of prediction seek to transcend time and threaten to murder freedom and spontaneity. Certitude, as the approaching wall of teleological, Western time, ultimately leads to the sense of hopeless alienation that marks the modern world. Hope and motivation can survive only in the soil of uncertainty.

Obviously total control means the death of time at the hands of predictability, which means nihilism. Inevitabilities such as death are the modern counterpart to Hegel's divine prison-house. Causal mechanics is materialised divine law. As a transcendentally universal force, it determines us while outrunning our comprehension. Awful certainty is the plague of the modern who rationally predicts his own future thus driving all vital motivation out of life and abandoning the responsibility to judge and take control of his/her own destiny. When Aquinas rationalistically reduced the Christian god to merely a first cause, he set the stage for thinkers like Hegel and Marx to conceive of time as a historic unfolding with 'iron' necessity—the great *chain* of causation. Ambiguous prophecy becomes intolerant statistical prediction. This anxiety proves to be much deeper than simple uncertainty. Indeed, uncertainty is an expression of that which is not

already known. Uncertainty is a prerequisite for communication which presupposses differences that facilitate exchange. Identity cannot exchange with itself.

'Vision' is relegated to the trash heep with other subjectivisms. Witness United States President Bush's empirical pragmatics as he has derrided the 'vision thing' and thus abducated his role as leader in favour of manager of 'facts'—things already done. Empiricism can only discuss the past, and for this reason it cannot, by definition, explain behaviour because behaviour is motivated by expectation and expectation is a projected future state of affairs (vision). Most social science wishes to remain at the cellular level of twitching responses to past stimuli. But the origin of motivation is imagination. Such projections presume an open future horizon 'where' alternatives have potential. Projections are the source of motivation and competition over alternative futures-politics. History is a product of vision, both of the historian and those about whom she writes. People make history in their efforts to realise plans. Politics is the struggle over which projections will be produced. Political science, by contrast, as is the case with all empirical sciences, claims to be a disinterested (depolitised) observer of things already done-facts. Statistical prediction is a rational attempt to gain more control over time. As is well known, sometimes the extra-empirical activity of prediction becomes part of creation as self-fulfilling prophecy. When this occurs, prediction is an attempt to gain control over the future itself.

The struggles over the future organisation of the European Economic Community are purely perspectival—political. The debates and power displays are essentially about the making of the future which is fundamentally a magical process involving a myriad of value judgements about competing visions and interests. But all the various positions the debaters take share one common logic which is linear developmental and combative, not integral.

SYSTASIS AND FREEDOM

Jean Gebser's (1949) notion of systasis is informative. Gebser's idea of 'integration' is very different from 'accomodation' and 'adaptation' as so often used by scholars (Kim, 1988; Taft, 1977; Hong, 1980; Pedone, 1980; Mansell, 1981; Gao and Gudykunst; Gudykunst and Sudweeks, 1992; Fogel, 1979; Oberg, 1960). Unfortunately, many scholars use the words 'adaptation', 'accomodation', and 'integration' as synonyms. 'Adaptation', which is often written about as a process of overcoming culture shock and re-entry shock, is a modern perspectival concept. 'Adaptation' is a linear concept which presupposes a Western material metaphysic embedded in the stimulus-response behaviourism fashionable in Anglo-American social science since the 1940s.

Adaptation has been uncritically borrowed from the Darwian school of linear evolution. Along with Darwin's theory has come the dominant Western metaphysical prejudice in favour of material ontology. History has already observed the intolerance generated by the wholesale adoption of this concept into social science. Witness Herbert Spencer's hierarchical privileging of social types. Adaptation and accomodation both presuppose a linear process and an unbalanced power distrabution whereby the individual must adapt to or

accomodate to some condition or ideal type. This materialistic metaphysical prejudice that marks the perspectival modern European is also expressed by such phrases as 're-entry shock'. In this instance, culture is seen as a thing one 'enters' and 'exits' rather than a process and orientation. Likewise, 'shock' expresses the trauma of clashing perspectives rather than the process of an integral appreciation of diversity. Such non-defensive appreciation is essential to the identities of self and other as coconstituting significations. In short, only a post-Renaissance perspectival modern European attitude could create theories of 're-entry shock', 'adaptation', and 'accomodation'. 'Integration' is a post-Modern (not Derridean antimodern) conceptualisation that attempts to avoid hierarchisation and linear-spatial metaphysical imperatives.

