

## **Human Ecology Economics (HEE) and Strategic Management**

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### **Abstract**

*Human Ecology Economics (HEE) draws on evolutionary and complex systems processes by incorporating interdisciplinary material from the humanities and sciences. Lessons for strategic managers follow from this HEE perspective with examples from the banking industry. HEE can nurture a broad environmental perspective among strategic managers and an ontological understanding of their organization within its dynamic ecology. Reconciliation is attempted between the chaotic dualities inherent in strategic management (SM).*

**Keywords:** Strategic management, human ecology economics, banking, sociology

### **1.0 Introduction**

A Human Ecology Economics (HEE) approach to Strategic Management (SM) is proposed in an effort to establish a common genealogy. Such an outcome may allow common discourse and clarification, if not reconciliation between the many conceived roots and branches of SM HEE, as recently developed by Allen (2008), provides this larger framework—especially for the inclusion of competing belief systems, social agreements, psyches and behaviors. Unlike traditional economics and other social and management sciences, HEE: (1) allows a long run time perspective, (2) encourages the use of the humanities, (3) allows everything to vary within the economic system—including belief systems, ‘ways of being’, and social behaviors—in complex, co-evolutionary ways, (4) emphasizes global systems, and (5) effectively juxtaposes ‘sustainability’ and other stakeholder goals alongside traditional economic goals such as profit maximization or shareholder value maximization. Each of these five attributes are required to fully apprehend organize and reconcile the ‘creative chaos’ of SM.

Initially this study uses a modified post-structuralist approach to explore the current state of SM. Rather than developing a traditional history of the present state of SM as a grand narrative of received history, culminating in discoveries of the present (Foucault, 1980), a genealogy is attempted which is, “...an act aimed at the present, rather than knowledge serenely directed elsewhere, towards the past...” (Shepherdson, 1995:20). A genealogy is discontinuous, contrasting a historical fiction which aims to discover “what really happened” in the past, from gradual discoveries and progressive clarification.

Since history is a narrative written by the conquerors, in which the truth about the present is recorded, SM can be conceived of as Orwellian history rewritten by the powers that be (Kuhn, 1984). The enduring metaphor of the dissection, then subsequent reunification of the androgyne, is used to explore the duality of SM.

As Scott (1994:137) notes, "... history is endowed with a teleology whose realisation is the present. That sociological imagination is riveted in the present that exists is natural, inevitable and unavoidable." Power and human motivation are central to a genealogy. How human behavior is motivated to a will to power (Nietzsche, 1909) and how shifting patterns of power within society relate to the self (Foucault, 1980), are vital to conceptualising the present for firms. These organizations are composed of people, so the evolutionary origins of SM will reside in the psyches of the firm's members.

A preferred 'ontology' is re-established for SM, which of course must come before (the 'obsession' with) 'methodology' and 'theory.' In regard to established ontology, theology (classical Greek especially) and psychology (Jung especially) provide 'pantheons' and 'mandalas' as depicted in Figure 4. Once this ontology of 'ways of being' is established, then it is possible to access the 'human ecology economics' frameworks are provided for in the other figures (which provide for a further detailed ontology that applies more specifically to SM), in order to discuss then reconcile various dualities of SM, 'Quantitative Easing'(QE) where expansionary monetary policy typically involves the central bank buying short-term government bonds in order to lower short-term market interest rates). The profession's obsession with methodology and epistemology might only be justified following on after this 'ontological re-imagining.'

## ***2.0 Dualities in Strategic Management (SM)***

A powerful metaphor of separation comes from Aristophanes' fanciful speech in Plato's Symposium (Plato, Jowett, trans, 1952, lines 251-3). In Aristophanes' story, the original human nature was not like the present, but different. The sexes were not two, as they are now, but originally three in number; there was man, woman, and a union of the two, having a name corresponding to this double nature, which once had a real existence, but is now lost, and the word androgyne is only preserved as a term of reproach. Initially this primeval person was round, his back and sides forming a circle; one head with two faces looking in opposite ways, set on a round neck and precisely alike; also four ears, two privy members, and the remainder to correspond. He could walk upright as men do now, backwards or forwards as he pleased, and he could also roll over and over at a great pace.

All of these creatures were then divided into two parts by a wrathful Zeus. The two parts, each desiring the other original half, came together and throwing their arms around one another, entwined in mutual embraces, longing to grow into one; they were on the point of dying from hunger and self-neglect because they did not like to do anything apart; and when one of the halves died and the other survived, the survivor sought another mate, man or woman, as we call them—being the sections of entire men or women—and clung to that.

The need to reconcile this separation and opposition remains fundamental to the human condition, and is a central to our quest to create a discourse of knowledge. Traditionally, we commonly think in terms of opposites or meaningful contrasts: order versus disorder, true versus false, good versus bad, individual versus community, power versus love, etc. Furthermore, the dualities might interpenetrate or balance each other and then produce unities. In Hegel's (1812) terms, thesis and antithesis can lead to synthesis, which then becomes a new thesis which provokes a new antithesis and so forth.

