FROM 'WHO AM I?' TO 'WHEN AM I?'

Framing the shape and time of the future

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Intended to aid in the development of an interpretive community, this article (1) articulates an alternative epistemological framework for understanding the future; (2) examines the structure of images of the future — primarily the image of the present continued, catastrophe, reversion to a stable past, and transformation; (3) explores linear, cyclical and spiral patterns of social change; and (4) argues that an ideal theory of the future must be able to problematize time and to negotiate the many meanings of time, even as it might be committed to a particular construction of time.

Fixing a watch does not mean that one understands the future, and understanding the nature of time does not mean that one can repair a watch. Fixing a watch requires technical skills and a theory of moving parts; understanding the future requires much more diverse skills; to begin with: an understanding and appreciation of theories of social change, cultural mythology, and the politics of epistemology.

But the person who repairs watches and the theoretician of the future both live in a world where time is central. Like the geographer who charts physical space or the sociologist who structures social space, the futurist creates maps of time. These maps can then be used to understand better who we are or, more appropriately, when we are. They can also be used to make better decisions (the policy-oriented organizational mode of futures studies) or create new maps (the activist-innovative mode of futures studies).

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 0016-3287/93/03235-19

Developing an interpretive community

This article aims at aiding in the task of developing an interpretive community. According to David Harvey,

> 'interpretive communities' [are] made up of both producers and consumers of particular kinds of knowledge, of texts, often operating within a particular institutional context, within particular divisions of labor, within particular places. Individuals and groups are held to control mutually within these domains what they consider to be valid knowledge.[1]

For futures researchers, our interpretive community has yet to create a consensual model of what constitutes valid or reliable knowledge and how this knowledge can be known, who can participate in this knowledge creation, and what the appropriate sites for knowledge creation are.

At present, futures studies largely straddles two dominant modes of knowing—the *technical* concerned with predicting the future and the *humanist* concerned with developing a good society. The larger knowledge context for these two modes, however, is Western, with the non-West effectively marginalized.[2]

James Dator[3] sees futures studies itself going through a dramatic transition:

> Futures studies is the last bastard child of positivism growing up in a postmodern age. It was conceived during the time people believed in a science (predictive and controlling) of the future. We know now that this is not possible (about anything, certainly about the future!). So we are struggling to find out what futures studies is, given the fact that so many people still want to be able to predict and control the future. If futures studies can know nothing about the future, what use is it?[4]

If this is the case, what are the options? Dator believes that futures research should focus on present images of the future 'in order that we can come to know more about how our present ideas and actions towards the future influence the future'. At the same time, drawing from post-structural interpretations of theory, the future can be seen as an asset, as a resource that helps us rethink the present, that makes the present remarkable. As Dator writes: 'Similarly, we are interested in using the future as a resource to solve present problems or to enable us to use the resources of the present more effectively and responsibly'.[5] In this view, futures studies has a critical dimension but also an instrumental purpose in linking ideals to institutional policy making.

But is futures studies merely restricted to research and policy making or is there a deeper transformative dimension? Dator adds:

> Finally, instead of predicting the future, futures studies helps people envision and invent the future *not* as though one were creating an inevitable blueprint, but in order to give a sense of direction and control (not the reality of such) on the assumption that soon after you start heading towards your preferred future, you will experience new things, develop new ideas, about a new preferred future, and want to discard the old one. The image of the preferred future which futures studies helps you create assumes—almost demands—such flexibility (this in another way differs from the old positivistic idea of a science of the future).[6]

But insofar as some collectivities have a head-start in research and creating the future, Dator asserts that 'decolonizing the future is an important part of futures studies, so questioning privileged futures and helping marginalized voices to speak and be heard is, and should always be, a central part of what futures studies is'.[7]

However as Zia Sardar has argued in 'Colonizing the future',[8] Dator's perspective is rarely practised, with the development of futures studies largely Orientalist in its scope, framed through Western images and categories of time. When the

non-West has entered futures research it has been on ahistorical terms and often as loyal opposition to the rationalist, instrumentalist self-definition of the West. Instead of cultural dialogue between different visions of the future, more often we have seen cultural cannibalism.

But Dator's views, which we share, are certainly not universal. There remains an ongoing debate within the field over the appropriate mix of theory, data and values; over the respective roles of the academy, business, government and social movements; over the appropriate use of different ways of knowing such as intuition and rationality; over what strategies should be used, understanding or transforming the future; over what are the most useful types of text, fiction or non-fiction; and, over what the approach of futures studies should be—hard or soft, scientific or artistic, technological or cultural, and spiritual or secular.

While Dator provides us with an eloquent overview of what futures should be, our effort here is to frame his and others' perspectives in a larger epistemological approach, that is, we seek to develop a core of mutual understandings from which to develop an interpretive community.

Three frames of reference

As a point of departure we begin with an earlier theoretically oriented essay entitled, 'Deconstructing and reconstructing the future',[9] where we argued that there are three frames of reference from which to view the future and futures studies. These views overlap and should be seen more as a continuum than as three exclusive perspectives, with many thinkers and studies simultaneously exhibiting more than one perspective. The first, the predictive, attempts to predict and control the future; the second, the interpretive, examines how different cultures, cosmologies, discourses approach and create the future; and the third, the critical, makes problematic the categories used to construct the future, asking what are the particular social costs for any approach or view of the future.

Deciding which approach one takes is not a philosophical issue, in terms of arriving at some view of truth, but a political issue, in terms of deciding what should be nominated as legitimate social theory in terms of the approach one takes and the relative importance of actors and structures, of the state and social movements, or the individual and the transcendental, for example.

Each of these views has a perspective of the world 'out there' in which the future can be *known*. In the predictive, the universe is by and large stable, with discernible laws. In the interpretive, there might be laws, but these laws are often culturally and historically specific and not necessarily universal, even though many claim that the structures they have found are time, space, and individual invariant—that is, they do not see their own cultural biases. Thus a thinker in this approach might believe that an empirical world exists, but this world is certainly quite different from the objective world that a modern scientist believes he or she has discovered. In the critical, however, intelligibility is clearly problematic, with the universe constituted by our knowing acts.

Each of these views also places the act of *meaning* in different sites. In the empirical position, meaning is in the referent-object of language; in the cultural position, meaning is often located in the intention of the speaker; and in the critical postmodern or poststructural perspective, meaning is located in the site of linguistic structures (as well as social structures such as class, gender or caste) that speakers find themselves inhabiting.