'Integration' as Gebser defines it suggests an 'aperspectival' mode of being that appreciates all other perspectives and orientations as being mutually implicative. An awareness of integrality does not presuppose a power relationship whereby the individual must adapt or fail to survive. This is tantamount to facism and, as Peter Sloterdijk (Critique of Cynical Reason) explains, the imperatives of empiricism and causal behaviourism are of this cloth. Hence it is not surprising that behaviourists who presuppose a materialistic metaphysic are the promoters of a theory of cultural 'adaptation' and 'shock'. Accomodating toward or adapting toward some previously existing and more compelling (powerful) orientation suggest a self-effacement. The spatial metaphysical prejudice presupposed by these perspectival theories is self-evident. But, as hermeneutic theorists such as Hans-Georg Gadamer (*Truth and Method*)⁸ and Paul Ricoeur (*Time and Narrative*)⁹ have demonstrated, the very way one 'adapts' to a compelling situation is determined by that person's orientation. For instance, a Mexican Mestizo integrates into the United States in a different way than a Francophone Parisian. Indeed, integration would be impossible without a previous orientation that enables newcomers to make sense of the new situation in their own way. Thus, identity must be preserved or else integration, in its many guises, cannot occur. Meanwhile, simple linear adaptation never occurs. 'Adaptation' implies a tool-like instrumental quality about a person that suggests that all people are the same and interpret and react to a given situation identically. Integration is very different from adapting toward some ideal 'native' and away from one's own identity. Integration is aperspectival, aspatial, and atemporal.

Experience shows us that, for instance, the gaijin (foreigner) in Japan that attempts to act too Japanese is perceived by Japanese, and other gaijin, as some sort of social weirdo. The more one attempts to adapt the more strange he or she is perceived to be. Foreigners are expected to be different, and for that reason they are interesting, even if in controversial ways sometimes. The identification 'foreign' is dependent upon diversity. And likewise, one cannot be identified as 'native' unless there are 'foreigners'.

Gebser, like Edmund Husserl⁶ and Ferdinand de Saussure (Course in General Linguistics)¹¹ before him, argues that meaning arises from the relationships between phenomena. In fact, the very identities and meanings of phenomena depend on their differential relationships to each other. For instance 'ethnicity', as an essential (meaning transcendent) category, would be utterly meaningless if ethnic differences did not exist. If all the world were of one ethnic type, then

ethnic pride as well as conflict could not exist. My identity is virtually dependent upon others as being different from me. 'I' am nothing without 'you'. Self-concept is dependent upon the other as different. Thus ethnic conflicts that are characterised by the us-them mentality which often motivates efforts to exterminate the 'outsiders' is suicidal.

Total adaptation would mean a single culture that would not have an identity. The logical conclusions of such a prospect has already been discussed (see Kramer, Consciousness and Culture: Introduction to the Thought of Jean Gebser forthcoming 1992; Schiller;¹² Gerbner, article 1978; Feyerabend¹³ under the rubrics of 'cultural empirialism', 'cultural mainstreaming', and 'cultivation', the extermination of differences—meaning). An example of monoculturalism is the imposition of a single national language. This represents the perspectival interest of efficiency. Such goals and efforts are fascist attempts to dictate cultural identity. An example of the manifestation of an obvious spatial linear metaphysical prejudice is the idea of 'development' defined as the forging of national identities in the interest of instrumental efficiency.

CONCLUSION

The sense of weness, the bond called 'us', is literally dependent on the existence of the 'them'. Extermination of the 'outsiders' means extermination of the ingroup's sense of identity. Uniform homogenisation via the mythic American 'melting pot' or via Nazi extermination is tantamount to an effort to destroy meaning (difference and identity). If all people were suddenly 'Aryans' then to be an Aryan would be senseless. Such an effort to exterminate difference is suicidally nihilistic. Words such as 'cleansing' and 'purity' are indicative of a 'fundamental' orientation that articulates an intolerant attitude.

The idea that there is such a thing as a European citizen is the product of this mindset. The problem of course is: what is the ideal citizen to which all shall strive to adapt or accomodate to (ward)? Whose vision of the European citizen should be priveleged and promoted with compulsion? Unlike being a weak individual entering a 'foreign' situation that has the power of an entire culture's inertia and hermeneutic horizon to force one to adapt, the various European identities are not so vulnerable. The power of cultural politics is distributed so that there are several versions of the ideal European citizen competing, and each, as one might expect, has a tendency to manifest characteristics of its inventor's ethnicity. Gebser's idea of integration is an appreciation of diversity as the source of all meaning and identities. This does not presuppose a transcendental value of efficiency or other spatial notions of directional 'progress'. Such hierarchical schemes as presupposed by a centralised European community always lead to conflict and the threat of nihilism. Suddenly everyone starts asking, 'What does this plan mean?' Because of the many power relations that exist there, Europe can only integrate and not adapt in some kind of unilateral direction in order to accommodate to some singular identity. European history is cluttered with the ruins of such efforts in the past including the dreams (or nightmares) of Napolean, Bizmark and Hitler.

