Leading into the Future IV: Order, Chaos and Three Societies

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As we probe more deeply into the challenge of leading into the future, it is important to recognize both the newness of the world in which we are leading and the organizational and societal structures, problems and opportunities that we have inherited and that are emerging in our current world. The newness might best be identified as a form of "edginess"—for we are living on the edge of new forms of order as well as conditions of chaos. This edginess is complemented (and perhaps exacerbated) by the intermingling of the three societies I identified in a previous essay: premodern, modern and postmodern. In this essay, I briefly focus on edginess and revisit the three societies..

Poised on the Edge of Order and Chaos

In a 1991 article in *Scientific American* that has become a classic in the field, Stuart Kauffman introduces a new concept of chaos and order. He describes three different categories or states in which many systems can be placed. One of these states is highly ordered and structured. Kauffman draws an analogy between this state and the solid state that water takes when it is frozen. A second state is highly chaotic. Kauffman equates this state with the gaseous form which water takes when it is evaporating. The third (most interesting) state is one of transition between order and chaos, which Kauffman equates with the liquid state of water.

Three Physical States

The differentiation between solid, gaseous and liquid networks can be of significant value in setting the context for any discussion of postmodernism in organizations—and, in particular, the irreversibility of many organizational processes. We must look not only at ordered networks—the so-called solid state—and at chaotic networks—the so-called gaseous state—but also at liquid networks that hover on the brink of chaos, if we are to understand and influence our unique postmodern institutions.

The third (liquid) state holds great potential when we examine and seek to understand confusing and often elusive organizational phenomena such as intentions, leadership and communication. Turbulent rivers, avalanches, shifting weather patterns, and other conditions that move between order and chaos typify the

liquid state. Liquid systems contain chaotic elements as well as elements of stability. There are both quiet pools and eddies in a turbulent river. Mountain avalanches consist of not only rapidly moving volumes of snow but also stable snowpacks on top of which, around which, or onto which the cascading snow moves. Stable and chaotic weather patterns intermingle to form overall climatic patterns on our planet.

The liquid state is one that is filled with edges and shifting boundaries. A liquid, edgy state is also filled with the potential for learning. A liquid system has the capacity to adjust and rework itself into an orderly, solid state. At certain points, however, the solid state (the eddy, the snowpack, or the stable weather pattern) reaches a super-critical state and can no longer adjust to the addition of another change or variant in pattern. At this point the system becomes fluid and an avalanche occurs. Portions of the system take on a very different form, and the system can once again adjust to the addition of a few changes or alterations in pattern.

I would suggest that most organizations live on the edge, in the liquid state, poised on the edge of chaos. Furthermore, organizations are dynamic systems that can adjust based on quick and accurate feedback systems. This is first-order change. Yet, at a super-critical stage, organizations can no longer adjust. They can no longer accept any additional change or crisis. The one additional piece of straw has broken the camel's back. An avalanche begins and the organization changes in a profound manner. This is second-order change.

Self-Organizing Criticality
The theory of *self-organizing criticality*[i] (or weak chaos) and *edginess* suggests that small events (first order changes) such as a shift in leadership will usually produce only minor alterations in the structure and dynamics of the organization (the snow pack will get a bit wider or a bit higher). However, a change in leadership sometimes will create a major second-order alteration (an avalanche). Furthermore, while the outcomes are dramatically different, Bak and Chen propose that the same processes are involved in the initiation of both the minor and major changes, and that the onset of the major event can't be predicted—in part because the same process brings about both outcomes.

The liquid state and the edge are places of leadership and innovation ("the leading edge"). They are settings where things get done—yet often in the context of a very challenging and exhausting *whitewater*

environment.[ii] Edges have no substance. They come to a point and then disappear. Perhaps this is what the new postmodern edginess is all about—what Milan Kundera calls "the unbearable lightness of being."

