

THE SEDIMENTATION THEORY OF CULTURAL TIME AND
SPACE: THE PRESENT IS EMBEDDED IN THE PAST

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Abstract

Linear time is a metaphor based on the concept of Euclidean space (St. Clair, 2006). One of the difficulties associated with this concept of time is that although it incorporates change as movement from one steady-state to another, it cannot account for the process that motivates that change of time within the same cultural space. A more insightful model of temporal and spatial change can be found in the metaphor of the “Archeology of Knowledge” (Foucault, 1969). A modification of this metaphor can be found in the sedimentation theory of time in space which envisions time as the accumulation of social practices layered in cultural space. It is argued that the present is embedded in the cultural past. The dynamics of change in a cultural space occurs in the co-present, a place where the reconstructed past is linked with the co-present. It is in this co-present space that the social construction of cultural space takes place. Some events are retained and defined as belonging to the past and are designated as the old-

present; other events are modified, redefined, or restructured in the present and function as the new-present. It is this social and cultural habitus (Bourdieu, 1977, 1984) that explains how meanings are contextualized and interpreted within the co-present. Rather than viewing culture as a superorganic entity, a collective consciousness, existing outside of human experience, culture is considered to be a set of practices, habits, and recipes for daily interaction emerging from the experiences of everyday life. It is by using the past to make sense of the present that the social construction of culture comes into existence (Mehan and Wood, 1975). Such practices are internalized through daily interaction in the form of social scripts (St. Clair, Thomé-Williams, and Su, 2005) and other forms of structuration (Giddens, 1984). Cultural change involves the retaining of some cultural practices along with the modification, revision, and re-invention of events in the co-present. Just as the present is embedded in the past, the future is embedded in the present.

Key words: archeology of knowledge, cultural space, co-present, social script.

INTRODUCTION

Defining culture is a difficult task because it brings into play so many different perspectives and one of the greatest dynamics has to do with change. There are many models of change, but one of the most influential models of change can be found in the work of Thomas Kuhn (1964; 1971) In this work, he argued that theoretical models of physics undergo structural changes from normal science to revolutionary science. Although this model of change accounts for the motivation of change in the natural sciences, viz., problem solving, it does not meet provide much insight into other aspects of the phenomena of change, especially cultural change.

It is in the context of this model, that the concept of cultural emergence is investigated and discussed. It is argued that the present is constantly being socially constructed to make sense of a plethora of daily routines that constitutive the sociology of everyday life. These routines are integrated into the sociology of everyday life by individuals and this integration results in a sense of being centered and connected to the world. Many daily routines, however, are not integrated and left unresolved.

It is argued that in the context of the emerging-present (co-present), new levels of consciousness are raised and this leads to the creation of new perspectives and new forms of knowledge. This information is integrated into the emerging-present of those who share in these new experiences. When they are integrated into the daily experiences of individuals, they are also socially enforced by maintenance rituals and centered through meaning social interactions involving symbolic maintenance.

When the present is emerging into a new level of consciousness, it comes into conflict with many of the more established patterns of the past. These conflicts must be resolved. They are usually accommodated by redefining the past in order for it to make sense in the cultural present. The redefinition of the past is part of Kuhn's theory of scientific revolutions. After the new revolutionary science develops as the new reigning paradigm for a scientific community, the old patterns of thought are redefined in the context of this new framework. The past is re-presented into a new model of the present. It is taken out of its old context and placed into a new one. The result is a structured form of historical anachronism, a historical discontinuity.

Why is the study of cultural emergence important? It is important because cultural change is a constantly occurring phenomenon. The study of culture is not an established pronouncement of what happened in the past. It is not a body of knowledge that has been relegated to an analysis of a body of knowledge as defined by cultural experts. Culture is dynamic. It is changing and redefining itself from one generation to the next. It creates a new future (new-present) while redefining its past (old-present). This new future is a directional marker. It merely identifies the new forces that are taking place in the present and that will continue to take place in the future. In order to make a transition into this new future, the old past has to be redefined. It must be broken down and reorganized so that it can be understood in the cultural present (Miller and Bruenger, 2005).

In order to explain the nature of the cultural dynamics outlined above, there are several concepts that need to be introduced and developed within the context of cultural emergence. These concepts include the archeology of knowledge, the concept of representation, the structure of scientific revolutions, zones of proximal development, structuration, and the process of re-writing the past in order to make sense of the present.

EXPLAINING THE DYNAMICS OF CULTURAL CHANGE

The traditional way of explaining change can be found in linguistic structuralism. It is assumed within that framework that change occurs when one steady-state of knowledge is replaced by a new steady-state. Examples of this approach can be found in historical linguistics where a steady-state of the later past, Old English, developed into a steady-state of the more recent past, Middle English. This is followed by the steady-state of the present, Modern English (Lehman, 1962). How does the movement from one state to the other take place? The answer to this question is described *ex post facto* by describing the sound changes that took place within the transition from one steady-state to the other. These laws are presented as the reason for the changes that occurred. The problem with this account is that it omits a discussion of the many epistemic ruptures (Foucault, 1969) that motivated those changes.

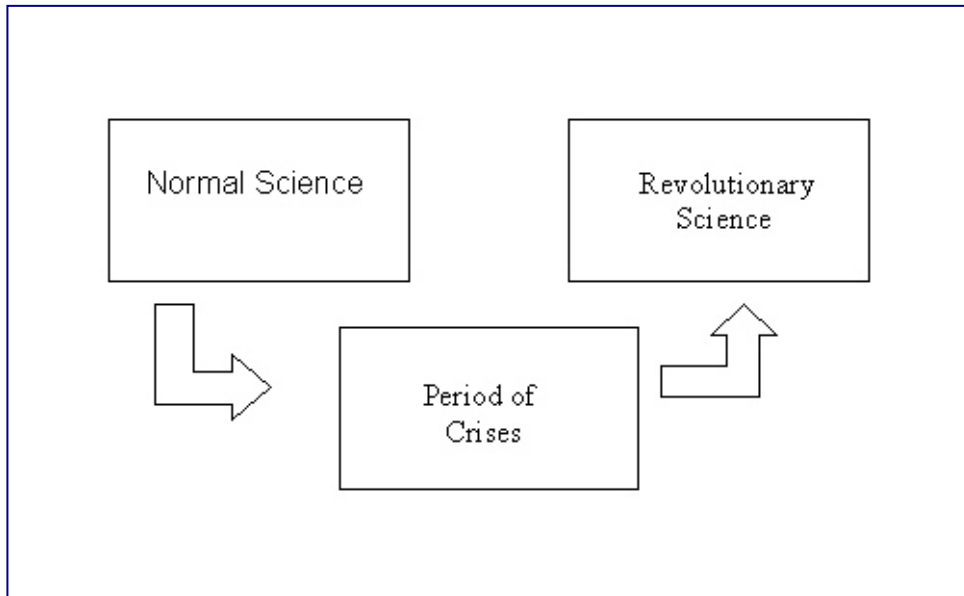
As noted earlier, Kuhn (1974) developed a theory of scientific revolutions within the natural sciences. Once again, his model of change is based on paradigm shifts from one steady-state (normal science) to another (revolutionary science). Kuhn argues that problem solving is the rationale for scientific change. When certain anomalies occur within a scientific discipline, this prompts the scientific community to engage in a quest to resolve those problems. There is a period of open discussion and debate (a period of crises) followed by the discovery of a workable solution in which a new paradigm emerges (period of scientific revolution). Within the historiography of the discipline, these transitions are seen as scientific events and are treated as historical discontinuities. Foucault (1969) considered these periods of events to be distortions of the historical record.

