

**Designing Sustainable Organizations:
Possible Clues from our Oldest Organizations**

Bruce Hanson, Ph.D.

Professor of Business and MBS Director
Concordia University Irvine
Orange County, California USA

Abstract

This paper develops some observations for designing sustainable organizations developed from lessons learned from some of our oldest organizations. This has implications for both the form and content of organizational design. Organizations need to remain oriented, flexible and innovative. The use of story is a valuable tool in organizational design, as the challenge of turbulence and change confront the organizational agent. Organizational fit includes not only ecological fit with the environment but our effect on that environment. To accomplish this over the years, we need to remain properly oriented. Consciousness becomes important, knowing who we are and how we contribute to the environment. The patience of the long-term perspective is important. There is much we can learn from ancient ways, however our power and knowledge have created entirely new challenges of how to manage our environment.

Key Words: *sustainable organizations, organizational design, organizational culture, organizational consciousness*

Introduction

“Though my life may be but one hundred years, may my work live one thousand.”
Quote by Namihei Odaira, founder of Hitachi

How might we conduct our work so that it has enduring and desirable effects for one thousand years? How might our organizations operate if we expected to be around in one thousand years?

Perhaps the oldest company in the world until recently was Kongo Gumi. It was founded by a Korean in Osaka Japan in 578, and built Buddhist temples, Shinto shrines and castles. It survived by having a flexible line of succession, including all children, not just the first-born males. It shifted its work to suit the opportunities, making coffins during WWII and also building offices, apartment buildings and private houses. It succumbed in 2003 to debt caused by heavy borrowing and a recession, which saw a decline in temple donations for building. The lessons of Kongo Gumi’s longevity and ultimate demise can be summed up with, “Pick a stable industry and create flexible succession policies. To avoid a similar demise, evolve as business conditions require, but do not get carried away with temporary enthusiasms and sacrifice financial stability for what looks like an opportunity.” (Hutcheson, 2007)

Studies of some of the oldest organizations in the world find that most of them are small having fewer than 100 people. And, they are often family owned businesses. (Economist, 2004)

It is dangerous to prescribe too much for longevity. Jim Collin & Jerry Porras (1994) in *Built to Last* highlighted many companies which in fact did not last. In fact,

"Ten years on, almost half of the visionary companies on the list have slipped dramatically in performance and reputation, and their vision currently seems more blurred than clairvoyant. Consider the fates of Motorola, Ford, Sony, Walt Disney, Boeing, Nordstrom, and Merck. Each has struggled in recent years, and all have faced serious questions about their leadership and strategy. Odds are, none of them today would meet BTL's criteria for visionary companies, which required that they be the premier player in their industry and be widely admired by people in the know." (Reingold & Underwood, 2004)

Qualities of old organizations are that they are small, flexible, and adaptable. But even the fit organizations are challenged by the rapid change of our times, not the least of which is the developments of new technology. Of course just surviving for a long time is not enough. There is much more to designing sustainable organizations.

Sustainable Organizations

It is one thing for an organization to have lived a long time, but how does one do this at the present time? There has been an increasing concern for sustainability in recent years as our environment and human life have been threatened with extinction. It is not just a matter of an individual organization surviving, but that organizations also transform their environment, for good or ill of the entire ecosystem.

The seeds of the *Sustainability Revolution* were planted in the mid-1800s by the New England Transcendentalists. ...the Modern model of a mechanistic universe has informed our existence for the past 500 years. ... we have evolved past the mechanistic management practices that deplete resources (both natural and human,) and propose that we apply the principles of sustainability to the leadership of all organizations to regain the balance of people, planet, and profit. (Sustainable Leadership.info)

The concept of a triple bottom line (abbreviated as TBL) adds two more "bottom lines" beyond economic concerns: social and environmental concerns. The three together are often paraphrased as "Profit, People, Planet", sometimes called "the three pillars" (IISB, 2011). With the ratification of the United Nations and ICLEI TBL standard for urban and community accounting in early 2007, this became the dominant approach to public sector full cost accounting. (WCED, 1987)

The three pillars are indeed lofty strategies, how does one design organizations that facilitate these bottom lines? The organizational goals are much more complex than

just maximizing shareholder profit. As Jay Galbraith (2002) has noted, one starts with the state of the current organization and design to facilitate their strategies. In this case it is not just enough for an organization to be small, flexible and agile, it must also be innovative and aware of its many internal and external relationships. Galbraith highlighted flexibility and innovation as two of the most frequently cited design criteria in his model of the reconfigurable organization. He also recognized criteria of customer centric organizations and organizing across borders.