The role of *language* is also different in each of these perspectives. In the first, language is transparent, merely describing the empirical. In the second and third, language is opaque, participating in the construction of the real. The critical position even goes so far as to argue that the structure of our grammar is political in that it nominates one view of agency over another (the individual over the collective, for example). For example, the simple equation of 1 + 1 = 2 is seen not as a universal but as a particular commitment to the real.

What constitutes an appropriate *science* also differs in each of these perspectives. In the predictive the central relationship is between data and theory. Better data, more reliable and precise, lead to better hypotheses which result in valid theories. In the interpretive, values inform the theory–data nexus. What the researcher believes—what should be studied, how it is studied, how research questions are phrased, and what the researcher does with the results—is as important as the object of research. In the interpretive, ideally the researcher should participate and create alternative transformative actions from his or her research findings. The researcher should be committed to the downtrodden, not disinterested, as is the ideal in the empirical approach. The critical view takes issue with the theory–data–values triangle. In the critical, data are no longer independently real; rather, they are decided by the dominant discursive formation (culture, class, episteme, power or paradigm). We limit how data are constituted since the present discursive formation privileges material, sensate reality.

While a better theory is the result of new data in the empirical predictive view, in the critical view, new theories supplant old theories not because a new theory has better explanatory power (that is only one dimension) but because of changes in how the world is viewed, changes in the academic community, or changes in power relations. Values in the critical perspective are based on the structure and discourse of the time. Values are not universal or merely group preferences, rather they are believed to be historically derived and, often, class-based. This is in sharp contrast to the cultural interpretive view which seeks to discover ways to uplift suppressed values and to universalize enlightenment (whether European or Buddhist or Islamic)[10] values.

Theoretical positions that take the *transcendent* seriously focus more on the role of the divine in creating identity than in traditional debates between structure and agency—the free will debate. At the same time, a transcendental perspective places the theory–data–values triangle within a hierarchical situated 'layers of the mind' perspective. At deeper layers of the mind, who one is can fundamentally influence the outcome of a natural science or a social science experiment. That is, one's spiritual level (in terms of fidelity or parallelism with the presence of the divine) transforms the nature of inquiry.[11] From the critical level, the transcendental is merely another discourse with the more important effort to research the different ways in which we have historically related to the transcendental and how our view of the transcendental influences our social and political structures. For the empirical there is no decisive evidence that proves the transcendental, and thus it is a variable that must be controlled for, factored out. For the cultural, however, the transcendental is that which inspires humans to act and create the good society.

What constitutes the *truth*, then, is also considerably different in each approach. In the empirical, truth is universal and exclusive; interpretations are either true or false. This contrasts with the interpretive dimensions of futures studies wherein, following Oswald Spengler, truth is deep and shallow, layered.[12] Still within the interpretive perspective, objective truth is considered realizable—

whether through authority, sense–inference, intuition or reason—but what that truth means is considered relative. With this view of truth, values are central, since data are meaning-based. Often in this approach, the specific and local cultural meaning of time, of the good society, is phrased in inspirational and metaphorical terms. By contrast, the predictive, at least in modern times, is framed in precise terms; accuracy is central. Metaphors are considered loose thinking, with lack of rigour seen as the fundamental stumbling block to making futures studies into a science or even a soft social science. In the critical view, truth is constituted differently across individuals, cultures and history. The future too is expressed variously in different eras. Whereas time was once consistent, that is, understandable by the watchmaker, it has now become plastic, even virtual, without any particular coherent centre.

In the critical view, both analysis and metaphor do not give us better forecasts; instead they are the fodder that helps make the future in itself problematic. As with the case of the question of the core of futures studies, we might ask: is this an appropriate metaphor? If so, is it a nuclear core on the verge of a theoretical meltdown or an apple core whose seeds should be planted all over our theoretical terrain in the hope that something (values, data or theories) will sprout and then replenish us? Or are there many cores held by different actors, cultures, cosmologies? Is the attempt to create a core in itself a hegemonic enterprise that while aiding in the legitimation of the field, in the long run reduces its biodiversity? Or is the core fine but the apple itself rotten, that is, the theory is fine but the application is flawed?

The types of *questions* that emerge from these three approaches also differ. The critical approach to futures studies, then, does not ask comfortable questions but rather seeks to use questions to disturb power relations. The goal is not to clarify the future but to see how we have created the category of future in the first place. The task is to distance ourselves from present conversations and the language used that makes these conversations intelligible. Values are not considered universal, as in the interpretive approach, or considered to be essentially vacuous statements, as in the empirical, but as historically derived and particular to social structure and practices that contextualize them. There is no instrumental gain as in the case of predictive futures studies where reality is known and action plans can be developed based on this known reality. This is especially the case, since within the critical view, there is no known objective universe out there (outside our knowing practices) to be discovered or predicted. Rather, we participate in the creation of the future. There is not one universe; rather, we exist in what David Spangler calls the multiverse.[13]

In the interpretive view, the goal is to clarify meanings and to find some semblance of universality in the sea of cultural differences. In the empirical, the universal is already laid out before us. The task is to develop step by step a science to discover this universal. The sooner we understand that culture, philosophy, politics and economics are variables that hinder the discovery of truth, the quicker we can develop a study of the future that can truly aid in the creation of a saner, more rational society. Of course, in both the cultural and critical perspectives, 'the rational' is in itself problematic, based on either one's own culture or based on who gets to write history.[14]

The types of questions that emerge from the empirical, then, are those that aid in reaching more precise definitions of data, that clarify the relationship

between theory and data, and that increase the reliability of forecasts, that is, that increase replicability by independent research centres and individuals.

Consciousness is also viewed differently. In the empirical, consciousness is our ally helping us to render the world intelligible; in the cultural, consciousness is something to be realized (as there is false and true consciousness); but in the critical, consciousness is neither our ally nor suddenly accessible through an experience of enlightenment, rather, consciousness is often our enemy, constitutive of the dangers of the world around us. Intelligibility is problematic, we do not know if our mind is clarifying or complicating what-is. Since there is no world out there waiting for us to apprehend, we are complicit in creating the reality that is us. In Kafka's story 'The Burrow', the creature is caught in a dilemma; it cannot tell to what extent the danger it experiences is created by outside enemies or by its own digging.

> Eventually, the creature becomes aware that the sole evidence of the existence of its enemies is noise. Beginning in a romanticized state of silence and tranquility, as its efforts to create an impregnable burrow proceed, the creature draws disparate conclusions about the whistling it begins to hear in the walls. Its inability to determine whether noises are produced by its own burrowing or by a predator can be read allegorically as pertaining to interpretation in general.[15]

How, then, to distinguish the act of knowing from that which is to be known?