The logocentric obsession to enhance permanence, to 'arrest' criminal time,

has often, and well before the 1980s, been described with the use of the word 'crisis'. This basic threat to freedom was already described in the eighteenth century, and was obviously presupposed by liberation movements even earlier. Perhaps the most scholarly descriptions of this threat appear in the early- and mid-twentieth Century. Gebser was not the only one to discuss at length the anxiety of our times and the sudden shift in consciousness, an observation he described as 'plus-mutation' as early as 1939. Unlike Darwian linearity expressed as intolerant progress—evolve or die—Gebser's integral theory of 'plus-mutation' argues that past structures do not cease to exist when a fundamental shift occurs. Instead, Gebser claims that all 'previous' structures maintain. Furthermore, Gebser's aperspectival temporics argues that there is no predestined direction from low to high, or less complex to more complex. Such a metaphysical prejudice is readily exposed.

Eric Mark Kramer

University of Oklahoma

NOTES

- James O'Connor, Meaning of Crisis: A Theoretical Introduction (Oxford: Blackwell, 1987).
- 2. Independent Commission on International Development Issues. North-South: A Programme for Survival (Cambridge MA: MIT Press, 1980).
- 3. William B. Gudykunst, *Communicating with Strangers* (New York: Random House, 1984).
- 4. Aurelio Peccei, The Chasm Ahead (New York: Macmillan, 1969). These include State of the World 1991: A Worldwatch Institute Report on Progress Toward a Sustainable Society (Brown et al., 1991); Small is Beautiful (E.F. Schumacher, 1973); The Limits to Growth: A Report for the Club of Rome's Project on the Predicament of Mankind (Forrester, 1972); Mankind at the Turning Point: The Second Report to the Club of Rome (Meadows, Mesarovic, and Pestel, 1974); Beyond the Limits to Growth (Pestel, 1989).

Other examples include: Max Weber's famous article 'Science as a Vocation', Edmund Husserl's essay 'Philosophie als strenge Wissenschaft' (1910) as well as his Crisis of European Sciences and Transcendental Phenomenology (1936), Alfred North Whitehead's 'The Turning Point' (1959), Heidegger's 'The Turning' (1949) and the various writings of Albert Schweitzer. Such works express a clear sense that the Western post-Renaissance modern world is in danger of surrendering the freedom and responsibility to create its future, and to do so in the name of causation. This modern discursive formation that posits the great cosmic chain of causation as its basis for predicative power (epistemic force), generates a rhetoric that offers its claims as fait accompli. The new priestly prophets, the techno-managerial engineers (for managers are increasingly rational engineers rather than leaders) have ascended to a discursive position of power that is unquestionably positive. Within this cosmos, facts take on a mantel of naturalistic innocence as though they are not the products of particular interests, motives, investments, and paths of inquiry. Even context is deemed an irrelevant subjectivism that only confounds pure objective interpretation. Thus critique and debate about the value of which alternative future to pursue, is neutralised before it can be joined. 'Experts', defined as purveyors of facts, outrun moral debate by relying on the innocence of facticity.

History of European Ideas

These lessons did not fall exclusively on deaf ears. An important case in point is Aurelio Peccei. Peccei was the first president of the Club of Rome. He recognised that his book, *The Chasm Ahead*, lacked the rhetorical power of statistical evidence. After all, the Club's goal was to initiate the Project on the Predicament of Mankind in terms compelling to a world overwhelmed by what Husserl named the 'thesis of the natural attitude'. Peccei and the other executive officers of the Club understood that the mathematising metaphysic, that counts as the only discursive medium for modern truth, was the best way to gain people's attention. Of course, the enumeration of facts is not identical with knowledge but the Club's goal was to find the proper discursive form for maximum influence.