A Brief and Selective History of Organizational Design

In their now classic formulation on the management of innovation, Burns & Stalker (1961, 1995) identified mechanical and organic forms of integration. In this formulation, if one wished to innovate it worked better to use more organic forms of coordination which means using people and teams of people rather than simply plans and mechanical means.

A major method in the 1960-1980's was *Socio-technical systems (STS)*. STS seems to have had its day in the sun and now seems largely eclipsed. However I still believe it has utility and serves as a good depository of worthy ideas. The designs were organized around the work team and sociability. This movement came out of the realization that technology had become the primary driver of work design and took the place of social relationships.

Out of STS (or alongside of it), there was a great deal of interest in *Quality of Work Life*. This approach got most interest in Canada and England where it was recognized that work could be oppressive to the human spirit. This movement did not however take off in the United States, which preferred *High Performance Organizations* (Pasmore, 1994).

This shift from mechanistic to organic coordinating methods became more difficult to describe. Mechanisms are easy to diagram, however living systems not only change frequently and are also multifaceted. In 1979, Pondy and Mitroff asked the field of management to theorize beyond mechanistic (frameworks, clockworks) and organic (blueprinted growth) systems to language-based organizing models (symbol-processing, multi-brain systems).

Gareth Morgan further developed the distinction between metaphors of organization as machines and as organisms in his sentinel work *Images of Organization* (1994). It is not so much that 'everything' is evolving into organic metaphors, but that we need different ways of knowing and representing our knowledge of organic systems. This is particularly true of human organization. Culture is certainly one of those areas that increase our knowledge and awareness.

David Boje (1991) and others have continued to develop this line with the use of storytelling in post-modern organizations. The identification of postmodern organizations is an important realization that the complexity and robust character of organizations

cannot be contained through modernist science. We also inherit the wealth of human history, for good or ill.

Hammer and Champy (2006) focused on business process. This shifted the perspective to a more active frame of reference. This was very well received, but also reported to be confusing and perhaps abstract in application. The purpose of the organization is to organize around the means of production.

Jay Galbraith particularly focused on *the Reconfigurable Organization* which emphasizes flexibility and adaptability (Galbraith, 2002). This recognizes the modularization that has become common in organizations, where each subunit is focused on a specific transformation process or function, and could then be either made or bought, incorporated or contracted.

The paradox of sustainability recognized by Galbraith is summarized as, “Thus the challenge is to design organizations to execute strategies when there are no sustainable competitive advantages. When product advantages are not sustainable over time, the winners will be those who create a series of short-term temporary advantages.” He goes on to say, “The reconfigurable organization is the means to execute this continuous strategy shifting.”

As a general rule, organizations in this digital and global age need to be innovative, flexible, and productive. This is not unlike changes in individual careers, which are increasingly characterized as contractual and not long term commitments.

More recently, *The Cellular Organization* (Miles & Snow et.al) highlighted that the objective of the organization is to innovate. It is a modularization of organizations into performing one primary transformation with its own ability to be entrepreneurial and self-organizing. While the eras of standardization and of customization have not entirely left the scene, attention increasingly has shifted to innovation. As in post-modern realities, the old does not go away, but more is added. The postmodern organization, as in postmodern architecture, is composed of bits and pieces from the entire run of history.

Their three building blocks of the cellular form are: entrepreneurship, self-organization and member ownership. As Miles & Snow say, each cell (team, strategic business unit, firm) will have an entrepreneurial responsibility to the larger organization.

In terms of organizational design, the concern I have thus far been able to discover in the literature is limited to the organization it directly controls and its immediate relationships as expressed in open systems planning (Pasmore, 1995).

While the forgoing considerations seem adequate for managing one’s conscious relationship with our environment, much more is needed to manage our self-awareness as we literally create our environment. Self-awareness or self-consciousness requires a whole other level of faculties. Markets collapse when there is a loss of confidence. The power and knowledge to balance such self-consciousness is quite extraordinary, often ascribed to supernatural entities with omniscience and omnipotence. In humans, this is often the purpose of ‘inner dialogue’ to monitor and maintain consciousness. GH Mead

also saw some of this process in social systems as intelligence and awareness is distributed. Appreciative Inquiry strives for such a state of wonder (Cooperrider & Whitney, 2005).