From the critical view, the basic problem in futures research is that the 'present' is all-consuming, utterances about the future are framed within the language of the present, and even as we attempt to escape this all-pervasive present, its ubiquity forces us into a terminal return, making the future all but fugitive. Scenarios, then, function not to aid in the prediction enterprise (as in the empirical) or as an aid to recover or uncover meanings associated with a particular social formation or vision (as with the cultural), but they help in creating an epistemological distance from the present. A future society becomes another place that functions as an 'Other' to the present.

While the predictive view sees *utopias* as impossible places[16] often used to justify the status quo since they are only fantasy (outside realist descriptions of state power relations), the cultural view– as expressed in enlightenment literature—frames the utopia either as a place reachable after the death of the individual structure (the body) or the death of a social structure (capitalism for communists, patriarchy for feminists, technocracy for humanists, and structure itself for anarchists). In the empirical and interpretive, the utopia, a perfect place, or even the eutopia, a good place, has remained a unified and coherent place, usually the Other of the present. From the critical perspective, Michel Foucault gives us another concept which injects the popular notion of alternatives into the traditional notion of the utopia. He calls this the heterotopia, defined as

> the coexistence in 'an impossible space' of a 'large number of fragmentary possible worlds', incommensurable spaces that are juxtaposed or superimposed upon each other. Characters no longer contemplate how they can unravel or unmask a central mystery (what is the nature of time, of what the future will look like, or even what we might want the future to be) but are forced to ask. 'Which world is this? What is to be done in it? Which of my selves is to do it?.[17]

From the critical futures perspective, the question then becomes not, 'who am I?', but the far more intriguing question of 'when am I?'. The self is placed within a temporal frame—historicized as well as futurized. The essential self of culturalists is

made problematic seen more as a frame from which to locate identity than as an eternal reality from which other sources are but mere reflections—some distorted, others perfect, as in the case of the enlightenment view of modernity.

While, in the critical perspective, the real is not concrete, we should not make the mistake of assuming that the real is imaginary—that nothing is real and all is illusion as in the Vedantic perspective[18]—rather, ontological questions are eschewed for epistemological assumptions, making reality less frozen in structure. Finally, as commonly thought, the critical postmodern perspective does not assert that suddenly 'mere anarchy is loosed upon the world'[19]; rather, it invites the paradox of time—fluid yet with an anchor. In the words of T.S. Elliot,[20]

> To be conscious is not to be in time
> But only in time can the moment in the rose-garden
> The moment in the arbour where the rain beat,
> Be remembered; involved with past and future.
> Only through time time is conquered.

This refers to the notion that while we may make the real problematic we can only do so with a reference to the real. There is an anchor, a vantage point. Thus, the postmodern critical perspective does not necessarily mean a continuation of modernity's nihilistic worldview; epistemology should not be confused with ontology. A postmodern future can be a future with values and commitments, to the transcendental, for example. However, this is a will to God's will. While the enlightenment may indeed have allowed

> man to emancipate himself 'from community and tradition of the Middle Ages in which his individual freedom was submerged' the Enlightenment affirmation of 'self without God' in the end negated itself because reason, a means, was left, in the absence of God's truth, without any spiritual or moral goal ... the postmodern theological project is to reaffirm God's truth without abandoning the powers of reason,[21]

or abandoning the power of intuition and myth.

But from the critical theoretical view, the key problem is that the transcendental, once constructed, must speak. It is with communication that the problem of intelligibility arrives. When the word is spoken it no longer retains its liminal purity, it now enters the realm of culture and politics—clearly the interpretive, where the one who gets to interpret not only gains the transcendental but the worldly benefits of calling the real 'reality'. Thus, from the critical view, the social costs of the will to the mystical, to the truth, must be accounted for.

From the modern empirical view, both cultural transcendentalism and postmodern relativism are problematic—the former because there exists no empirical evidence, irrespective of the problem of communication, and the latter because with all assurances of agreement thrown out, we can eventually know nothing. Pitrim Sorokin[22] provides a noteworthy context for this discussion. For Sorokin there have been five historical responses to the question of the nature of reality: it is empirical; it is idealistic; it is dualist; it is unknowable; and, one cannot be sure of any position. While from the first three one can derive sensate, ideational and integrative civilizations, from the latter two one cannot derive a stable society. If what-is is unknowable or if the nature of what-is is uncertain, how can one act, how can one create a science, how can one have economic development?

Thus from the modernist empirical position, irrespective of the social costs of science and technology and of the expansion of the idea of progress, at least modernity has changed the fatalism of history; something unique has happened.

At least, humans are not left alone wandering aimlessly in a universe that has no certainty or that can never have any future.

While the above has been a structural approach to the future and futures studies, these various dimensions of futures studies must not be only frozen in this century, they must be historicized. For example, we need to discern the history of 'the future' more rigorously than as the case with the traditional study of utopias. To begin with, the future is neither novel nor is it modern, although certainly it is uniquely fascinating as we near the millennium. In the ancient interpretive view, one's relationship with nature was more important than predicting its future direction. In the classical view, however, prediction in the context of a closed and unified—cosmically and morally—universe became more important. The modern view continued this predictive vein but made the universe itself more varied, richer. It is in the postmodern where the universe itself has disappeared with the meaning of a particular utterance no longer lodged out there as a thing-in-itself but situated in the social context of various linguistic signifiers.

Other approaches

The division of the future into the empirical, interpretive and critical is merely one approach; there are others. Roy Amara[23] favours the division of the future into the preferred (value), probable (scientifically predictable) and the possible (the range of structures that give us the possible). This view has become the commonsense, conventional model of futures studies. Jay Ogilvy believes that futures studies should remain value-orientated (the preferred) and not attempt to become a hard science, especially when the sciences in themselves are facing the brunt of the postmodern critique of universalism.[24] Wendell Bell is far more hopeful, arguing that even with the empirical problematic there is still something that we are referring to when we speak, and that, if not a science of the future, then at least a rigorous study of the future can be articulated. Futures studies can be like a science at least in terms of 'logical coherence and the marshalling of evidence'.[25]

Following Habermas, Richard Slaughter is far more concerned with recovering meanings that have been silenced by dominant discourses than with approximating science. This is also Zia Sardar's[26] project, specifically with respect to the meanings deafened by the silent noise of Orientalism. Others have attempted to take traditional values and postmodernize them, that is, selectively project them, as in the case of Nandy,[27] Yamaguchi[28] and Inayatullah.[29]

Images of the future

But these are epistemological approaches. Can anything be said about the structure of what is actually said about the future? If we examine various attempts to write scenarios about the future, the common structure appears to be the classic double dialectic—a positive statement of the future and then its negation: and again.