Thus, the Club proceeded to sponsor the most sophisticated mathematical model available to prove what they already knew. This was the 'Modified Delphi-Approach' to systems modelling. However, the Club determined that, despite the model's state-of-the-art status, it was just too simplistic for the task. Hence, when the club was invited by the Swiss Government to hold its first full-scale conference in Berne, June 1970, the membership elected to alter its research proposal to the Volkswagen Foundation abandoning the 'Modified Delphi-Approach' in favour of Professor Jay Forrester's (of the Massachusetts Institute of Technology) 'Industrial Dynamics' model. Forrester's quantitative predictions confirmed Peccei's verbal arguments as stated in the *Chasm* book. Like all scholarship that risks prediction, the Club wanted to find reliability in their claims, but given the apocalyptic nature of their predictions they would have preferred to have been proven false prophets.

The Club needed to powerfully convince the world that its predictions where highly probable so that steps could be taken to avoid their realisation. The Club was not interested in waiting for empirical conditions to catch up with, and validate their predictions for this would mean disaster. Thus, unlike most trivial social scientific projections, where if they come true the researchers celebrate their own ingenuity, the Club desired to guarantee their own failure. In short, with the publication of the Limits to Growth, the Club attempted to realise the Latin proverb utinam vates falsus sim (that I were a false prophet). In this way, the Club was inspired by the romantic tradition and the American pragmatic naturalists Henry David Thoreau, Charles S. Sargent, W.J. McGee, John Muir, and Aldo Leopold. What all of these writers described is a form of integration which includes nature. (For an excellent short discussion of the origins of environmental thought in the West see Richard H. Crowe, 'Origins of Western Environmentalism', Scientific American (July 1992), pp. 42–47.)

The numerical rhetoric of Forrester's 'World 2' model, later reinforced by his assistant, Dennis Meadows' even more complex 'World 3' model, caused the desired response from the intended audience of techno-managers. Forrester's predictions were published in 1972, by the Club of Rome under the title The Limits to Growth: A Report for The Club of Rome's Project on the Predicament of Mankind, Meadow's more complicated computer model 'World 3', yielded predictions formulated and published in 1974, by Mihajlo Mesarovic and Eduard Pestel titled Mankind at the Turning Point: The Second Report to The Club of Rome. Unfortunately, as reported in 1989, by Pestel in Beyond the Limits to Growth, the faith in numbers tended to not only reify the computer projections but to lead many to mistakenly claim that the Club of Rome was promoting zero economic growth as the only salvation for the stasis of culture/nature. For instance, in 1973, at the presentation of the Peace Prize of the German Booksellers Association to the Club of Rome, Sicco Mansholt, then president of the European Commission, gave a public address to the prestigious audience in attendance including the president of the Federal Republic of Germany, saying,

In my opinion the most important problem appears to be: How can we bring about zero growth in our society? I have not the slightest doubt that zero growth must be attained in our industrial societies, in America, Western Europe, and Japan. This becomes depressingly clear also from the MIT study (quoted by Pestel, 1989: 31.32).

While Mansholt exemplified the many who embraced the report as a proof for the need to move toward zero-growth, many mainstream economists attacked the model on equally irrational grounds. In the UNESCO publication Impact of Science on Society (1981), Professor Geoffrey S. Holister explains why many economists disagreed with the report. 'The reason is that while the assumptions made by the computer modelers are in fact no more gross or unrealistic than those assumed by economists, they are, unfortunately different' (p. 22). Holister argues that the validity of the Forrester computer simulation is no less problematic than the relationship between 'economic man' and a real person. We must recognise that most economic models presume, for instance, full employment so that the valued parsimony of their formulations may be protected from being overburdened with the complicated realities of under- and unemployment. Such a ridiculous metaphysical prejudice is readily exposed. Given the current rate of increase in labour productivity, the levels of structural unemployment and underemployment in the industrialised nations (chronically hovering between 25-30 million persons) cannot be ameliorated at even a continual GNP growth rate of 3% (after inflation). Meanwhile, the number of unemployed and underemployed in the poorest countries is fast approaching the 1 billion mark. Cheap labour worldwide has fulfilled the prophecies first offered by Engels and Marx of an international division of labour. Thus, zero growth would serve only to aggravate the problem (p. 43). Since OPEC's three initial price hikes in 1973, the depressed level of global economic activities has not only hurt the vast majority of poor but has also dragged the so-called 'middle-income' countries down under the staggering burden of external deficits. Concurrently, the deplorable balance-of-payments situation has hamstrung developing nations' efforts to import food. Consequently, '1.5 billion people who now live in low-income countries consume less grain than is fed to animals worldwide for meat production' (Peste, 1989: p. 43). Chronic malnutrition and outright starvation currently affect tens of millions of people impairing their mental and physical abilities.