Implications for Organizational Design

While the challenge is perhaps greater than we can hope to address in this short article, I would like to point to some fairly modest design directions based on these observations, which incorporate corporate longevity.

Limited role of hierarchical authority

While the nature of succession is important to the survival of business (many of the oldest organizations are family businesses with more than 40 successive generations), the overall role of hierarchical authority has its limitations.

It used to be that organizational design particularly focused on organizational charts. But that has gotten very difficult to do as the main emphasis in organizational power have shifted from hierarchical authority to influence. The technical changes to knowledge have decreased the relevance of hierarchy as organizations have instead become processes, modular networks with cellular forms. The keys to managing organizations and businesses are still flexibility but have become even more dependent upon innovation.

Elliot Jacques was perhaps the last major theorist to consider hierarchical authority. (1997). He came to the conclusion that there would probably always be at least four levels to hierarchy. His perhaps best-known concept was time span of discretion, in which people at the top of the organization would pay attention to perhaps 20 years in the future, while people at the bottom of the organization might pay attention to the next 20 minutes of work. While this sounds fine, what one actually finds in organizations is that many times people at the top in fact pay attention to very short-term phenomena, watching for disruptive anomalies that threaten the business as well as innovations, which could potentially disrupt the organization positively. Most assuredly corporate executives do appear to have been often pressured to produce results in the next quarter's profits and to maintain very transient interests, not long term ones.

It is truly not only lonely at the top, the challenges of adequately maintaining appropriate or sufficient knowledge and power seems to require system wide awareness and not just consciousness at the top of a hierarchy. Rapid technical change and the concomitant increase of diversity within the system seem to require a broader awareness of our collective destiny.

The Story Telling Organization

While drawing organizational charts seems to have gotten more difficult to do and less meaningful because they are more based on influence rather than authority, our methods of expression have changed to stories (Boje, 1991). This follows an overall shift

in valuation of companies from material goods to virtual features. Thus the value of companies such as Facebook or Google often has to do with estimates of potential rather than a strict assessment of material assets. Of course this only really works if the potential finally delivers on its promise and the cash flows.

The overall change in organizational theory that has been helpful in understanding and designing organizations still focuses on organizational groupings or subunits that are linked or coordinated by many different methods such as teams, coordinators, information systems, etc. But as these have become increasingly difficult to express in organizational charts, we rely more on narrative explanations.

Part of this change is also that the value of business has less to do with the value of raw commodities than with its service or knowledge content. Peter Drucker in his sentinel HBR article of September 1994, *The Theory of the Business*, used stories to describe different companies' theories of business. These stories are their statements of assumptions upon which the organizations have been built and have shaped their behavior. (Drucker, 1994)

Rehearsing their stories is extremely important in organizations placing attention on their mission and values. Awareness of the founding story of an organization is very important as it sets much of our culture. Creating new stories can be an integral part of their organizational change and development.

Boje (1991) suggests that post-modern forms of storytelling may be fragmentary including many voices in the organization, and not a single long grand narrative. This may make the story more challenging to know and develop, however it gives greater capability of it being reoriented and rewritten. This seems to require a great degree of awareness with minimum action, rather than drastic action with minimum awareness.

Small is Beautiful

EF Schumacher wrote a very influential book in 1973 called *Small is Beautiful*, which was one of the main treatises on socio-economics in the 20th century. In it, he draws on small scale structures' ability to care for humans of which they are composed. Oxford University is perhaps the oldest university in the world, being founded in 1168. One of the things that may have aided its survival is that it is composed of many independent and small colleges. It still gives birth to new schools. The Saaid Business School was started relatively recently, with money from the large UK department store. I suspect that small subunits add flexibility and proper scale for survivability. This seems to be a very unusual structure when compared to our mega campuses with universities with students numbering in the tens of thousands.

Miles and Snow's concept of cellular organizations tends to fit this scenario quite well. There has been a distinct change to modularity in the business landscape as organizations have shrunk in size as technology has gained strength. This can be a very good thing and may bode well for stronger orientation and environmental compatibility. Miles & Snow's model would need additional considerations for their environmental

impact, even though they do note that entrepreneurial efforts of the cell need to support the overall organization.