Of particular use are the works of James Dator.[30] Dator uses four, apparently archetypical, images of the future. They are (1) continued growth, (2) collapse or catastrophe, (3) reversion to the past, and (4) transformation.

The first is often related to the science and technology revolution, to our usual

understandings of progress. The second is the historical image of catastrophe either based on various life events, or some historical image of disaster we unconsciously hold, or a fear of the scenario of 'what if everything fell apart?'. The third is a reversion to avoid catastrophe, to return to a time of stability when life made sense and time was slow. The fourth alternative is the evocation of the Other, some different transformed type of society.

This is not the place to articulate each one of the scenarios but to ask why they work so well; why do individuals recognize them and use them for giving meanings to their own lives?[31] The first makes sense because it is the present, what we see around us. It is the data that we live with. The first scenario assumes that our daily existence will safely continue (only that there will be more of it and us to enjoy it). The second posits that our world collapses, that either through environmental crises, nuclear holocaust, or starvation, the centre is unable to hold. Again, this might be because of fear, guilt or some historical crises, or perhaps even a natural response to ensure that we do not become arrogant and allow what we cherish to disappear.

Given that we remember the past, to imagine a return to some previous era (which we have romanticized for our own psychological safety) appears natural. This could be the womb, childhood, precommunism, matriarchy, the agricultural era or other archetypes from our collective history, where uncertainty was less and where the good clearly existed.

The last is the possibility of transformation, the vision of the butterfly, the vision of idealism, of perfection, of something else. Again this is the dream, the call by the leader to create something else—neither to expand nor to collapse or revert back to the past, but to transcend our limitations.

The universality of these scenarios is based on historical experiences and on structural reasons. Either the present *continues, collapses or declines, reverts back to a prior state*, or *transforms*. Or, put in plain English: things go up, things go down, things return, things transform—there are no other choices.

This type of thinking helps us understand the elegance of Amara's model of the probable (evoking history or deep structural patterns); the preferred (individual agency and growth); and the possible (the unknown). This also fits into grand sociological discussions—individual agency *v* structural determinism, with the unknown, the transcendental, being the third most important factor.

Another series of metaphors articulated by Slaughter in his *Futures Tools and Techniques*[32] is valuable for similar reasons. He offers us four images to understand better how we see the future. The first is the dice (or total chance); the second is the river (limited choice); the third is the roller coaster (no choice); and the fourth is the ocean (total freedom). These images work because they relate to grand questions and conflicts between freedom and choice. They evoke myths.

The cultural historian, William Irwin Thompson, gives us another way of stating the dilemma between the vision of 'continued growth' and the vision of 'reversion to the past'. He frames it in the city/pasture dialectic:[33]

> When one believes in an alternative vision of history . . . he is stepping outside the city to see a pastoral vision in which the office building and the universities do not obscure the archaic stars . . . Those left behind in the city define themselves as responsible and sane and see the wanderer as a madman. The wanderer defines himself as the only sane person in a city of the insane and walks out in search of other possibilities. All history seems to pulse in this rhythm of urban view and pastoral visions.

Rationality and mythology

Walter Truett Anderson, in his *Reality Isn't What it Used to Be*, also uses this fourfold structure but expands it to six. Instead of scenarios, he uses more interpretive language, calling them stories. Stories, then, are 'common sense description of ways that people explain how the world got to be the way it is and what is happening and is likely to happen'.[34] The first is the story of progress and modernity, the second is that of Christian fundamentalism, the third of Islamic fundamentalism, the fourth that of Marxism, the fifth that of the green movement, and the sixth is transformational, the idea of a major break in history, some type of new social formation—the new paradigm story of the New Age.

The similarities between Dator's basic structure should be obvious. The first is similar to Dator's 'continued growth' scenario. In both the Christian and the Islamic story, the intention is to recover some prior historical time or event. Marxism is similar to 'continued growth' but with an added distributive dimension, that is, reverting to a time when there was no alienation. Anderson's last story is that of the invocation of the New Age. Again, there is a fourfold pattern.

Anderson believes that through dialogue, we need to create a metastory, a rational discussion of all the stories, to create dialogue from which a new story of stories can develop. Unfortunately, it is unlikely that the whole world will reach a stage when we will be able to live by metaphor (having totally digested critical theory), believing that our hard-fought victories, our ideological battles—the tales of martyrdom, Jesus's crucifixion, Ali's brutal death, the plight of women and labour—are mere metaphors, not literal truths. He misses Foucault's point in that changes in knowledge frames are not 'tea parties' but, as Mao has written, fundamental struggles. Misunderstanding mythology, he forgets that these basic structures are outside our rational knowledge efforts. Each story is precisely an attractive model or myth because humans believe it to be the only model. While Anderson calls these noble lies, Wallerstein is far more instructive.[35]

> A major function myths play is to mobilize people by their (the myths) promise and their optimism. Crushed by the realities of routine, we all hesitate to engage ourselves in political struggle. We fear wasted energy. We fear repression. We fear cutting ourselves off from family and friends. One of the most basic mechanisms that sustains the status quo is always this pervasive fear of the oppressed to break with routine. A revolutionary movement is precisely a movement that calls for a break with routine, that demands sacrifice in the present for a better world in the future. And because the sacrifice is real and immediate, while the better world is in the distance and uncertain, it is always difficult to organize. Myths are an essential element in the organizing process, and in sustaining the troops during the long political battle.

From the critical perspective then, a theory's contribution to humanity is not whether it corresponds to that what has been preselected as 'facts' (as with the empirical) but if it changes the way the world is socially constructed. Thus in the critical view, Marx's theory is important because it rearranged social and political relationships by restructuring ways of viewing them; it gave new assets to a new class of people. It made revolution by the peasants and workers against the bourgeoisie, aristocrats and the church both natural, normal and evolutionary. He was not important because of his empirical predictions; in any case, they have been largely incorrect within the empirical discourse. Thus, instead of merely more stories about stories—the metastory—we need new mythologies, that can graciously negotiate reality with other mythologies.

But it is not only grand thinkers who hope to create a new world. Futurists also give us noble visions. Misunderstanding how social movements arise, how mythologies are created, futurists hope that they can create a scenario and then gain popular support for their vision of the future. Some even hope to use rational processes to create mythology. But the scenarios of a university futurist or a corporate futurist are unlikely to transform our world and our knowing of it. It is through utopian grand knowledge, noble lies and claims, that theorists have been able to mobilize activism; without these unproblematic claims their efforts would be mere intellectualism.