Within the humanities, models of structural change are not met with favor. There are several reasons for this. Although scientific paradigms may go unchanged for decades, events within modern culture are undergoing rapid change. The cultural present is immersed in a wide range of social, economic, and technical changes. The old method of defining a culture by containing it within the borders of a nation-state no longer holds. Modern technology has enabled cultural events to readily transcend national borders. Many modern cultures are involved in the process of global exchange and this has resulted in complex patterns of cultural hybridity (Nederveen Pieterse, 2004). Not only are cultural patterns and belief systems exchanged, borrowed, or

incorporated within each nation-state, but large masses of individuals have entered into an economic diaspora where they live and work in other countries as expatriates. Hence, culture can no longer be envisioned as a steady-state phenomenon. It is far more dynamic. It is constantly being redefined by a plethora of social and cultural forces. The forces of modernization have transcended local borders (Wallerstein, 2005). All countries are either engaged in or influenced by a Capitalist World-economic system (Wallerstein, 1977; 1980; 1989).

THE STRUCTURE OF CHANGE IN THE NATURAL SCIENCES

Perhaps one of the most insightful models of change can be found in the work of Thomas Kuhn (1962), a historiographer of the natural sciences. He drew on the philosophical models of Norwood Hanson (1958) in constructing his theory of scientific revolutions. Science advances, as Kuhn noted, not by the mere accretion of knowledge, but through scientific revolutions. He differed from most previous historiographers by arguing that scientists do not add new knowledge to old knowledge, as has been so often claimed, but they create and define progress by replacing old models within their respective disciplines with new ones. He labels the old model as Normal Science, the established model of the scientific community. Normal science is the epistemological framework or the paradigm (Kuhn, 1972: 6) underlying a discipline. But, normal science does not last forever and with the transition of time, certain anomalies eventually begin to appear in this supposedly stable framework of knowledge. In some cases, definitions no longer work; in other situations, experiments fail or internal inconsistencies arise. At first, these anomalies are denied. They are seen as oddities, exceptions to the rule. But, as these anomalies continue to mount a threshold is crossed and the scientific community begins to lose faith in their root established world views. What follows is a period of crises, an attempt to resuscitate a paradigm failure, whereby scientists actively search for a new paradigm to replace the old model that no longer serves their needs of problem solving. When this occurs, a new paradigm emerges. Kuhn refers to the newer model or paradigm as revolutionary science.



Normal Science has the properties of a closed system. It is something that represents tradition and is treated as a sacred domain that must be protected against change. When new ideas are presented by fellow scientists to the editors of established journals, their ideas are also rejected. Thus funding for any new projects that do not fit into the established model of normal science is also rejected. Change begins with the transition from normal science to a period of crises. This is a time when those who are the beholders of normal science begin to admit that problems do exist with their beloved paradigm. They note that experiments do not turn out in the same way that the theory predicted. They realize that contradictions exist between different parts of their system of thought. It is at this point that the scientific community begins to loosen its belief in the system. They voice their opposition to the model and document the many anomalies inherent in the model. This period of unrest gives rise to a period of crises. At this time, many different ideas are presented as possible solutions to the problems that they have encountered in the traditional model. Academic journals begin to accept innovative articles and tolerate suggested changes in the traditional paradigm. Funding agencies begin to accept projects that promise a resolution to the problems encountered in the traditional model of normal science. It is a time of open discussion and intellectual debate. Out of these many proposed models of change, one of them will rise above the others and present itself as the new revolutionary science. The victor establishes its headquarters as the new revolutionary science. It gathers members of the new scientific community around its new command post and launches an attack on the old normal

science. The new paradigm uses the old one as a way of elevating itself above the crowd of competitors. It proclaims that there are only two things wrong with the old normal science: everything it said and everything that it did. The new paradigm then goes on to redefine the past in terms of its newer theoretical model of science. They do not describe what happened in a larger historical sense but account for how things changed within the context of their own theoretical pursuits. After a period of time, the new revolutionary science becomes the reigning paradigm. It develops into an established model and becomes the new normal science. This transition is not a circular one, but a spiral transition. Each normal science is different from those in the past. Each has gone through a different trajectory. Each has defined its own battlefield and emerged as champions of their own scientific beliefs. Each has had its own model and theory and battlefield of accomplishments. Such is the nature of scientific progress.

What is missing from Kuhn's theory is the fact that there is more than problem solving involved in the transition from the past to present and its enfolding into the future. Normal Science and Revolutionary Science are both treated as static models of thought. Normal science presents the problem; the period of crises investigates the problem; and revolutionary science solves the problem. Kuhn was concerned with problem solving within a discipline and consequently he did not investigate other kinds of factors that took place during this transition. He assumed that this change was only due to problem solving among scientists. This, it can be argued, is the motivation for change within a scientific paradigm. Hence, within the current framework of the natural sciences, it is an admirable theoretical construct. A more detailed analysis of his approach to change can be found in his book on the Copernican Revolution (Kuhn, 1971). It is important to note that in both of his expositions on the historiography of science, he argued that a small group of pioneering scientists were motivated to change the existing paradigm and raised many issues relating to current paradigm. These pioneering scientists were the *avant-garde* of those who finally led the charge for change during the period of crises. They were the agents of change. These investigators were motivated by a quest for a paradigm change. They were ahead of their time and encountered many problems with the models that they were working with. Kuhn (1971) has provided insight into what motivates a paradigm change, but other factors need to be addressed. There are other structures operating within this period of crises and these

will be discussed under the topic of structuration (Giddens, 1974; 1981; 1984). It is now time to address Kuhn's model of scientific revolutions from a different perspective.

METAPHORICAL MODELS OF EPISTEMIC CHANGE

Most systems of thought are self-contained models. They present a view of the world from a certain perspective (Brown, 1977) and they systematically exclude alternative mentalities. Richard Brown (1977, chapter 4), a sociological theorist, argues that this fact simply reiterates his claim that all models of knowledge are metaphorical, and he also advocates the view that the sciences are metaphorical constructs and have more in common with literary fiction than was previously thought? But how can one argue that theoretical models are merely metaphors? The answer to this, Brown (1977, 1987) notes can be readily found in the concept of the metaphor itself. A metaphor is, after all, the seeing of something from a certain point of view. It is a frame of vision. And since models of science are simply ways of seeing a body of knowledge from a certain viewpoint or theoretical frameworks, these models are consequently metaphorical in nature. As a matter of fact, Brown argues, all knowledge is perspectival. What this means, in essence, is that all knowledge is also metaphorical.

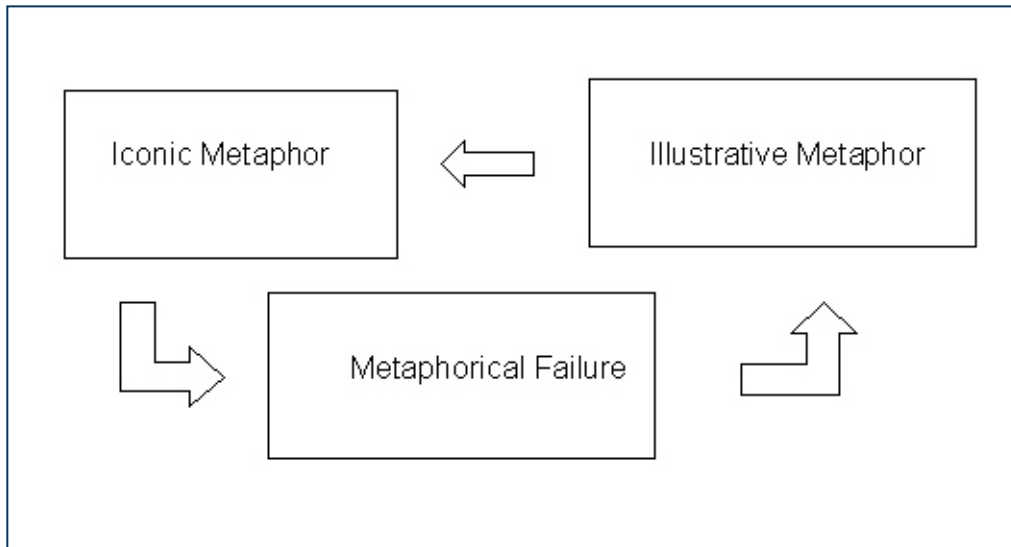
Metaphors provide the key to model building. They begin within a discipline as illustrative devices. Through the use of a new term or lexical connotation, the framework of the old system is shifted or transferred to a new perspective or context. When physicists, for example, used the idea of the solar system as the basis for their new model of the atom (Jones, 1982), they were using an illustrative metaphor. The new model (the concept of the atom) was based on an analogy to another model (the concept of the solar system). Once scientists accepted this new perspective and its corresponding figures of speech, they continued to elaborate on the details thereby expanding their knowledge base. The result of this additive process is the eventual arrival of an iconic model. As the details within this new system continue to proliferate, the remaining options for exploratory research are greatly attenuated. At this stage, argues Brown (1977), the illustrative metaphor has become an iconic metaphor. Some metaphors are so well accepted that with the passage of time they become entrenched within their own cultural framework as tacit knowledge. Consequently they provide a fundamental image