An Additional Dimension to Organizational Culture: long-term orientation

Geert Hofstede is well known for his development of four dimensions of business culture in countries around the world that were originally based on data from the global affiliates of IBM. A fascinating fifth dimension emerged as practitioners and academics tried to use the models in Asia. This fifth dimension was added in 1991 and was based on research by Michael Bond who conducted an additional international study among students with a survey instrument that was developed together with Chinese professors. That dimension, based on Confucian thinking, was called Long-Term Orientation (LTO) and was applied to 23 countries. There were four values discovered to compose long-term orientation: persistence (or perseverance), ordering relationships by status, thrift and having a sense of shame. As one considers the long-term orientation of Asian cultures broadly, it is remarkable to note the profound lack of long-term awareness in the recent economic development in China.

There is some movement in China for a Second Enlightenment in which organic Communitarianism and ecological awareness might supplant the First Enlightenment's individualism and imperialist attitude toward nature (Wang, 2013). While an environmental movement appears necessary to create a broad field of awareness, I suspect this might also be needed within the design of the organizations themselves so that external awareness is broadly held.

The Development of Organizational Consciousness

Organizations develop much like we do as individuals. Our story of who we are serves as a context for how we act and thrive. As our life changes, new chapters need to be written, but we also need the conserving nature of our founding story. This founding story often elicits patience and mindfulness. One can view consciousness as our internal dialogue. Psychologists have discovered a great deal about consciousness, finding that it is actually a dialogue of internal 'voices'. Stein Broten (1998) studied mothers and children to better understand organizational process. Mothers taught their children through their dialogue, and the children internalized what the mother said. What he found was that their monologues became the child's internalized dialogues. Likewise the moral psychologist Lawrence Kohlberg (1983) found that moral development in children progressed from external authority to internal authority. In combination, we "become the company" through socialization and rehearsal of the organizational story. We take on our internalized authority as we develop as human organizations.

While there may always remain some degree of hierarchical authority, it largely is something we need to internalize so that the tension between power and knowledge can be managed. As our mothers teach us, so too we are taught by those in authority in our organizations. Once we learn these founding stories we then should be left to create our smaller stories. Knowledge is often held by people closest to the work, and they also need the power to act on that knowledge. When we have to translate information and knowledge through hierarchical layers, this knowledge is corrupted and distorted. We

cannot afford for power to corrupt knowledge as in older forms of hierarchical organization. Power and knowledge need to reside together.

Karl Weick (1988) had a very interesting distinction between knowledge in action and knowledge about action. For us to operate we need to have a form of knowledge that can be used as we operate. This needs to be incorporated into our assumptions. Max Bazerman (2011) sees this as a process of resetting our assumptions through researching and searching beyond our simple biases. From time to time we need to reset our assumptions and perhaps rewrite our story. This reorientation is needed as the organizational and ecological landscapes change.

The awareness of Wang's Second Enlightenment is broadly echoed in the ecological and sustainability movement declarations. Such awareness has occurred from time to time as in labor movements and ecological movements like Earth Day, etc. The triple bottom line (Planet, People, and Profits) would be a challenge yet unmet in organizational design. This essay is only an introduction to such an inquiry.

Conclusion

Organic growth strategies do not mean that only internal sources are utilized in growth, but rather a respectfulness of life is present in the intercellular exchanges. Globally common values are needed to facilitate commerce. Hans Kung and Vaclav Havel's *Global Ethic for Global Politics and Economics* provides a value framework for a stable economic order, however this only set a minimal requirement and does not suggest that it would be sufficient to ensure a stable economic order (Kung, 1997). The consideration of global values was also a concern for Kriger and Hanson's work in *A Value Based Paradigm for Truly Healthy Organizations* which again draws from world religions but perhaps suggests how we might reach deeper than simply sufficiency (Kriger & Hanson, 1999).

Standardization of quality (TQM), documentation (ISO) and other processes have increased interchange and globalization of resources. However, large corporate decision-making can create great error through locational bias. These systems do not comment on appropriateness or orientation. Open systems of cellular organizations that have internal compasses are needed to create the vision of self-consciousness and management of awareness and self. However, much of this theorizing appears to yet be done.

Large-scale organizational exchange does occur in ecology, and studies in organizational ecology and institutional theory are very helpful in understanding these relationships in corporate ecology. However it is not just the exchanges that need to be understood, but the internal composition of such organs. What goes on inside ourselves and our organizations does make a difference.