The visions of Adam Smith and Karl Marx, of the feminists, of the prophets, and of the Enlightenment are significant because of their grandness. Without their uncritical representations of the real, of the natural, of the belief that their movements are guided by destiny, they would not have been able to sustain the energy and commitment needed for individual and social transformation. The voice, the narratives, the grand stages of history in fact must be written from a voice that is unproblematic. It is this unproblematic narrative that gives the theory potency. Would Marxism have potency without the promise of a classless society? Would capitalism have potency without the promise of the ideal magical marketplace, where hard work is perfectly rewarded? Could liberalism have transformed the world into consumers without the mythology of the invisible hand, of divine self-interest and of the philosophical division of the world into ancient, mediaeval and modern (making the future the perfect, the present the good, the past the bad, and the ancient the wise from which there was a 'fall'). Would humanism be successful without the creation of the sovereignty of man and a hierarchy of needs, indicative of ever higher levels of self-realization?

Thus the paradox. To change history, the future must stand outside history claiming the empirical even as the discourse is ripe with metaphors. Unfortunately, however, it is this very placement that leads to terror, to the inquisition of minds. And yet theorists continue to develop grand blueprints of history and the future based on 'natural' or fundamental laws.

While one might wish for theories that are more consciously metaphorical[36] than finished blueprint—with spaces left for interpretation, dialogue and dissent, for epistemological and ontological pluralism—this is unlikely, because most attempts at utopian thinking make knowledge claims in which those outside the grand theory cannot understand themselves for they exist in prehistory. For example, monotheists claim not only to understand their world better, but they claim to understand the world of the paganists more fully as well. Science exalts itself to the objective and reduces magic to the irrational and marginal.

What, then, is the way out, especially if as Indian social theorist Ashis Nandy writes 'yesterday's dissent is often today's establishment and, unless resisted, becomes tomorrow's terror?'[37] For Nandy, instead of rational myth creation, the solution is in the evocation of the eternal cycle, as for example, written in the *Mahabharata*: 'Alas, having defeated the enemy, we have ourselves been defeated . . . the . . . defeated have become victorious . . . Misery appears like prosperity, and prosperity looks like misery. Thus our victory is twined into defeat'.[38] Identification with human suffering (and the views that all utopias will cause it) is one step out of totalizing discourses and out of linear theories of the future which instrumentalize the past.

Of course, the scientific response to the problem of totalizing discourses has been that theories must be empirically tested (causation, correlation and explana-

tion) and cannot be self-contained. Linear theories where change and knowledge grow incrementally are preferred. But even the scientific discourse is a particular myth of history and future.

Restating the above, the question that then remains is, why not call a theory a myth, a way of seeing, instead of the new truth, the new real? But then can sustained transformation be possible without myth, with solely a will to transform, with a critical politicization of all, and a mythification of nothing? *Is truth possible without lies?* Perhaps we need to rethink our notions of truth and falsehood. In this sense Anderson's idea of noble lies is useful; however, he forgets that his remedy of a story of stories is in itself a noble lie.

Sarkar here is quite useful in providing a historical context for the postmodern turn in contemporary social thought. For him the breakdown of a unified meaning system, of governance, of economy, of culture is to be expected at the end of the *Vaeshyan* era (loosely, the world capitalist system). For Sorokin, as well, this loss of a coherent centre is to be expected when sensate civilization breaks down. This disintegration results in a plethora of perspectives, none heard by anyone else, selves wandering through social structures with no unified ego to hold them together and with only oppressive structures such as religion, nation or race serving to unite a system about to crack. Social, political and economic chaos evident in society is also apparent at the level of intellectual theory. Society and truth become decentred: knowledge becomes totally relational. There is no ground for belief and action, social theory becomes void of content concerned only with style and the interpretations of interpretations. The theory of theory, the postmodern approach, then, is merely the cultural logic of late capitalism, with the creation of ideas, goods, values, needed to 'produce desire and titillate individual sensibilities'.[39]

This loss of centre is why empiricists argue that we need a science (with laws) of society, not just an interpretation of the future. But this move demands a closure to the open loop of interpretation and metaphor, and thereby a concomitant loss of the openness needed to create a dialogue between worldviews.

This fear of an overarching voice to history is why critical theorists attempt to make past and future problematic. As Richard Ashley writes,

> The problem of critical theory is not to offer one more replication (blueprint), thus to endorse and empower one or more political movements on behalf of 'man'. The problem is to understand how, through practice, 'man' is constructed and empowered as a subject of history, what effects these practices of constructing and empowering 'man' might have, and what resistance and new connections these practices might engender and open up.[40]

The critical perspective, then, continuously points out alternatives to the present (alternative pasts and alternative futures) but—unlike the cultural perspective—refuses to be bound by any. What results are local resistances, testing here, challenging there, and as Foucault writes, '[giving] up hope of ever acceding to a point of view that could give access to any complete and definitive knowledge of what may constitute our historical limits'.[41] But whereas some futurists merely seek to give alternatives, others do seek to provide a new overall frame of meaning—the postindustrialists, the general systems thinkers, for example. But the critical perspective outlined by Richard Ashley would 'eschew a transcendental attitude and, with it, a promise of making a metaphysics possible—is admittedly to disclaim an interest in imposing a general interpretation as a guide to the transformation of life on a global scale'.[42] Thus instead of empirical objective knowledge claims or

spiritual, cultural knowledge frames and models of the good society, what results are alternatives in the constant search for more alternatives, ever avoiding creating a blueprint.

But for many futurists, the attempt to create a science is a necessary attempt at closure for a discovery kept forever open, and while this is useful in academia it does not lead to social activism, to changes in the material world. Perhaps most important is the cultural, for while acceding to cultural relativity, the interpretive perspective still does give us diverse images of the future and models of the good society.

The shape of the future

As important as frames of reference and archetypical images of the future is the shape of the trajectory of the future.[43] We posit three basic shapes,[44] derived largely from historical patterns of social change: the linear evolutionary shape of progress; the cyclical shape of the lifecycle and the natural world; and the spiral shape that combines progress and tradition.[45] These three shapes are again loosely related to the predictive orientation (linear), the cyclical (cultural) and spiral (a combination of both). The critical view is not so much concerned with a theory of social change but with articulating the assumptions and social costs associated with a particular grand theory.

Traditionally, social change theories have been categorized into dialectical and equilibrium theories. In dialectical theories, change is normal and opposites exist in dynamic tension at every stage. Power and domination are often central to dialectical theories. Dialectical theories can be materialistic (Marx) or idealistic (Hegel) in their orientation or some combination of both (Sarkar). In equilibrium theories stasis is natural and change is incremental. A third dimension is transcendental theories, where the pull of the 'God' moves civilization forward.