of the world, a *Zeitgeist*. In other words, the iconic metaphor associated with Normal Science becomes a root metaphor (Brown, 1977: 78). Within his own field of sociology, Brown argues that there are five principal or root metaphors that constitute his discipline:

Society seen as an organism,
Society seen as a machine,
Society seen as a social drama,
Society viewed as a game, and
Social conduct seen as language behavior.

In a later work, *Society as Text*, Brown (1987) expands on his idea of social metaphors and describes how social discourse is rhetorical in nature, and how discord in society results from opposing models or conflicting metaphors of society. This approach to sociology has certain relevant consequences for an understanding of the role of metaphor across cultures. Cultures differ, it can be argued, because they embody different root metaphors (St. Clair, 2002). These cultural paradigms have become so embedded within the social history of a citizenry, that it provides not only a background of tacit knowledge, a root metaphor underlying all systems of belief, but also a plethora of social scripts or role behaviors on how to perform in public. But there is another important contribution that Brown provides through his model of metaphorical knowledge, viz., his understanding of scientific revolutions as metaphorical shifts, and the implications that these shifts constitute in the transition from dialectics to rhetoric.

Richard Brown (1977: chapter 4) has interesting implications for the reinterpretation of Kuhn's model of scientific revolutions. What Kuhn saw as normal science, can now be seen as an iconic metaphor; and what Kuhn discussed as the paradigm of revolutionary science, can now be viewed as an illustrative metaphor. Furthermore, the period of crises between these two paradigms or epistemological metaphors, is nothing more than a transition or the metaphorical failure of the iconic metaphor.



In arguing that society is a text, Brown is making a postmodern statement that science is fiction. The distinction between the arts and the sciences is blurred. Both are creative acts in which new mentalities are constructed in order to overcome the epistemic disparities of the past.

In claiming that science is fiction, Brown (1987) is also arguing that society is a text. What kind of text is it? Does it have agency? Who is the author? In theocracies and in monarchies, the author is usually clearly defined by the dictates of a ruler. What about representative governments? This is where bureaucracies and elected officials create the conditions for emergence of new social structures. In this case, agency is not so clearly defined.

The more interesting aspect of the society as a text module can be found in reader response theory (Fish, 1972). How is the text being interpreted? In Kuhn's model of the scientific community (Hagstrom, 1965), the practitioners were socialized to follow a particular paradigm. It was a part of their academic training. Can one argue that the citizenry of a country is also socialized to follow an ideology and adhere to a united interpretation of civic laws? Such a claim is doubtful, even within a dictatorship (Cosser, 2002). One can infer from these arguments that the concept of society as a text would have many different interpretations among its readers. It is for this reason that reader response theory is a postmodern construct. Whereas Kuhn represented a view more consistent with the highly organized systems associated with modernism, Brown provides a framework that is concomitant with postmodern models of cultural change.

POSTMODERNISM AND CULTURAL CHANGE

It is not surprising that many academics began to doubt the modernist enterprise. They were overwhelmed by the changes that they encountered on a daily basis. They had difficulty in making sense of the present. These changes are so rapid that society has not yet been able to develop solutions for them. The belief structures that enabled modernism to survive no longer provided acceptable answers for them. Consequently, they have rejected the past. For example, they rejected the tenets of the Enlightenment with its belief in a stable, coherent, knowable self that operates through reasons. Consequently, they rejected science and had doubts about the supremacy of reason, progress, and the concept of Absolute Truth (Rorty, 1991). They no longer held to the belief that reason is the ultimate judge of what is true. In other words, they considered that the worldview fostered through Modernism (and by the Western humanist tradition) was flawed, corrupt, and oppressive. Some modernists are destructive (Derrida, 1976) in that they seek to overcome the modernist worldview by “deconstructing” the ideas and values contained within these writings. Their efforts are not meant to just reveal the constituent parts and the fundamental assumptions fostered by such document, but they want to undermine the frame of reference and the assumptions upon which they are based. Other postmodernists are constructive in that they do not reject modernism per se. They seek to revise its premises and traditional concept. It is in this latter view of constructive postmodernism that this investigation is framed.

The focus of this constructive venture has to do with the nature of change and the complexity of culture. Modernism had to do with the belief in steady-states that are either in equilibrium or near equilibrium. The postmodern world does not address the nature of steady-state systems. It is concerned with the dynamics of change and the nature of this change is closer to the behavior of non-linear systems. It is about change in a cultural flux. The late Ilya Prigogine (1997) and colleague (Prigogine and Stenger, 1983, 1997) addressed these kinds of concerns in his study “dissipative structures.” He noted that from one perspective such structures contained order and structure and from another perspective they were unordered and in chaos. His concern was in how a steady-state or a system in equilibrium dissipated and then reorganized itself into a new steady-state. How does order emerge out of chaos? When the old system began to break

up, the process was irreversible. One cannot return to the older steady-state system. That which constituted order turned into chaos. Hence, the appeared as though there was no order when this dissipation occurred. However, Prigogine and Stenger (1983) argue that there was order in the flux of change and it will eventually emerge as a new system in equilibrium. It can be argued that postmodernism is the quest for a new order within a state of dissipation. Postmodernists are trying to make sense of the chaos. They are beginning to see the signs of the new system and this is what they are writing about. Because of the novelty of change, such systems are difficult to express. This difficulty has been interpreted by some as a kind of nihilism, but it is not. The theory of the sedimentation theory of cultural space is presented within this context. It is a theory of cultural change that is trying to find a new order in the flux of cultural change.

THE POSTMODERN APPROACH TO CULTURAL CHANGE

In a series of insightful articles, Miller and Bruenger have discussed similar views of cultural change under the rubric of viral culture. They have expanded their research on viral communication theory far beyond the work of Lippman and his colleagues (Lippman and Reed, 2003; Lippman and Pentland, 2004). These MIT researchers are interested in how modern communication systems function without central control and move intelligence to the end user. They studied these networks in terms of their “viral architecture.” It should be noted that the term “viral” was adapted from biology for use in marketing, computer technology, and the social sciences. Just as a virus in a biological environment can replicate and become diffused within a system, it is argued that informational objects and processes can also expand within communication networks. Lippman and Pentland (2003) considered viral communication to be a consequence of economic, social, and technical forces within communication networks. Lippman and his colleagues have noted that such systems create the potential to embed communications into the sociology of everyday life. They have discussed the fact that this phenomenon has expanded greatly within modern society. They have also argued that these new forms of connectivity facilitate the formation of new social behaviors. Although viral communication research may have begun with marketing and computer technology but it no longer remains there.