The explosion of information and plurality of voices in global commerce create an almost insurmountable challenge to find coherence and convergence. The challenge of organic forms of integration could result in 'all channels blaring' if this conversation is not well managed. If one images our ecosystem consciousness as the management of this

conversation, much of this potential success lies with grounded decision-making based on the colocation of knowledge and power. From a design perspective, the cellular form seems to have a great deal to offer, however it needs broader system alignment and attunement.

This orientational force can perhaps be created as in other organic systems. The Gaia hypothesis (the Earth is a living system) was one such speculative effort, but large system self-awareness needs to be more fully developed. Without this orientation and basic understanding of power and knowledge, global corporations could soon foul the atmosphere and create a non-functioning marketplace. However if we can discover how to operate more organic and oriented, we can proceed with greater consciousness and global awareness of our system state. No government or corporate headquarters can adequately control this process. The folks at the top of the pyramid cannot do it. Everyone in the system needs to make conscious choices. The fear of self-consciousness can be fatal and we can easily become self-absorbed. Our ultimate challenge for organizational design is to have an inspired system state.

References

- Bazerman, M. (2011). *Managerial decisions*. Hoboken, NJ: Wiley.
- Boje, D. (1991). The storytelling organization: A study of storytelling performance in an office supply firm. *Administrative Science Quarterly*, 36: 106-126.
- Braten, S. (1990). Paradigms of autonomy: Dialogical or monological? In A. Fehbrajo and B. Teubner (Eds), *State, Law and Economy as Autopoietic Systems*. Florence: European University Institute.
- Burns, T. & Stalker, G.M. (1994). *The management of innovation*. USA: Oxford University Press.
- Cobb, John (2008). *Whitehead word book*. Claremont, CA: P&F Press
- Collins, J. & Porras, J.(1994). *Built to last: Successful habits of visionary companies*. USA: Harper Business Essentials
- Cooperrider, D., Whitney, D. (2005). *Appreciative inquiry: A positive revolution in change*. USA: Berrett-Koehler Publishers.
- Daley & Cobb . (1994). *For the common good*. Boston, Massachusetts: Beacon.
- De Geus, A. (1997) . The Living Company. *Harvard Business Review*. 75 (2), 51-59.
- Drucker, P. (1994). "The Theory of the Business" *Harvard Business Review*. September 1994.
- Economist (2004). The world's oldest companies. The business of survival. What is the

secret of corporate longevity? Dec 16th 2004 | From the print edition

- Galbraith, J., (2002). *Designing organizations*. USA: Jossey-Bass/Wiley.
- Hammer, M, & Champy, J (2006). *Reengineering the corporation: A manifesto for business revolution*. USA: Harper Business
- Hutcheson, J. (2007). "The end of a 1,400-year-old business". *Business Week*. Retrieved 2012-08-23.
- International Institute for Sustainable Development (2011). "The triple bottom line". *Business and Sustainable Development: A Global Guide*. Bsdglobal.com. Retrieved 2013-04-04.
- Jacques, E. (1997). *Requisite organization: Total system for effective managerial organization and managerial leadership for the 21st century*. London: Gower
- Kohlberg, L, Levine, C; & Hewer, A. (1983). *Moral stages: A current formulation and a response to critics*. Basel, NY: Karger
- Kung, H. (1997). *A global ethic for global politics and economics*. Oxford University Press.
- Miles, E.M., Snow, C., Mathews, J., Miles, G., Coleman, H. (1997). Organizing in the knowledge age: Anticipating the cellular form. *Academy of Management Executive*. 11(4)
- Morgan, G. (1997). *Images of organization*. USA: Sage Publications.
- Pasmore, W. (1994). *Creating Strategic Change: Designing the flexible high-performance organization*. USA: Wiley.
- Pondy, L. R., & Mitroff, I. (1979) . Beyond open system models of organization. *Research in Organizational Behavior*, 1: 3-39.
- Reingold, J., & Underwood, R. (2004) . Was built to last built? *Fast Company*, 88: 103-111.
- Schumacher, E.F. (1999). *Small is Beautiful*. USA: Hartley & Marks.
- Wang, Z. (2013) The Second Enlightenment, Ecological Civilization, and Postmodern Green Lifestyle. A working paper with the Center for Process Studies at Claremont School of Theology.
- Weick, K. (1988). Managerial thinking. *Executive Mind* by Srivastva, et.al. USA: Jossey Bass.
- Whitehead, A.N. (1926). *Process and Reality*. New York, New York: Free Press.

World Commission on Environment and Development (1987). *Our Common Future*. p.27.
Oxford: Oxford University Press.