Relating these dimensions to our earlier typology, we can see that the linear shape is similar to 'continued growth', whereas the cyclical is a version of the 'return of the past' scenario and 'catastrophe' is often a result of a linear extrapolation. The spiral theory has dimensions of both linear and cyclical but promises some other society, similar to the 'transformation' scenario. Epistemologically, linear theories base themselves on the empirical/predictive model of the social sciences whereas cyclical theories are closer to the interpretive/structural model. The spiral attempts to link the empirical with deep human values. It is this latter pattern that intends to remove the future from the confines of predetermined history, from the cycle, and to create the possibility for the spiral—an acceptance of structure, but a willingness to transform the suffering associated with history, and to find previous pockets of darkness and illuminate them, to pierce through silences.

A cyclical theory privileges perpetual change while a linear theory privileges equilibrium, although it could be an evolutionary equilibrium as in the case of Herbert Spencer. In cyclical theories change is endemic to the system; for example, variously through dialectics, through the principle of limits, through the Chinese *yin/yang* principle, or through the Indian Tantric *vidya/avidya* (introversion and extroversion) principle.

By contrast, in linear theories change is often because of external causes. Cyclical historians examine the rise and fall of civilizations while linear historians believe the fall problem to apply to other civilizations (Oriental civilization, for

example) while their own civilization (the West) is destined for eternal rise and progress. The formula for progress has been found; the problem now is merely staying the course.

While cyclical theorists do have linear dimensions (they move up or they move down), it is the return to a previous stage—however modified—that does not allow for an unbridled theory of progress. In contrast, within the narrative of linear stages, linear theorists might postulate ups and downs of a lesser unit of analysis (for example, within human evolution or the evolution of capital, there might be the rise and fall of nations or firms or dynasties), but in general the larger pattern is progress. Humans might themselves have contradictions (for example, based on the Western good/evil pattern), but society marches on either through technology, capital accumulation, innovation, or the pull of God. Recent efforts such as general evolution theory now include information as the key variable that keeps evolution marching onwards. Of course, from the cyclical view, increased information does not lead to attempts to control the pattern of change, but *humility* in the face of the eternal cycle of history.

Linear thinkers are often seen as optimists (as with Herman Kahn) especially from the viewpoint of the centre civilization. In contrast, cyclical theories are seen as pessimistic by the elite of the centre nation. From the view of the individual, cyclical theorists are seen as disempowering, since structure and process prevail over agency. Transcendental theories are empowering in thay they inspire individuals to act, *but* they also lead to fatalism since all is in the hands of the transcendental.

Along with a theory of progress, linear perspectives include clear stages of ascension with even clearer theories of how to pull up the backward classes or leave them to die (as in Spencer). Cyclical theories of the future focus on structures that do not change or structures that keep on rising up. In this view, we cannot escape our history, we cannot escape the past, we cannot create our future.

Of course the basic question in terms of a theory of the future is: is it possible to have a model that combines linear (evolution and progress, the irreversibility of time) with cyclical (there is a season for everything, ancient ways are important, and the strong shall fall and the weak shall rise) along with a transcendental dimension (superagency, timeless time with teleology) that includes individual agency (humans create the future) *with* structure (the deep patterns of change, whether class, episteme, or gender that place limits on change)? Spiral theorists attempt to include both, having certain dimensions which move forwards and certain dimensions that repeat. This is the most difficult and certainly the most important dimension of developing theories of the future—continuity with change.

To have an adequate theory of a spiral shape of the future, one must have a theory of exploitation, to show, for example, as Sarkar does, how imperialistic warriors, cunning intellectuals and clever merchants have historically denied rights to females, peasants, and children.[46] Exploitation has occurred through the extraction of labour, ideas and wealth to the centre from the periphery.

But one must also have a theory of progress. Economic progress is critical albeit for the purpose of the third dimension—the mystical, the transcendental. Evolution can be based on struggle with the environment (the materialist position), struggle between ideas (the idealistic position) and the Attraction of the Great (the mystical position) or some mixture of all three.

But just as there is a role for structure, individuals also must play a role. Through struggle, it is individuals who can transform the cycle. The transcendental

can have numerous functions—it can be located in the state, thus serving to develop a God that plays favourites, or it can function as a consciousness that serves to liberate our minds from our own fixations. It creates a new way of knowing, love or devotion, that attempts to break the bonds of family, race and nation.

Most thinkers have remained at the individual level, forgetting class and gender relations, and have merely focused on individual enlightenment. Or they have only focused on structural dimensions forgetting the importance of individual efforts. Those who have had space for both structure and individual have missed the transcendental dimension, the spiritual aspect of humans. What is then needed is a multiple theory of time and space; efficient time, cyclical time, and spiritual timeless time, along with the possibility of *Kairos*, that is, the right time, the time, the moment in which there is a bifurcation of past and present and the world is made anew—in which individual and history join together to create the future.

The metaphors of time

Along with the shape of the future, the way time is constructed by different cosmologies is of central importance. Within the empirical perspective, time is the unexpressed variable that remains hidden, untouched and unexplained, like language, used to describe the real world but not appropriate for critical examination. *Time is considered as a universal outside language and culture.* But time *is* constructed differently by various cultures.

From the cultural view, time is constructed differently by various cultures and in historical epistemes. Traditional culture, to be sure, is based on the cycle. These are the seasons, the lunar cycle, and the lifecycle. For example, the traditional Chinese perspective of time is considered astronomical; for the classical Chinese thinker there is no recognizable date to human history. Heavenly and worldly time are interrelated. They are endless. By using the model of the stars, Chinese history easily lends itself to a science of society that is not distinct from a science of the stars or a science of the self. History that is based on the stars can never have any real beginning or end, for the stars appear eternal, continuously moving, forwards and backwards. Society too must follow this pattern: everything has its place and there is a place for everything. In this model, the *tao* is the unseen force that provides the cohesiveness for the natural and human universes. With the universe knowable, the task for the scholar is merely to fit history and future into this larger pattern.[47] In this regard, the Chinese view is closer to the empirical perspective. However, from the modern scientific perspective, the traditional Chinese view does not reflect the data, thus it is not true, indeed, merely elegant and ultimately useless.

Indian time also has a cosmic dimension consisting of *yugas* containing millions and millions of years. Besides the size of the numbers, cosmic time is distinct from historical time in that certain numbers have magical properties. Numbers participate in the real, they are not mere representations: they have an ontological existence. Thus from the classical worldview, time had to relate to consciousness and to the natural/social worlds since the entire universe was mathematically perfect. In this sense, the idea of the future meant something quite different from the modern idea of 'the future', as the site of change and innovation. Rather 'the future' was integrated into classical cosmology.