Most experts (Brown et al., 1991; Pestel, 1989; R.J. Johnston and P.J. Taylor, 1989; Seager, 1990) see a spiral of misery for the 1 billion people now living in absolute poverty. Because of enormous debt load and runaway inflation, most developing countries are forced into austerity measures that exacerbate the impairment of the abilities of their citizens. Their poverty (coupled with culturally relative corruption) causes inefficient use of resources (when available) which results in low productivity, ending in lowered purchasing power which in turn aggravates malnutrition.

Neither the antagonistic conventional economists, nor the advocates of zero growth understood the Club's intention. As Pestel (1989) notes, zero growth is neither called for nor desired but, more to the point, neither is the form of growth typically argued for by economists and industrial/political leaders. Pestel claims that the mainstream scholastic economists failed to note that the report draws an important distinction between undifferentiated quantitative growth and organic growth. Undifferentiated growth is measured solely with the percentage increase of GNP. Such growth must eventually stop. as Pestel explains:

One does not need any complicated analysis, with or without models, to arrive at that conclusion. It is easy to see why. If, for example, an economy grows at an annual rate of 5%, it would, by the end of the next century, reach a level about 500 times greater (or 50,000% higher) than the current level...material growth would then be so fast that

there would be neither time nor space for the complex process of differentiation—as is required for organic development (Pestel, 1989: p. 45).

As opposed to undifferentiated (what might be metaphorically called malignant) growth, which is purely quantitative and extensive, organic growth is differentiated by an 'inescapable logic' of interdependencies. The more fundamental choice however, is between the two cosmologies. Organic growth is governed by a notion of proportion. Interdependent proportionality as a communicative process between systems, integrates them in such a way that over-determined growth in one sector is controlled by other sectors upon which it depends.

Following the Club of Rome's mathematical 'proof' a veritable avalanche of doomsday books has descended upon us, each attempting to prove the inevitability of impending disaster more than the last. However, the notion that the call to awareness that the world is growing in an undifferentiated, strictly quantitative fashion (what Pestel calls 'more of the same' type of growth 'like crystals', p. 45) as opposed to qualitatively differentiated growth which presumes rational reflection in the form of praxis, is hardly new. The idea that chaotic growth for its own sake has catastrophic consequences, has been argued many times over by what Theodore Roszak (1975) calls a, 'subterranean tradition of organic and decentralist economics' (3). This tradition includes Kropotkin, Landauer, Tolstoy, William Morris, Gandhi, Lewis Mumford, Paul Goodman, Murray Bookchin, E.F. Schumacher, Rachel Carson, and many others.

The world is sliding into a state wherein most of its inhabitants are, or are threatened with becoming, refugees and immigrants in search of economic opportunities (not to mention the various and sundry military conflicts motivated by ancient blood feuds as in former Yugoslavia and control of resources as in the 1991 Gulf War). Subsaharian Africa is the scene of an ecological disaster while Haitians desperately seek asylum in the United States for 'merely' economic reasons. These may all be expressed appropriately as 'crises'. Yet, to suggest as many do, that there are no alternatives is to presume determinism more than probability. Gebser's call for a shift in attitude to an integral awareness offers something quite different from doomsday. Gebser's prescription is premised on our freedom, which if understood and appreciated, systatically promotes itself. Once the power of productivity is recognised to be essentially freedom, then all predictions become less determined in their epistemic force. Gebser is calling for us to take responsibility for the nascent state of the future that is ever-present as choice.

- 5. Stephen Toulmin, Uses of Argument (Cambridge: Cambridge University Press, 1958).
- 6. Edmund Husserl, Logical Investigations, trans. J.N. Findlay (Humanities, 1970).
- 7. Peter Sloterdijk, Critique of Cynical Reason, trans. Michael Eldred (Minneapolis: Minnesota University Press, 1987).
- 8. Johan Galtung, True Worlds: A Transnational Experience (Free Press, 1981).
- 9. Paul Ricoeur, *Time and Narrative*, trans. Kathleen McLaughlin and David Pellauer (Chicago: Chicago University Press, 1984).
- 10. John C. Condon, With Respect to the Japanese (Yarmoth, ME.: Intercultural Press, 1984).
- 11. Ferdinand De Saussure, Course in General Linguistics, ed. Charles Bally and Albert Reidlinger, trans. Wade Baskin (New York: Philosophical Library, 1959).
- 12. Herbert I. Schiller, *Mass Communication and American Empire*, Critical Studies in Communication and in the Cultural Industries (Westview, 1981).
- 13. Hans-Georg Gadamer, Truth and Method (New York: Seabury Press, 1975).