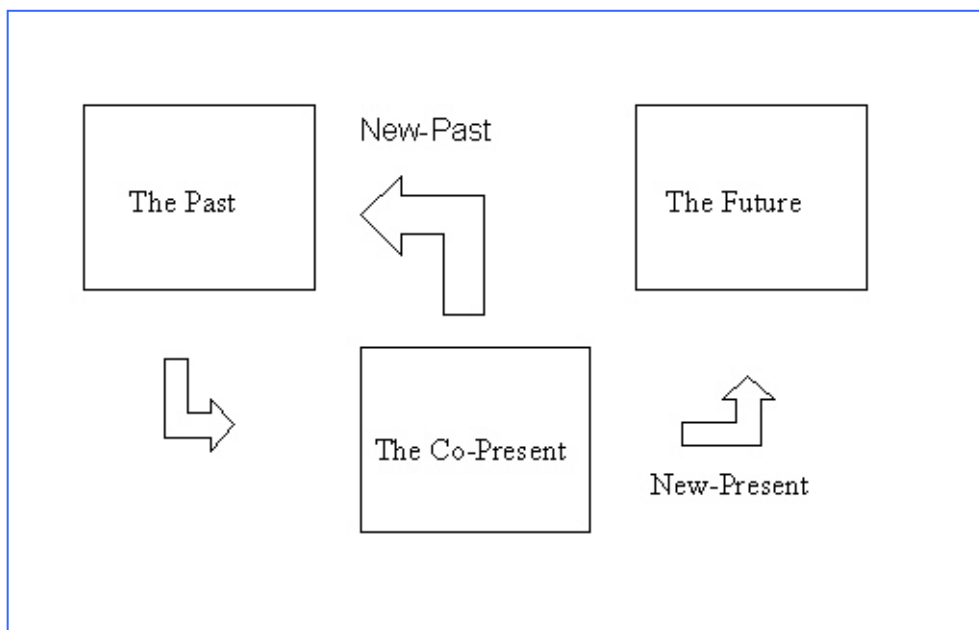
In a postmodern society, the use of viral communications has shifted. What Miller and Bruenger (2005, 2006) have done is to expand social aspects of how viral communication systems operate with a postmodern society. For example, the role of agency has shifted from one of vertical control to the horizontal transmission of information of the same generation. With the advent of these new forms of computer-mediated technology, they have also become producers of knowledge within the new viral culture. In essence, societies bend and weave technology to their own uses. It creates its own social fabric. These new mediated networks are no longer locally restricted and participate in various forms of global communication. Most importantly, viral communication is no longer associated with what people buy. It is what people do. It has become the way in which people experience life. There is a new kind of social and cultural habitus associated with this new virtual culture. The forms of social and cultural capital have changed. As Bourdieu (1986: 241-258) has noted, capital takes time to accumulate and reproduce itself. However, such is not the case with viral capital. Miller and Bruenger (2005: 8) have noted, within viral networks viral capital accumulates and reproduces very quickly. It is an infectious cultural process. Furthermore, in a postmodern media-driven society, the market economy has had a commodifying process. As Debord (1995) notes, it has become a “society of the spectacle.” Baudrillard (1995) argues that it is a society immersed in a continuous stream of simulated experiences, simulacra.

Where does this reinterpretation of viral communication occur? Cultural change occurs in the co-present. It uses the layers of the past in order to understand the present. It is in the co-present that generational differences in culture occur. Parents tend to accept more of the past in formulating it as the new-past. Their offspring, however, have a different focus. They tend to live more in the co-present. They tend to reject, redefine, or modify the past and are more concerned with creating a new-present. One of the forces that dominates their social construction of reality comes from making the simulated experiences around them (simulacra) their new-present.

EMERGENT STRUCTURES

How do new structures emerge from within a steady-state model? For example, how did emergent structures arise from normal science within a scientific discipline? These mechanisms of change occur within the period of crises. What is important about

the transition from normal science to revolutionary science is the fact that new structures emerge from the process of one paradigm shift to another. These structures are either a recombination of old structures or a re-presentation of old structures. This means that the past never dies. It can and does undergo one of several changes; while undergoing these changes, the past embedded within a new context where it is restructured, re-presented, or reinvented. This means that after the new paradigm of revolutionary science is established, the older form of normal science was rewritten from the perspective of the new paradigm. This is not a radical phenomenon. Scientific textbooks also revise history and present information from the perspective of the new paradigm (Kuhn, 1962). The old structures undergo a transformation. They are elements of an embedded past that are reconstructed into a new component within the newer paradigm. Once these redefined units are introduced into the realm of revolutionary science, they come to designate a different level of consciousness within the present. They become part of the new-present.



The co-present contains the habitus of the past and the “emergent structures” of the future. The co-present is where the phenomenon of change takes place. It is where the older structures are re-presented into new entities, the new-past and the new-present. Why does the past need to be restructured into different entities? It is because the contexts characteristically associated with the past have changed. When the present is embedded within the past, it brings into play new connotations and new associations

that have to do with the co-present. The past has be re-contextualized. These re-presentations are important when they have been connected in a different way with the newly deposited layer of the co-present. In this case they are associated the context of a new level of consciousness. In the process of creating a co-present reality of structures within a paradigmatic shift, these re-presentations of the past may undergo further change. They are either brought into the co-present as an unmodified structure (the past) and remain within the habitus of the co-present realm or they are endowed with a heightened level of change that its presence demands that the past be redefined (the new-past).

The past	This is the past that belongs to an older paradigm. It is the past that is associated with what happened before it was brought into contact with the co-present. It is also the past associated with the unconsciousness
The old-past	The past is taken out of one context and placed into another. The new context is the co-present. It is where the past is re-evaluated in terms of the present.
The new-present	When the old-past is restructured, redefined, or reinvented, it becomes a part of the new present. Sometimes new vocabularies are created to reflect these changes, but often they are not. The old worlds are used with the new meanings resulting in polysemy.
The co-present	This is where change takes place within the consciousness of the presence of everyday life. This is where the events of the past and the present collide. The retaining of old events in the present is the old-past. The revision of the past (restructuring, redefining, or reinventing) results in the new-present
The new-original	Within sedimentation theory, a new layer of practices may develop into a newer stratum of cultural space over the older strata. This new layer provides the basis for replacing older concepts, objects, and events with newer ones. They become the new-originals. The painting of Mona Lisa is the original; the replica or simulacrum of the painting in popular culture becomes the new-original. It is the new-original because the newer generation within the co-present is not aware of the historiography of that object n the past and the new-past.

The fact that the past is always undergoing redefinition raises an important question for scientific research. What is the past? This is the question that Foucault (1969) sought to address. Why are such vagrant examples of historical anachronism allowed within a scientific enterprise? Why are historical discontinuities created in the historiography of a discipline? Can historical accounts of the past really be trusted? Do they have authenticity? Are primary sources just reconstructions of other allegedly primary sources? These are the kinds of questions being asked by postmodernists. With regard to culture, the co-present may contain a wide variety of cultural artifacts. Some of these exist within the realm of consciousness for experts and specialists as domains of knowledge, but how are they understood by others? Outside of the cultural sciences are non-specialists really aware of cultural theory? Can they articulate what constitutes culture? Is culture defined by what they do? Are nonverbal social scripts also a part of culture? If culture is to have permanence, it has to be a part of the past? The problem is whose version of the past? Whose version of the co-present defines the past? For many, the past is associated with new-origins. The co-present is where the past is ending and the future is beginning. It is a place of transition. It is world in flux.

THE METAPHOR OF THE ARCHEOLOGY OF KNOWLEDGE

The theory proposed in this essay is based on the metaphor of the archeology of knowledge in which Foucault (1969) envisioned knowledge in the form of layers that have been deposited within a certain space over time. Some of the layers are clearly identified because similar kinds of events took place over a period of time; other layers are rather amorphous and suggest that events within that stratum were in transition. Foucault suggested that the various layers of the past become accessible to archeologists during major earthquakes. In this situation, the various layers are separated and one of the faces of the layers are uplifted and made visible to researchers. The past becomes visible in the present. Within the framework of historical knowledge, the past can be made visible by means of a tumultuous event which he called “epistemic ruptures.” Such ruptures can be readily identified as historical events: the plague, world wars, territorial invasions and settlements, etc.