In the classical model of time, there is a degeneration of time from the golden

era, to the silver, to the copper, to the iron. Society degenerates with differentiation (as opposed to modernity wherein differentiation leads to evolution and progress) eventually resulting in the iron age of materialism. Time then decreases in value from the golden era characterized by unity and spiritual development to the iron age characterized by materialism, chaos and confusion. We begin with perfection and then degenerate.

But the degeneration does end. At the nadir of the dark iron age, the redeemer sets the world right and the golden era begins again, the cycle continues. Within this view, the goal is not transformation or conscious evolution but the search for a redeemer to end the darkness of the present, to recreate the perfection of the past. Few visions of futurists, however, focus on the return of the great leader, the redemption is gained through participation in the conscious evolution of society (or the creation of social and political structures to facilitate community values, as with the green view). Understanding the pattern in itself becomes the way out of the cycle of history. But in the traditional cyclical view, understanding only allows a nominal degree of manoeuvring, eventually, over time, there will be degeneration, such is the nature of the universe we live in. Of course, the *why* of degeneration differs.

One exemplary theory of decline comes from Ibn Khaldun.[48] For him there are four stages and four generations in which creativity degenerates into imitation, in which a family's or a civilization's fortunes fade. The first generation creates, the second produces by watching the first, the third produces merely through rote (as it does not have access to the original creator) and the fourth does nothing believing that wealth—inheritance—is owed to them. This generation decays, losing its wealth and creativity as it does not build strength and marketable skills. Thus, we should always expect culture to degenerate into custom over time and expect cultural revival to come from the periphery, from outside the official culture.

Similar to the seasonal/cyclical model is the biological and sexual model. In this view, the rise and fall of nations, dynasties and families can be related to the rise and fall of the phallus, the fundamental sexual event known to men and women. The phallic movement is dramatic and has a clear beginning and a clear end. However, men, it can be argued (using the linear model), prefer the first part of the cycle, the progressive linear phase, and perhaps imagine a utopia where the phallus never declines. The populist Muslim vision of heaven is a particular example. The historical empirical data suggest, however, that endless rise does not occur. In contrast, the female experience is wavelike with multiple motions. Time slows and expands. Instead of a rise and fall model, what emerges is an expansion/contraction model. This model can be used to describe Western cosmology.

Biological time can also be used to understand the future. Instead of using the Earth's resources for present generations, we should think of future generations, argue ecologists. Policy makers should base decisions on the needs of future outcomes, on the needs of future generations. Contemporary writers, in particular, use this metaphor. Culture, then, should be forward-looking not past-oriented, concerned with grandchildren, not with grandparents.

In contrast to these traditional cyclical views, modernity emphasizes quantitative, linear time. This is similar to the 'time as an arrow' metaphor. It can neither be repeated nor be reversed, otherwise we could remember the future. Instead of degeneration there is forward development. Time in this well researched model is largely reductionist with efficiency as the primary goal.

Time then has many perspectives. We list a few of these as divided by our earlier structure:

Predictive/linear:

(1) Quantitative (time as precious, something not to waste).
(2) Linear time (efficient, quantitative and scientific).
(3) Electric time (linear time of the city, reducing the night).
(4) Institutional time (the institutional power context by which an event is bounded).
(5) Generational time (saving the future for one's children).
(6) Leisure time (time as abundance).
(7) Bureaucratic time (scheduled but delayed).

Cultural/cyclical:

(8) Death (time as bounded by the awareness of death, running out of time).
(9) Lunar/solar time (day/night, menstrual cycle, full moon to new moon).
(10) Biological time (nine-month cycle).
(11) Sexual time (rise and fall, expansion and contraction).
(12) Geological time (stability, shocks then stability).
(13) Cosmic time (astronomical).
(14) Spiral time (return of the past but onward into the future).
(15) Spiritual time (no sense of individual consciousness, only a sense of the transcendent, or infinite).
(16) Cultural time (being on time, being late, norms of socially shared reality).
(17) Mythological time (fall of time from golden to silver, to copper to iron).
(18) Religious time (the birth and return of the Prophet, Messiah).
(19) Lifecycle (birth to death and for some rebirth).
(20) Sociological time (the societal patterns).

What time we live in is based on our assumptions of the nature of the world we believe exists and how we believe we know what this world is like. Any adequate theory of the future must be able to problematize time and negotiate the many meanings of time even as it might be committed to a particular construction of time. It must be able to 'time' the world in different ways. An ideal theory of the future, besides articulating a rich theory of time, must simultaneously be able to use predictive, interpretive and critical perspectives and have linear and cyclical, and thus spiral dimensions to it. It must also be able to find complementary roles for the individual, for structure and for the transcendental.

Conclusion

This article has attempted to articulate core theories of the future to aid in the development of an interpretive community. We have focused on three ways to frame the future and futures studies—the predictive/empirical, the interpretive/cultural and the critical/postmodern. We have examined different images of the future, primarily the image of the present continued, catastrophe, reversion to a stable past, and transformation. We have also examined the shape of the future primarily looking at linear, cyclical and spiral patterns of change. We have concluded where we began by elaborating the richness of time. We now return to our initial assertion—fixing a watch does not mean one understands time. We hope

that the above provides enough reasons why some of us do not wear a watch yet still yearn for the future.