We need to learn how to live and work in this new environment of edges. If this is the case, then perhaps we need to listen to the architects and prophets of postmodernism, for they may provide some valuable clues as to how this world might best be faced. These architects and prophets come in many different forms: deconstructionists, feminists, chaos theorists, structuralists. This book is devoted, in part, to the examination of these postmodernists as they might help inform and revise our assumptions about the nature, purpose and dynamics of those organizations in which we live and work.

The Tale of Three Societies: Redux

I will now turn again to the second topic in this essay—a topic that is setting the stage for our probing of the challenges inherent in the process of leading into the future. This second topic is critical because it has to do with the organizational and societal structures, problems and opportunities that face us right now as leaders. This is the challenge that I first identified twenty-five years ago (Bergquist, 1993): we now live in a world that supports three different types of social structure.

Three Societies Living Side-By-Side

As I noted in a previous essay, one of these social structures has been present for many centuries. A vast majority of the people now living reside in this type of social structure. This structure goes by many names: "traditional," "primitive," "developing," "third world," "agrarian" and "neo-feudal." I have chosen to use the term *premodern* in identifying this social structure, in large part because the other terms tend to be value-laden or restricted to non-Western countries. Throughout this book we will identify many positive features of premodern societies and certainly do not wish to consider it less "developed" than other social structures. Furthermore, many social structures that exist in the Western World are clearly premodern. They do not just exist in the "third world" nor are they found only in societies that are dependent on agriculture.

The second type of social structure is so prevalent in the world in which most of the readers of this book live that it is taken for granted. This is the *modern* society that has existed in Western Europe since the beginning of the industrial era (early 19th Century), in North America since the early years of the 20th

Century, and in urban settings in other parts of the world since World War II. I would suggest that there is now a third type of social structure that (for want of a better word) I shall identify as *postmodern*. This social structure now exists in many parts of the world and is rapidly assuming a prominent role at the start of the 21st Century.

I propose that the profound nature of the transition that premodern societies have made in their shift to modern social structures is being matched by the profundity of the transition that is required in the shift from modern to postmodern social structures. Furthermore, I propose that the transitions from premodern to modern and from modern to postmodern are essentially irreversible. We can never go back to a former world—though we can (and inevitably will) borrow from previous social structures as we seek to create new forms to meeting emerging needs and serve new functions.

While the past fifty to seventy years might best be described as an era of adjustment (the modern-day organizational pendulum), we are now entering an era of fire. In this new era, old organizational forms, structures and processes will be consumed and new forms, structures and processes will emerge, like the mythic Phoenix, from the ashes of fiery consumption. This new era will not be composed entirely of new organizational elements. Rather it will offer a hybrid of . . .

- very old, premodern elements of our society,
- modern day elements of our society (as exemplified in many organizations that reached their zenith during the second half of the Twentieth Century), and
- newly emerging elements that bear little similarity to either their premodern or modern day precursors.

I will briefly describe each of the three social structures to make some initial sense of these rather sweeping generalizations and will focus at this point on the general economic and social characteristics of each type of society.

Premodern Societies

These societies are economically based in the extraction or cultivation of natural resources: agriculture, mining, forestry, fishing, ranching and related activities. It is also founded in craftsmanship—these crafts ranging from the production of tools to the creation of artistic works. While some premodern societies are very loosely structured and formed around nomadic patterns of living (the gathering rather than extraction

or cultivation of nature resources), most premodern societies that exist today are founded in small villages or other closely-knit communities. The loosely structured forms of the premodern society are most likely to exist in regions of the world where there are harsh climates and sparse natural resources (e.g. Siberia, Alaska, North Africa, Central Australia).

The premodern society is also typically dependent on strong and enduring extended family systems. This extended family (usually consisting of grandparents, parents and children) serves not only as the primary economic unit of the community, but also as the primary source of most social services (health, education, child care, and so forth). While the community (and in particular the church or other philanthropic organizations) is available to support the family in an emergency (for example, loss of property or unanticipated death of family member), family members are expected to provide most of the social support. There are no medical plans, disability plans, retirement plans or social security systems in premodern societies—family members are expected to take care of their injured relatives and aging parents.