In terms of academic disciplines, the main contemporary dialectic that seems to shape SM contrasts an Industrial Organizational approach (a subfield of Economics and then Microeconomics) with a Sociological approach. The former assumes rationality and self-disciplined behavior, profit maximization, and rules are developed for resource allocation and profit maximization in an environment of competitive rivalry. The latter assumes rationality and satisficing rather than maximizing behavior, and the nature of human interactions is stressed—usually in a broader social or stakeholder context. Inserted into this basic dialectic is a host of tactics derived from a range of disciplines ranging from military strategy to psychometrics, which are played out at all levels of aggregation, including the overarching corporate strategy of the diversified firm, and the strategy for each core business area and functional unit strategies.

Shifting now to the authors' modified post-structuralist approach, SM presents the following contemporary thematic dialectics.

## **2.1 A Field in Decline versus a Field poised for Rejuvenation**

Following 20 years of continuous development (1965-85) SM approaches eventually fell into disrepute. During these halcyon days explicit and implicit assumptions and premises held about SM concepts had become immutable. This is arguably an inevitable consequence of a field dominated by positivists, using rudimentary deductive reasoning adopted from the first principles of economics. A disjointed theory-base with inadequate explanatory power eventuated, with serious loss of credibility amongst practitioners. Hammar and Champy (2001) built an image of these practitioners as a generation of senior level executives who worked hard to become senior executives, so they would not have to work so hard. Hardly the stuff of inspiring leaders.

SM is obligated to not only re-engage these practitioners but to reunite them with the academic disciplines. Assumptions about SM are based on concepts of firms from a different era. The illusion of continuous rational development of the field is highly challengeable. Industrial Organization theory based on identifying homogeneous groups can only partially address challenges faced by firms (Hosie & Smith, 2009). To achieve contemporary utility, strategic theory must connect with the realities of practice. Assumptions embedded in traditional models need to be updated to meet the new competitive milieu. Multiple viewpoints about the nature of SM dominated in the absence of a consistent and useful paradigm.

## **2.2 Methodology versus Theory**

Scholars of the Middle Ages, including Plato himself, purport ideas to be more authentic than experiences in the material world (Cornford, 1957). But since form determines content, methodology and theory are inextricably entwined. This is in keeping with Kant (1959) who presents the notion that a transcendent human subject might not be able to derive useful knowledge prior to any environmental experience. He also proposes that experience and *a priori* reason are integrated. This co-dependent relationship has contributed to fabricate the knowledge-base of SM. Concepts and tools of analysis derived from logical positivist tradition have been invoked to construct the fiction of the 'static' firm, with minimal attention to new or emerging industries. This psychically unhealthy alliance has failed to capture and adequately describe a firm's reality. Although positivists have provided the mainstream methodological approach in SM, pluralistic approaches may have the capacity to inject vitality into achievable visions.

## **2.3 Paradigmatic Closure versus Paradigmatic Pluralism**

Change dynamics of the 1980's spawned a plethora of fragmented, technically dependent research. Piecemeal testing of concepts neglected to account for the context of research invoked to justify claims. Absence of systematically delineated linkages with research findings failed to reconcile disparate parts of the SM framework. As a science of the artificial, SM searches for the Holy Grail of a unifying theory and ultimately nirvana—a central paradigm. In the interim, the field endures a framework, a pre-paradigmatic state. Theoretical pluralism serves to continue the 'conversation' about what is happening. Grounded theory building has the potential to progress this debate at a more fundamental level.

## **2.4. Science versus Art**

Post-Kuhn, science is not considered to progress in a continuous manner, making the distinction between science and art of SM arbitrary. The evolution of SM can be similarly conceived. SM is not well-served by strict adherence to either perspective but needs to adopt or, in some cases, develop appropriate methodologies for analyzing management. Phenomenologically-based mental machinations and cogitations become critical as differentiators between science and art perspectives.

## **2.5. Get Practical versus Stay Rigorous**

To be practical SM needs to be relevant, but if it is relevant, is it still rigorous? In the absence of useful theory, practitioners abandoned strategy and embraced implementation as their saviour. SM sits precariously on a raft of empiricism believed to be built on bedrock but is actually situated in quicksand—to avoid disappearing in the mire it must rapidly discover the true nature of what determines a firm's competitive virility. SM is more likely to prosper if it establishes a theoretical base and provides research outcomes with utility (Hosie & Smith, 2009). SM's renaissance requires the culling of artificial barriers between academic business disciplines and the successful marketing of these ideas to practitioners.

## 2.6. *Ex Post* versus *ex Ante*

SM has primarily adopted positivist methodologies resulting in descriptive reconstructed logic. *Ex post* rationalisation has resulted in theoretical development with weak predictive power for competitive outcomes. *Ex post* research is rather like trying to drive a Porsche at 250 kilometres per hour, relying on the rear view mirror for guidance—a ‘back to the future’ approach. *Ex ante* adopting pluralistic methodologies have more predictive potential than *ex post* empiricism. Logical theory with predictive power is more likely to result from *ex ante* pluralistic approaches. While a general *ex post* theory of SM needs to be developed, specific occurrences also need to be considered. Constantly obsessing about on the past saps energy that would be better spent on creating a desirable future.