The theory of the stratification of time and space is based on the metaphor of the archeology of knowledge. However, whereas the archeology of knowledge was used to

explain major historical events and their epistemic ruptures, the stratification of time and space is used to account for the modern world with its rapid modernization and its extensive globalization of culture. A new layer of culture is being imposed on the co-presence of those living in the modern world. Alvin Toffler (1970) referred to this barrage of new concepts and images as “future shock.” He went on to refer to these mass changes in terms of waves of change (Toffler, 1980). The First Wave was the society after the agrarian revolution. This change took place during the Neolithic Revolution over 10,000 years ago when the people of that time made a transition from hunters and gatherers to agriculture. With these changes came a high population density, the organization of a hierarchical society, the development of standing armies, trading economies and the quest for human beings to control nature. The Second Wave is more recent. It has to do with the industrial revolution in which the focus is on the mass production and consumption of goods, and the use of mass media. With these changes there was a shift from the extended family to the nuclear family and the rule of corporate power in the form of a bureaucracy based on standardization, centralization of populations, the concentration of power, and a system of mass education. For Toffler, the Third Wave can be found in post-industrial society. In this new wave, one finds diverse lifestyles, fluid organizations that adapt quickly to changes and the shift from the economic value of industrial products to information as a value construct. The Third Wave is the Information Age. Using the stratification model of Foucault (1969), one could argue that the older strata of the First Wave of agricultural culture was inundated by the Second Wave of industrialized culture and is currently being flooded by the events surrounding the Information Age. After a flood, the possessions of that age settle in the form of sediment. Each layer marks its place in time and space. Those areas of the landscape that are above the flood plain undergo little change; those areas below the flood plain are devastated by change. In the age of globalization, societies all over the world are flooded with a plethora of images from mass media. They are bombarded with new cultural artifacts from all parts of the world. How does one explain how all of these disparate societies remain culturally different while undergoing modernization?

What is interesting about this model of time and space is that in the modern context of globalization cultures adapt their views of time and space by adding a new cultural layer of the co-present. Globalization can be seen as a flood of images, artifacts, and events on the cultural space of the landscape. It leaves behind a new layer of

sediment that becomes part of the new-present. Not all territories experience the flood of simulacra in the same way. Some territories remain above the flood line. Others learn to control flood damage by washing off the newly deposited layers of cultural space. However, regardless of how this new flood of mass marketing is dealt with, all topographies are involved in dealing with the constant flood of information. Even though cities are modernized, they differ from each other because of their cultural pasts. São Paulo, Brazil, for example, differs in many ways from Rio de Janeiro. Both are modernized but they exhibit different cultural spaces. This is because of the differences in their historical past. Each city has dealt with the cultural past in a different way. Rio de Janeiro affirms the past while São Paulo affirms the new-present and lives for the future (the new-originals).

For those who leave their cultural space and move into a new intercultural context, their past is transported and recreated as a new cultural space in which other members of their diaspora reside and imbue themselves with symbols of the cultural past. They want to look out on the landscape of their host country and see residue of their old cultural space. They do this by reconstructing their past within the context of new co-present world. Of course, the past is never fully reconstructed because it is immersed in foreign soil and greatly influenced by it. The result is a hybrid culture which varies in accordance to their dominant and recessive traits (Nederveen Pieterse, 2004).

In the case of colonialism, the process is different. The colonizers know that they are in foreign territory but they want to bring their own cultural space into this new land and try to make the local indigenous groups a subpart of their own cultural framework. They do this by controlling the managerial elite (Karier, Spring and Violas, 1973) and by establishing a new system of colonial laws and education. The aim of this approach to cultural change is to replace the top soil with new earth. In the process of following the laws of the colonizers and in learning about their culture, the new-present will become the new-original. The indigenous groups will take the language and the culture of the colonizers as their own. Their history will be replaced by a new cultural space. In many cases, this process is irreversible.

THE CONCEPT OF RE-PRESENTATION

The concept of re-presentation plays a major role in this investigation. Hence, it merits further commentary. Perhaps a clue into how symbolic systems are reconstructed

can be found in the work of Michel Foucault (1966, 1969). Foucault noticed that the Renaissance brought about a new way of seeing reality. Earlier, artists and scholars were content to imitate nature, but with the Renaissance one began to re-present knowledge into another symbolic system. Things happen, they are present. People relate what happened by re-presenting them in the form of another code system. At some point, a cognitive shift took place. The real events were not as important as their re-presentations. The re-presentations become the new-originals

PRESENT	RE-PRESENT	NEW-ORIGINALS
The event occurs in the present. It is coded through language. The code is not neutral. It has a value structure	The event is re-presented. The meaning of the event has been changed in its re-presentation. It is re-coded. The new code has a different value structure	The cognitive shift occurs when one assumes that the new re-presentation stands for what was originally present. It does not stand for the original. The new re-presentation has shifted its meaning. It now has to do with a different meaning and a different value structure. It has become the new-original

The present contains replicas of the past but these replicas have undergone certain changes. They have represented the past from the perspective of the present. They have re-presented the past. It contains meanings of both the past and the present. When the meanings of the past are dominated by the meanings of the present, the meaning of the old-original is replaced by the meaning of the new-original.

What is happening in this re-coding of information? The present is embedded within the past. It co-exists with the past because the past emerges into the present. It is that part of the habitus that continues to exist into the consciousness of the present. Is one conscious of this past? Yes, there are parts of the past that define and articulate the consciousness of the present. The present, however, involves much more than the habitus of the past. It involves a growing consciousness of events that are taking place in the co-present and these forms of emerging consciousness sometimes reaffirms the past and at other times it makes one aware of conflicts that exist between values and feelings associated with the past and how they challenge or call into question other feelings associated with the consciousness of the present. The code that constitutes

language is not neutral. It is embedded with within the past. Language is value-laden. All symbols are value-laden. They are culturally articulated. When one is aware of new values and new levels of consciousness in the present, those moments of awareness come to play a part in redefining the present. What was present is re-presented as something new. This new idea is connected both the present and the emerging future. The idea that was changed was connected to the past and the present. Once the original occurrence has been changed, it becomes part of the new-present and the emerging future.

Foucault (1982) was quick to point out how people believe in symbols and consider them to be a new kind of reality. In one of his books, *This is not a pipe*, Foucault has a picture of a pipe and above it is the French, *Ceci n'est pas une pipe*. He knows that many will look at the picture of the pipe and immediately challenge the caption, "This is not a pipe." This is exactly his point; the picture is just a representation of the real thing.

Foucault (1969) has made a major contribution to historical knowledge with his discovery of the changes in cognition that took place during the Middle Ages. He cites the beginning of this new epistemological framework in his discussion of *Las Meninas*, a painting by Velasquez. In the original scene, the king and queen are sitting before the painter. They are present in front of him. In the re-presentation, they are show in miniature in the reflection of a mirror at the back of the room. The painter should not be in the painting, yet he can be found there looking at a young girl. He has re-presented himself into the center of the painting as a significant figure. The young girl is the new queen of Spain; she is the re-presented in the painting by the artist. He was supposed to focus on the older monarchs, the king and queen, but he used the painting to make a political statement. She is shown in the rays of light streaming into the room. He has cloaked her in a mystical light as though her positioned is sanctioned from above. Furthermore, she is shown as one who is protected by her servants and guardians. In that work of art, the persons being painted are not seen directly. One sees the artist and all of the others who are witnessing the painting. The subjects of the painting, the King and Queen, are only seen indirectly as reflections on distant mirrors. The symbolism of this painting is about the world of representation. Foucault was very concerned with false consciousness and this is evident in his analysis of the painting by Velasquez.

What was present before the artists was re-presented. The original meaning of the scene was changed. The event was re-presented.