Bartering is the primary unit of economic exchange in the premodern society. Working within the context of a trusting and norm-enforcing community, men and women exchange commodities (such as tables or seed) or services (such as home construction or plowing of a field) for other commodities or services. In such a community there is little need for money or legal institutions. One natural resource—gold—that comes from a premodern extractive process (mining) does become a medium of exchange in most premodern societies, as do certain other natural resources (such as silver, pearls, spices and art works) that are prized for their beauty or scarcity. Given the absence of any elaborate trade system or of any way in which to preserve perishable commodities (other than through a salting or drying process), the primary focus in most premodern societies has been placed on the cultivation or extraction of sufficient resources to sustain life and on high quality craftsmanship (quality rather than quantity).

Governmental institutions are typically minimal in size or scope—usually focusing exclusively on the protection of national boundaries against invasion. While there may be a rudimentary community government system (village council or town hall meetings), the primary authority resides within the family and in the informal control exerted by the most economically powerful families in the community. Even today, we find that many premodern societies are essential feudal in nature, with power residing with a few

members of the community who, in turn, assume overall responsibility for the welfare of the community and all of its residents.

While most premodern societies are established in small communities, relatively large cities obviously existed throughout the world long before the 19th Century advent of industrialization in Western Europe. Premodern cities such as Paris, Rome, London, Cairo, Istanbul, Bombay and Peking were usually not much more than very large (and often quite unwieldy) extensions of the small village. Minimal government existed in these urban centers and tightly knit ethnic neighborhoods took the place of the village community.

Extended families still played a dominant role and bartering was prevalent. The premodern city played a critical role in supporting limited international trade and the more sophisticated crafts (such as printing and the construction of large buildings). They also typically housed the central administrative offices of the only two organizations of any significant size in the premodern world—namely, the military and church. A large cathedral or temple usually dominated the central core of the premodern city, while the military typically provided protection at the outskirts of the city: the gates to the city, and/or the towers and walls surrounding the city.

Modern Societies

The modern society was a byproduct of Western industrialization. As machine were being invented and built that enabled mass production, there was an increasing need for centralization of both capital (for the machines were very expensive) and a work force (to run the machines). Extended families from premodern communities were broken up as the younger members of the family were lured by the prospect of money and material possessions to the new urban centers of industry. Of even greater importance (especially in modern American life) was the creation of a new form of community—called the suburb. Often identified as "the sultans of sprawl," William Levitt, James Rouse and Robert Moses led the way following World War II by creating the first large-scale housing developments (Levittown, New York), commercial malls (Rouse) and expressways (Moses) to connect the suburbs to one another and the urban centers that employed the suburbanites.[iii]

The new industrial workers discovered a new commodity: money. They soon substituted wages for the production (or bartering) of their own food or commodities. With the shift to a money-based economy came the vast expansion of financial institutions. While banks exist in premodern societies (primarily to serve the upper class), they play a much larger role in modern societies, serving not only as a safe repository for saved money, but also as a source of unearned money. The modern worker soon discovered that banks would enable them to spend money that they had not yet earned and to take out long-term loans to make major purchases (especially homes). Modern societies inevitably become communities of debt and money becomes the most valued entity in these societies.

Industrial workers also substitute employment in modern organizations for their premodern reliance on the extended family. The organization becomes their new source of security and they look to their work site for friendship and a sense of purpose and community. Increasingly, the modern worker also began to look to the government for basic social services: education, health, retirement. Thus, we find in the modern society not only expansion in the size of private industrial organizations, but also in the size and scope of public institutions. Public education, social welfare and medical services for the elderly became the givens of modern societies. Citizens no longer looked primarily to their family or to their church or other philanthropic organizations for support. Rather, government became the new guarantor of health and happiness. Government soon also entered the much more controversial arenas of organizational operations (labor law and affirmative action), family life (protection of children against abuse) and private morality (the right for women to abort an unborn child).