Notes and references

1. David Harvey, *The Condition of Postmodernity* (Oxford, Basil Blackwell, 1989), page 47.
2. For an elaboration of this point see Zia Sardar, 'Colonizing the future: the 'other' dimension of futures studies', as well as my response 'Colluding and colliding with the Orientalists', both in *Futures, 25*(2), March 1993.
3. Dator is Professor of Political Science at the University of Hawaii. He is also outgoing President of the World Futures Studies Federation (WFSF) and previous secretary-general of the WFSF.
4. James Dator, e-mail transmission, 24 December 1992. Also see James Dator, 'Futures studies tomorrow—and today', *Futuribili*, forthcoming 1993.
5. *Ibid.*
6. *Ibid.*
7. *Ibid.*
8. Sardar, *op cit*, reference 2.
9. Sohail Inayatullah, 'Deconstructing and reconstructing the future: predictive, cultural and critical epistemologies', *Futures, 22*(2), 1990.
10. There has been more than one enlightenment!
11. See, for example, Acharya Rudreshananda Avadhuta, 'The new science of microvita', *New Renaissance, 3*(2), 1992, and 'Do microvita form sub-atomic particles', *New Renaissance, 3*(2), 1992. For more information contact: Microvita Research Institute, Weisenauer Weg 4, 6500 Mainz 42, Germany.
12. See Sohail Inayatulah, 'Oswald Spengler: the rise and fall of culture', in Johan Galtung and Sohail Inayatullah, *Macrohistory and Macrohistorians* (forthcoming).
13. David Spangler and William Irwin Thompson, *Reimagination of the World: A Critique of the New Age, Science and Popular Culture* (Santa Fe, NM, Bear and Company, 1992).
14. Of course one can develop a range of grey within this perspective—of stages, or of layers of reality consisting of magic, pre-rational, then rational-scientific and finally, post-rational or spiritual. See for example, Michael Towsey, *The Eternal Dance of Macrocosm* (Calcutta, Ananda Marga Publications, 1987), or the efforts of Ken Wilber.
15. Michael Shapiro, *Reading the Postmodern Polity* (Minneapolis, MN, University of Minnesota, 1992), page 123.
16. There is a variety of responses ranging from the social engineering perspective in which social perfection is still realizable to the liberal view in which individual perfection in the after-life is possible.
17. Foucault, in Harvey, *op cit*, reference 1, page 48.
18. I am indebted to Satish Seth for this observation.
19. Yeats, in Harvey, *op cit*, reference 1, page 11.
20. Quoted in *ibid*, page 21.
21. Rocco Buttiglione speaking for the Pope (*Baltimore Sun*, 9 September 1987), quoted in *ibid*, page 41.
22. Pitrim Sorokin, *Social and Cultural Dynamics* (Boston, MA, Porter Sargent, 1957).
23. Roy Amara, 'The futures field', *The Futurist*, February, April and June 1981.
24. Unfortunately, Ogilvy does not help develop the futures field (in any sense of the norms of academic engagement). Other works in this area—Harmon's, Markely's, Sardar's, Slaughter's, Bell's, Amara's—are not important in his interpretive swing. Moreover, the writers he does use to make his interpretive argument are entirely Western. In the end his essay reveals to us the problem with the cultural approach, that is, it can be culturally myopic, universalizing the particular as if other approaches did not exist: bad social science and bad futures studies. See James Ogilvy, 'Futures studies and the human sciences: the case for normative scenarios', *Futures Research Quarterly, 8*(2), 1992.
25. See Wendell Bell, 'Is the futures field an art form or can it become a science?', *Futures Research Quarterly, 3*(1), 1987, page 39.
26. See, for example, R. Slaughter, 'Probing beneath the surface: review of a decade's futures work', *Futures, 21*(5), 1989, pages 447–465. Also see the special issue entitled 'Islam and the Future' guest edited by Zia Sardar, *Futures, 23* (3), 1991.
27. See, for example, Ashis Nandy, *The Intimate Enemy* (New Delhi, Oxford University Press, 1983).
28. See, for example, Kaoru Yamaguchi, *Beyond Walras, Keynes and Marx—Synthesis in Economic Theory Towards a New Social Design* (New York, Peter Lang, 1988).
29. See, for example, Sohail Inayatullah, 'Rethinking science and society: Sarkar's reconstruction of science', *IFDA Dossier, 81*, April/June 1991.

30. See James Dator, 'The futures of cultures and cultures of the future', in Marsella *et al* (editors), *Perspectives on Cross Cultural Psychology* (New York, Academic Press, 1979). Also see the more recent, James Dator and Sharon Rodgers (editors), *Alternative Futures for the State Courts of 2020* (Chicago, IL, American Judicature Society, 1991).
31. Among others, the Institute for Alternative Futures, the Hawaii Futures Research Centre, articles in both *Futures* and *Futures Research Quarterly*. For a detailed analysis of scenarios, see Sharon Rodgers, 'Scenarios in planning and futures', paper submitted to the Department of Urban and Regional Planning, University of Hawaii, December 1992.
32. Richard A. Slaughter, *Futures Tools and Techniques*, (University of Lancaster, 1987).
33. William Irwin Thompson, *At the Edge of History* (New York, Harper and Row, 1971), page 78.
34. Walter Truett Anderson, *Reality Isn't What it Used to Be* (San Francisco, CA, Harper and Row Publishers, 1990), page 243.
35. Quoted in G. Challiand, *Revolution in the Third World* (New York, Viking Press, 1977), Preface by Immanuel Wallerstein.
36. This is Tony Judge's effort, see Union of International Associations, *Encyclopedia of World Problems and Human Potential* (Munich, Saur, 1986) and 'Metaphors as transdisciplinary vehicles of the future', paper prepared for the Conference on Science and Technology, Paris, December 1991.
37. Ashis Nandy, *Traditions, Tyranny, and Utopias* (Delhi, Oxford University Press, 1987), page 13.
38. *Ibid*, page 21.
39. Harvey, *op cit*, reference 1, page 63.
40. Rameshray Roy, R. B. J. Walker, and Richard Ashley, 'Dialogue: towards a critical social theory of international politics', *Alternatives*, January 1988, page 91.
41. *Ibid*, page 94. See also Richard Ashley, 'Living on borderlines: man, poststructuralism and war', in James Der Derian and Michael Shapiro (editors), *International/Intertextual Relations: Postmodern Readings of World Politics* (Lexington, MA, Lexington Books, 1989).
42. *Ibid*, page 95.
43. For an excellent discussion of the shape of futures, see Earl C. Joseph, 'Anticipatory sciences research: shape of alternative futures', *Futurics 3*(1), 1979, pages 81–86. But instead of a search for a general theory of the shape of the future, Joseph asks and answers the more practical question, 'Is there a set of (all) possible shapes of alternative futures to assist in developing our intuitive perceptions of the future', page 81.
44. For further elaboration, see Sohail Inayatullah, 'Linear, cyclical and transcendental theories of social change', *Cosmic Society*, May/June 1992, and *Situating Sarkar: Discourse, Structure and Future* (Calcutta, Ananda Marga Publications, 1993).
45. David Resnick and Norman Thomas, 'Cycling through American politics', *Polity*, Fall 1990, argue that the three basic shapes are linear, cyclical and chaotic. Taking a critical view of cycles themselves, they believe that too often the cycle exists in the eyes of the theorist not in the empirical world or that a cycle indeed exists but it exists for random factors. For them cyclical theories should be focused on the micro and probabalistic level and not on the macro level, which is far more dubious, and overly speculative.
46. P. R. Sarkar, *Prout in a Nutshell*, Vols 1–25 (Calcutta, AM Press, 1987–1993). In the West, see Ravi Batra, *The Downfall of Capitalism and Communism* (Dallas, TX, Venus Books, 1990).
47. This is classical historian Ssu-ma Chien's perspective. See Burton Watson, *Ssu-Ma Chien: Grand Historian of China* (New York, Columbia Press, 1958).
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