He is also concerned with historical truth as are all other members of the *Annales d'histoire économique et sociale*. This organization was founded by Marc Bloch and Lucien Febvre in 1928. Its main innovation was to shift its focus on writing about historical problems. The movement was also defined as a form of structural situationism. What this meant was the historians in this school criticized the positivist school of history. The latter is associated with the investigation of historical events from a political and military point of view. The founding fathers of the Annales School differed from the positivist school in several ways. They are mainly comprised of economic historians who rebelled against traditional historians' who constantly wrote about political idols. They felt that the positivist school had an obsession with great men. The Annales School launched a method of investigation. They were concerned with the context of the situation as it occurred in the past. This new method was to find fertile soil in French radical thought because it freed history from its subjugation to philosophy (Foucault, 1971).

Prior to discussing the nature of emergent structures, it is important to first discuss some of the components that constitute sedimentation theory. These include the concept of Zones of Proximal Development (ZPD) and relate them to the concept of structuration (Giddens, 1984).

CONSTRUCTING A SEDIMENTATION THEORY OF CULTURE

There are several viable concepts that come together to constitute a model of cultural change. One of them is the concept of re-presentation that Foucault (1966) introduced in *The Order of Things*. He noted that the Middle Ages went through a time when the old idea of imitating nature was replaced by one in which the events of the present were re-presented and this meant that they were cast in a different code and possessed different social and cultural values. The way in which people think changed during this period of time. Instead of seeing art as copies of an original, the originals were re-presented and made into new entities. In this sedimentation theory, these new entities are called the new-originals. These developments occur within the co-present in the framework of a "contextualized emergence" in which some elements of the past are retained while others are modified or replaced with newer concepts. In terms of

Foucault's sedimentation model of time, the layer of the present is placed onto the previous layer of the past. Hence, the present is embedded into the past. Those aspects of the past that undergo change come to represent the newest layer of sedimentation, the new-present or the makings of the future.

The implications of this investigation is that language is used to re-present the social construction of reality and in doing so it redefines the past in terms of the relevancy of the present. As Kuhn (1964) noted in his model of the Structure of Scientific Revolutions, the past is rewritten to reflect the new paradigm. This phenomenon is not limited to the natural sciences but is endemic in daily social interaction involving language. The idea that scientific revolutions lead to new paradigms and new models of normal science is what Foucault (1969) sees as historical discontinuities. These models of the emergence of new knowledge frameworks is the by product of a process that begins with the anomalies discovered in normal science, the attempts to correct them during the period of crisis, and the successful implementation of a new scientific paradigm during the period of scientific revolution. This is how natural and social scientists argue for a model of change. What they are revising and reconstructing is a system of thought, an old paradigm is replaced with a new one. This is the situation presented by Vygotsky in his model of the social mind.

VYGOTSKY AND THE SOCIAL MIND

In order to better understand what Vygotsky meant by his model of the social mind, it is necessary to return to some of the avatars that influenced his work. One of them was Karl Marx (1973) was a student of philosophy under G. W. F. Hegel. Students of philosophy are familiar Hegel. He was an idealist. He believed that historical changes were motivated by ideas. Marx did not concur with his teacher and argued that history changed because of material factors such the need for sustenance, conflicts between social classes, and other forms of human interaction in daily life. Marx wanted to oppose the idealism of his teacher and in its place he created a new concept, materialism. This claim by Marx of materialism as the force that motivated historical change was revolutionary at the time. Marx not only introduced a materialist view of history, but he also incorporated it into his model of human consciousness. He did this by introducing the concept of everyday activity into his theory of cognition. This was a profound concept. It argued that human practice is the basis for human cognition.

Cognition does not exist outside of the process of being-in-the-world and interacting with it. What one does determines how one thinks about life. Marx wanted to focus on actual individuals, what they do, and how the material conditions in life determine their own thinking. He rejected the old Hegelian model of materialism in which individuals were abstract. Under the new materialism, individuals are concrete human beings who are involved in doing things with others in a physical world.

Vygotsky (1934; 1978) was a Soviet psychologist who accepted the new materialism of Marx. He went on to argue that the human mind is a product of cultural influences and experiences. Human being, he argued, invented devices that have transformed their thinking. There are two kinds of tools used by humans. One is the symbolic tool of language, an epistemological tool, and the other is the physical tools of technology.

Tools of the Mind	
Technical Tool	Individuals interact with nature through various kinds of material tools. It is by means of these tools that they are able to transform nature.
Symbolic Tools	Individuals also transform nature through language. Language is a tool of the mind. It allows one to socially construct new forms of reality.

What this means is that each child does not invent these instrumental systems; they are passed down across generations. For Vygotsky, intelligence had to do with the capacity to learn from instruction with the use of these tools. Hence, the teacher plays a central role in this context. The teacher is there to help the student go beyond his current level of competence. Hence, intelligence is an index of what a student can do is capable of doing while interacting with adults. The move from the present level of development to the new potential level of development is called the *Zone of Proximal Development* (ZPD). This zone is too difficult for a child to manage alone and for this reason it is done with a mentor, a teacher, helping adult. The use of apprenticeship in education is called *scaffolding*. The teacher helps the student to move to the next rung on the ladder of ZPD.

Child's Understanding of the world	Zone of Proximal Development (ZPD)	Adult's Understanding of the world
X	—————→	Y
<p>One moves from position X to position Y with the help of a mentor or teacher. The task is determined by the teacher as a ZPD. Once the task is accomplished, a new task is arranged. This series of tasks is called "scaffolding."</p>		

What Vygotsky is saying is that these new mental tools are developed through a teaching-learning process that involves social exchange in which shared meanings are developed through joint activity. These changes in higher mental functions are not universal. They are culture specific. Many of the cognitive categories and functions that cultural psychologists have argued are universal are not.

What are the implications of scaffolding theory for a theory of social change? It means that there are many within a social group who possess and command higher forms of human knowledge. These specialists act as catalysts. It is their duty assist learner from one level of the Zone of Proximal Development to the other. It is their task to raise the levels of consciousness of their apprentices from a lower level of consciousness into a higher one. The pioneering scientists mentioned by Kuhn (1964) are such individuals. They are the motivators of change. In this model of scientific revolutions, Kuhn argued that science is motivated by problem solving and he designated a small group of specialists, the upper 2 percent, as motivators of scientific change. They are the few among many who are aware of potential paradigm shifts.

Within sedimentation theory, the student is already familiar with the past. This experience is used by the mentor to create a new-present. The mentor introduces examples of contextual emergence in order to assist the student in redefining the past with the co-present. This process results in many experiences being redefined, restructured, or reinvented within the co-present. When a student enters into the zone of proximal development, he is not using the new-past to formulate his ideas, but begins with the new-present. These changes emerge as new-originals, the foundations of the next level of consciousness. It is important at this point to explain how the future is embedded in the present. Where do future ideas and events come from? They emerge

from the co-present when the past is redefined, restructured, or reinvented. All of these changes constitute a contextual emergence of ideas within the new-present. When these ideas are accepted and rest on the sediment of the past, they command the new landscape as the basis for new ideas, concepts, and experiences. The future (new-originals) are embedded in the present (new-present). What Vygotsky has developed within his zone of proximal development is a system in which mentors are agents of change. They are introducing their students to the next level of awareness. They understand the future and are using the co-present to guide their students into the next level of consciousness.