With mass production came a shift in focus from quality to quantity. Industrialization (and an accompanying capacity for widespread distribution of products) shifted the focus of economics to productivity. Industries (and the workers in these industries) were considered successful if they were highly productive. High levels of productivity in turn led to the need for marketing and a new emphasis on sales. Profit could only be derived from large volume sales (to make up for the initial costs associated with purchase of the mass production equipment). Productivity without sales yielded nothing but a costly surplus of goods. The modern era (in conjunction with the move to suburbia) brought about the department store, the franchise fast food industry, and the abiding concern about crab grass and lawn fertilizers. Thus, the industrial revolution became a *Commercial Revolution*.

While the premodern craftsman typically only made a product when it was requested and tended to custom make each item, mass production processes called for uniformity of product and for interchangeable parts. The new emphasis on uniform production and marketing and sales set the stage for new organizational roles that were not directly connected to the production process. These non-production roles in marketing, sales and production control were soon complimented by another set of organizational roles—those associated with the overall coordination of organizational functions. These roles (called "management") soon came to dominate the culture of the modern organization and provided much of the leadership for 20th Century organizations. Thus, the industrial and commercial revolutions produced yet another revolution: the *Managerial Revolution*.

Postmodern Societies

The new social structures into which the more privileged people of the world are moving offers a remarkable mixture (hybrid/pastiche/mosaic) of the premodern, modern and postmodern. New communities are being formed that in some ways resemble the premodern villages of olden times—yet these new communities are formed around electronic communication systems and the new digital economies of the 21st Century. We are returning to bartering systems, but are now negotiating exchanges over the Internet rather than down at the Town Square. The big businesses of the modern era continue to exist, but are now competing or cooperating with the small e-commerce businesses of the postmodern world. We are returning to premodern rituals and spirituality, while proclaiming our modern-day independence from superstitions and dependence on science and technology. In a futuristic image offered by David Gelernter in *Mirror World,* the new world will be one in which the premodern sense of an intimate community is interwoven with postmodern technology:[iv]

Imagine that when you are in town, the town is aware of your presence, and of who your friends are and where they are. You may be driving along and be told that someone you haven't seen for a while is having coffee just over there (and there is a parking space out front, too!) Simple things like this may begin to restore the human scale to our now-so-large cities.

Our new postmodern world comes to us complete with new heroes (ranging between Bill Gates and Madonna) and new legends (such as the sagas of Elvis Presley and Nelson Mandela – to mention the

extremes). It also comes to us with great promises (universal education, abundant food sources, new forms of energy) as well as daunting challenges (over population, environmental collapse, virulent plagues). Each of these promises and challenges is global in nature and scope. A level of cooperation between nation-states is required that has never been achieved in either the premodern or modern era.

Conclusions

The challenge of leading into the future begins to come into focus with this analysis of the three cultures and our living on the edge of new order and challenging chaos. We must lead in a new global village and in this village we must look to new strategies and discover new answers, while also honoring the wisdom and values of past eras..As Salmon Rushdie queried in his very postmodern and life-threatening (for him) novel, *The Satanic Verse*:[v]

> How does newness come into the world? How is it born? Of what fusions, translations, conjoinings is it made? How does it survive extreme and dangerous as it is?

Our emerging postmodern era can indeed be described as an *edgy* experience. We are poised on the edge of both chaos and new order. As Rushdie suggests, we know something about what is to come, yet don't know exactly what form the *new* will take

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[i] (Bak and Chen, 1991)
[ii] (Vail, 1989).
[iii] Joel Garreau, *Edge City: Life in the New Frontier*.
[iv] Bill Joy, "Design for the digital revolution," *Fortune*, March 6, 2000, p. 15.
[v] Quoted by Edmundson. *Prophet of a New Postmodernism*. Harper's 1989.