One of the weaknesses in Vygotsky's model that he was not able to articulate how actions and objects mediated the cognitive leap or transition from the higher mental functions of the child to that of the adult. He was able to discuss cultural entities, but not social functions. Activity theory (Ratner, 1996, [web link](#)) and social script theory explain how psychological is grounded in cultural activities. As a matter of fact, cognitive linguistics suffers from the same weakness. It can construct a personal model of culture within the individual, but it cannot explain how this model is socially constructed. A child learns by doing thing, by following others, by trying to emulate them, by trying to make his world similar to their world. There is agency involved in these events. The agency comes from the child, but it is an attempt to emulate the social world and the cultural world that he is immersed in. He uses social scripts and language as learning tools and experiential devices to navigate within that milieu. Co-constructionist models of cultural psychology separate the production of social relations from the ways in which individuals utilize and consume them. One learns a social script by participating in that socially constructed event. In many cultures (Hicks and Gwynne, 1996) a child is not considered to be a human until they have mastered a certain level of secondary socialization. In these cultures, this transition is marked by a rite of passage (van Gennep, 1961). At this point in their lives, they have mastered the major social scripts demanded of them by their culture. They leave the world and the mentality of a child and enter into a world that is cognitively different, the world of the adult.

SOCIAL SCRIPTS AS PERFORMED STRUCTURES

It is time to look closer at the concept of habitus and explain how the past is formulated as the new-past. One could argue that these practices are almost unconscious

because they represent practices within the sociology of everyday life that are tacitly accepted as social scripts. An interesting exception to this use of the past can be found in the writings of Victor Turner (1968, 1969, 1972, and 1982). He developed a model of social performance to explain how rituals are maintained in hunter and gatherer societies. The rituals follow a structure reminiscent of the rites of passage model of van Gennep (1960). Turner (1968) goes further in his explanation of the rite of passage rituals in these earlier societal forms. He promotes the concept of consciousness. Those who perform the rituals know that they are keeping the past alive in the present. In terms of sedimentation theory, they are redefining the old past as the new-present. Mundane activities are defined in terms of the new-past, but sacred rituals have a special status. They are performed in the present and for the present. Hence, they constitute the new-present. Nevertheless, the social scripts discussed in this part of the investigation have to do with tacit knowledge. They have to do with social practices that take place within the sociology of everyday life. Hence, they form the structures inherent within the cultural habitus of a community.

Social script theory has been developed to provide a structural account of cultural habitus (Bourdieu, 1977, 1984). It assumes that these tacit practices are nothing other than “social recipes.” Within existential sociology, for example, it is argued that most human beings are not able to envision themselves in terms of grand theories or models of social thought. All that they know are their day to day existences and these are always highly contextualized (Douglas et al, 1980; chapter 6). This is because for them, life is situated (Douglas and Johnson, 1977; Kotarba and Fontana, 1984). Things may occur from one moment to the next and they must learn how to deal with these exigencies. How do they deal with these problems? Where did they learn how to cope with these problems? They learned them as mini-dramas and social acts (Lyman and Scott, 1976, 1978). They learned them by observing and experiencing similar problems in natural situations. What is a natural situation? It is one that is not dictated by the kinds of laboratory conditions found in psychological testing. It is not a situation that is taken out of context. By natural, they mean the situations that are common to everyday life. These are situations in which individuals meet each other in face-to-face encounters. It is a common sense world in which meanings refer to feelings, perceptions, emotions, moods, thoughts, values, and ideas shared with other members of society. It is that internal connection with others that is referred to as the meanings of

life. Natural means that one is able to analyze and understand social situations from the standpoint of the members of a group or community. Natural situations are dependant on actual situations and circumstances. It involves being-in-the-situation.

From these actual situations, one is able to develop social scripts of the events and the actions. These are best described as episodic events. One does not just enter a restaurant, he must follow a script. That script already exists. It is one that he has seen many times as a child and has participated in. These scripts refer to social functions. They dictate what one should be doing at a particular time and in a particular place if one is to play the role characteristically associated with that script. There may be several people involved in the same situation, but they may differ in the roles that they have been given or have chosen to enact. Hence, the following is a revision of the Restaurant Schema (Minsky, 1988) as Social Script Theory (St. Clair, Thomé-Williams, and Su, 2005). The original concept can be found in Miller, Pribam, and Galanter (1960). These scholars discussed the importance of plans, structures, and behaviors. Social life, they argue, is organized. It consists of plans. It is structured, and it determines behavior. Social scripts are sequential plans; they are organized; and they are structured with event frames, social roles, tacit scripts and episodic functions. When one enters a restaurant, he participates in a social script. Just the act of entering a restaurant is an event and it invokes a plan of behavior. The customer is aware of most of the social roles of the people working in a restaurant. He knows what to do and performs the proper episodic functions in that environment. Most importantly, the other people working in that restaurant also know the social script of the customer. However, the customer may not even be aware of the social scripts of most of the people working in a restaurant. They may identify the waiter, the bus boy, and the cashier and be unaware of the roles of the cooks, the dishwasher, the manager, the accountant, etc.

The Restaurant Schema under Social Script Theory	
Event Frame	Dinning at a restaurant
Social Roles	Waiter, customer, cashier, busboy, manager, cook
Episodic Functions	<p>Enter a restaurant</p> <p>Approach the host</p> <p>Have someone direct the customer to a table</p> <p>Have someone bring a menu to the customer</p> <p>The customer peruses the menu</p> <p>Have the waiter approach the customer and ask for an order</p> <p>The customer puts in his order</p> <p>The waiter leave and eventually returns with the food</p> <p>The waiter signals the end of the main meal by asking about deserts.</p> <p>The waiter customer signals the end of the meal by asking for the bill</p> <p>The waiter brings the bill or the check</p> <p>The customer either pays the waiter or pays the cashier</p> <p>The customer pays the cashier</p> <p>The customer may leave a tip</p> <p>The customer leaves the restaurant</p>
Lexicon	Waiter, customer, table, main meal, deserts, tip, cashier, restaurant, the bill, the check, the menu, etc.
Script	Enter a restaurant, approach the cashier, get assigned to a waiter, go to your assigned table, accept the menus, read them, make an order, wait for the meal, eat your meal, discuss the topic of conversation during the meal, wait for the waiter to ask if you want to have a dessert, order the dessert (Optional), receive the bill, leave a tip, pay the cashier, leave the establishment.

GIDDENS AND STRUCTURATION

How would these subtle changes in society over time operate? How would individual change lead to social change? There are several answers to these questions. Both have to do with the process of socialization. Children are born into a world that already has a social system and an existing culture. Their parents and their family

members act as agents of primary socialization on their behalf. They learn to function in several roles and witness significant others performing a range of other roles related to primary socialization. Later, these children will enter into a school system where they are introduced into the process of secondary socialization. They come to learn how to behave outside of their home environment. They are introduced to new instruments of thought such as science, mathematics, social studies, and a range of basic social skills. What does this socialization accomplish? These children may differ significantly in how they were socialized at home. They may encounter different parent-child interaction patterns and may be exposed to different socioeconomic environments. In school, they are supposed to learn the same skills and same forms of social knowledge but this does not always happen as school systems may vary greatly from one district to another. What this means, in essence, is that their concepts of social reality is widely distributed (Berger and Luckmann, 1966). This distribution can be discussed as generational differences but the complexity of the situation is closer to a calculus of differences. Generations occur within families but children are born every day and this leads to a wide range of people who are supposed to share in the same patterns of socialization, but they do not.

Anthony Giddens (1984) argued for a similar pattern of differentiation in society. He referred to these changes as structuration. What this means is that a group of individuals may be exposed to new social concepts and experiences and these events change them. During this process of change, they move from one level of consciousness to another. Upon entering this higher level of awareness, they enter society with new visions of understanding. In the framework of Vygotsky (1962, 1978) they have moved up to a higher rung in the Zone of Proximal Development. They have entered into a higher level of consciousness because they have been introduced to new symbolic tools. Just as the movement from one paradigm of normal science is elevated to another paradigm of natural science, one finds that each movement along the ladder of consciousness is also a spiral achievement.

Structuration occurs within Sedimentation Theory when the old-original is replaced with a new-original. It occurs when there is a paradigm shift from one level of plans, structures, and behaviors to the next. All of this occurs because new social practices emerge as contextualized emergents and because old symbolic tools are replaced with new ones.

TOWARDS A THEORY OF CULTURAL CHANGE

Within the theory of the sedimentation of cultural time and space, it is argued that cultural consciousness plays an important role in the co-present, the place where the present is embedded in the past. It is in the co-present where the new-past is established and where traditions are redefined and given attributes that concur with its new contextual frame. It can be argued that the meaning of the present comes from the past. Old traditions provide road signs to the present. Old patterns of behavior provide social structures that legitimize the present. These patterns may not be obvious to the individuals functioning within the co-present. In such a case, the past becomes the new-past. However, where individuals are conscious of these transformations, the past becomes the new-present. They represent the newest layer of cultural space that is placed upon the co-present. This new layer will eventually form the old past for future generations of people inhabiting that cultural space.

Old-past	New-past Redefined	New-past Modified	New-Originals
			New-Past Reinvented
The Co-Present			
The Past			

It is also in the co-present where the new-present is created. This is because the future is embedded in the present. It is the place where human projections are created and where hopes and desires are developed and contextualized. Changes in the new-present are most obvious across generations within a social setting. A clear case of this can be found in the generation gap that has occurred among baby boomers from 1946-1964. Jones (1981), a demographer, studied this period in American culture and documented how the social construction of reality of the children of this generation differed substantially from those of their parents. There were several factors that led to

this difference. It was during this time that people moved from the inner city to live in the suburbs. The automobile became a dominant means of transportation, and television the dominant means of entertainment. A plethora of new patterns of socialization led to the creation of a new mind set, a new cultural consciousness. The new-present of the children of this era differed significantly from the new-present of their parents. What the parents called the new-present, their children viewed the same phenomena as the new-originals.

MAKING THE PRESENT COHERENT THROUGH HABITUS

Living in the co-present means that one inhabits a world that is in a state of flux. However, individuals who live in the co-present do not experience the sociology of everyday life as an unstructured and constantly changing world. Why is that? The answer can be found in the concept of Habitus (Bourdieu, 1977, 1984; Bourdieu and Wacquant, 1992). The structures that underlie everyday life are the routines, habits, beliefs, and patterns of behavior that one acquires by living within a cultural complex known as one's social and cultural habitus. Life is embedded in this habitus. Without this habitus, life would undergo constant scrutiny. One would ask some very basic questions about the daily routines in life. What must one do when entering a restaurant? How does one go about ordering a meal? Life is full of these nonverbal social scripts. They are learned by living and participating in a cultural complex. Life makes sense because these routines provide daily activities and actions with a semblance of order. When others share the same social scripts, the result is a sense of social order. Primary and secondary socialization formed the training ground for the creation of this social order. Television programs also provide information on what is available for purchase in the common market. These programs also contain examples of social behavior in the form of soap operas, movies, and documentaries. Much of what constitutes culture exists in the form of tacit knowledge. It can be found in the cultural habitus of daily living.

RE-INVENTING THE CULTURAL PAST

Globalization is the new label that has replaced the concept of multiculturalism. It has been chosen as a new term for several reasons. In globalization the *terra firma* of a cultural space is overlaid with new earth. The mores of other cultures and ways of life

invade the cultural spaces of the past. The co-present is a mixture of not only new and old cultures, but also disparate cultures. There is another reason why globalization has been a more significant concept in modern times and this has to do with large movements of human beings going across international boundaries to resettle in a new land. The old concept of culture was defined by nation-states. It is what is within the political entity of a nation-state constituted its cultural framework. Once an individual leaves his country or nation-state, he enters into a new culture. With globalization such a definition of multiculturalism no longer holds. People are transported *en masse* in new cultures where they become hybrid citizens. In the old country, the present was embedded in the past. In the new host country, however, the cultural past is different. This means that their cultural identity has been compromised. They want to be participants in the new culture and yet remain favorable to their cultural past. This problem is resolved by transporting components of the cultural past and relocating it in the new home land. Those who reside outside of this phenomenon has labeled such communities as a ghetto, a little Tokyo, a barrio, or a China towns. The reality is that has more to do with the making of a hybrid culture. It constitutes a new cultural space. Within the Foucault model of the archeology of knowledge, earth from the old country is brought into the new country and mixed with its new cultural space.

For those who are being bombarded with modernization in the form of new forms of architecture, new products, new languages, and new ways of thinking, the opposite is true. Their culture past is allow new forms of earth to be placed on it *terra firma*. It also constitutes a hybrid culture but of a different kind.

THE EMERGENCE OF VIRAL CULTURES

One aspect of socialization that has not been fully addressed so far comes from the uses of mass media. This use of media comes in many forms and is directed to cultural niches. What one sees on television becomes a part of the conscious co-present. Those who share the same media use it as a way of reaffirming their social construction of reality. The soap operas, movies, and situation comedies that they watch are comparable to other forms of socialization except that the participation is passive and the messages may are tacit. Years after a certain event took place on television, individuals may invoke them in conversations and role playing. These invents are part of their virtual memory and form a part of their virtual culture. They function, in part, as

a collective memory that has been distributed individually to individuals and these persons invoke the same memory at the same time in a public setting. They have become the new-originals. One can ascertain after a short conversation, for example, if another person subscribes to cable and what programs he or she watches on television. These forms of virtual memory become social markers of group coherence with regard to one event. It is as if there are niche cultures that can be invoked and used to unite disparate individuals by means of one event.

Sociologists do not want to deal with the concept of collective memory. They find it too mystical. This concept, it should be noted, was introduced by Durkheim (1951), one of the founders of sociology. Durkheim (1964, 1970) argued that individuals are bound together in society in two ways. They share their lives with others in a communal setting or they are bound together by institutions, laws, and regulations. Those who see life as a community share the same religion, the same hope, fears, and aspirations. Those who are bound by rules and regulations belong to a group but they do not feel bonded to the group. With the advent of television and the creation of the consumer culture, the kinds of bonding that occur in mass society has many of the elements associated with the primal communities that Durkheim discussed. Virtual cultures share virtual memories. They are bonded by virtual events. They have the same kind of deep emotional connection over events that earlier societal types encounter. If there ever was a time when a case could be made for the existence of fragments of a virtual memory distributed over a wide range of niche cultures, it is in the co-present world of television, the internet, blogospheres, and other forms of mediated communication.

CONCLUDING REMARKS

The concept of culture as a unit of knowledge shared by all individuals within a nation-state can no longer be maintained. Just as economic groups transcend national borders in order to do business, mass media transcends these same borders in order to market goods. What was once a simple matter of defining the mores of a tribal unit or a nation-state has emerged into a calculus of cultural artifacts that play a role in the co-present worlds of numerous consumer societies. How does one begin to explain this new form of cultural diffusion? How does one begin to define the forces behind these

infusions of cultural symbols? How does one deal with the spectacle of life (Debord, 1995; Baudrillard, 1973)?

It was argued earlier in this investigation that Kuhn's theory of scientific revolutions provides a basis for the discussion of change within the cultural fabric of a society. Emphasis was placed on the period of crises where the social construction of reality is questioned and new potential paradigms emerge. It was argued that this locale is not the present but the co-present, the place where the past and the present encounter each other. It is where the present is embedded in the habitus of the past. It is also where the future is being created by means of new levels of consciousness raising and new representations of the artifacts of the past. It is here that the rationale for change takes place. It is from this context that cultural changes emerge. Some of these function as new-originals. Others just remain as the new-present.

What this new framework for the study of culture proposes is that culture is a steady-state phenomenon that represents linear moments of frozen time in a dynamic realm of change. If modernity had to do with steady-state phenomena of the past and postmodernism has to do with the state of flux between steady-states, the question that needs to be asked is what comes after postmodernism. It will be another stable system surrounded by a flux of forces that contain the seeds of cultural change in the future. What is needed is a complexity theory of culture. It is under these circumstances that the nature of cultural change can be better examined, articulated, and defined.

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