## 2.7. Logical Positivism versus Interpretative Insight

Devotees of logical positivism have seduced their audience with a fiction of gradually emerging truth and reason, with a false assurance of the past given by a detached researcher. At the very point where Eastern mysticism (‘from the inside’, ‘within’) meets Western science (‘from the outside’, ‘without’) the duality of logical positivism must be reconciled with interpretative approaches. This may permit subtle but powerful analysis using anthropological, sociological and economic reasoning to understand the diversification of the firm.

For many SM academics, being rigorous is synonymous with being empirical. Heretic researchers in the mid-eighties prised open the firms ‘black box’ to find that teleological imperatives, such as goals and motivation, affect the strategic logic of a manager’s pursuit of goals. Rather than operating as economic aggregates, organizations began to be conceived of as a function of the cognitive work of participants, acknowledging the primacy of the manager’s strategic thinking. Positivist rationalists need to begin to wean themselves off the firm’s empirical breast and embrace the manager’s enacted environment, where the central analysis can be socially constructed in conjunction with the interactive processes of organized actors. This will serve to expand theory, research and constant practice of how organized participants interpret their environment.

## 2.8. Planning School versus the Design School

Frustration with complicated techniques in the early 1980’s, such as the ‘planning school’, gave way to simpler approaches. Enter the ‘design school’ framework, which underlies most SM prescription by purporting to represent a fundamental congruence between external opportunity (threats) and internal competence (opportunities). Fundamental formulation/implementation assumptions of the ‘design school’ were ill-conceived; since data being aggregated and transmitted up a hierarchy usually experiences significant loss or distortion, most environments are not sufficiently stable to ensure that strategies remain viable after being implemented.

## 2.9. Bounded Rationality versus Rational Bounding

Units of analysis have variously focused on: organizations (1970s), business units (mid 1970s to 1980), industries (mid 1980s-1990), the corporation’s collection of resources (1990-mid 1990s), how industry structure is managed by the firm and current notions of a firm’s competencies. Various levels of analysis are linked by concepts of competence building and leveraging with units of analysis determined by the dynamics being investigated, but eventually becoming context-dependent on the industry being considered. Strategic goals are believed to be managed holistically, incorporating the interplay between exogenous and endogenous variables. Some boundaries appear beyond analysis. Legal issues dominate the de-regulation process and therefore contribute in determining the firm’s boundaries. If we think of product and process historically as a ‘conjugated, complex pair’, in the world of Chaos they now represent a *Hopf bifurcation* having crossed the boundary of stability (Compelli & Reynolds, 1992).

Post modernists approach organizations, such as the firm, by deconstructing the interactions of individuals critical to the firm in and through social situations. This requires recognising and listening to other voices. Meaning and understanding are not considered naturally intrinsic to an organization and so must be deconstructed to reflect the diversity, pluralism and ambiguity of a firm. This has the potential to challenge the hegemony of existing modernist organizations.

In contrast to the World War II traditionalist mindset of using formal strategic thinking to guide management decisions, the military realized that the strategic challenge is authentically an adaptive one (Pascale, Millemann & Gioja, 2000). But SM is more than an anvil against which issues are annealed and solutions shaped. In the post-modernist world it must also integrate abstractions and visions in developing grounded business realities.

## 2.10. Business as Usual versus Competence Based Competition

SM is at a cross-roads. Critical challenges need to be addressed to avoid becoming progressively irrelevant. A logical theoretical base capable of making *ex post* predictions needs to be developed which is useful for strategic managers. Practitioners have become, by default, SM's real-time applied theory builders and testers. Leading practitioners are setting the pace for academics who simply document their actions—after the event—instead of developing theories to predict such phenomena.

Competence based competition is a de facto unifying theory of strategy (previously known as SM). As such, it implicitly aspires to integrate existing theories and guide a future pragmatic-oriented research agenda. Specific, dynamic, systematic, cognitive and holistic concepts are central to the concept of competence. A firm's capabilities to develop new competencies are considered critical to ensure competitive advantage in markets. Core assumptions about firms are surfaced to ensure the primitives are identified and the priors accounted for. For example, Game Theory's assumptions that all players have complete knowledge would be challenged. Cognitive and economic issues are believed to be inseparably entwined. The firm is considered a strategic asset to rebuild and expand so as to continuously create new innovative sources of competitive advantage.

For competency to establish credibility amongst academics and practitioners, fundamental issues underlying the field need to be articulated. In particular, this requires confronting disassociated assumptions about the firm. Strategy must change rapidly to sustain credibility with practitioners. 'Rigorous' yet 'flexible' or 'nimble' methodologies are advocated to achieve this end. For the reductionists this means superior quantitative methods (more of the same), whereas appropriate contextual methodologies may have greater potential to identify and investigate the fundamental questions eluding the field for the last 50 years. These underlying assumptions have the potential to challenge conventional strategy wisdom. Attempts to explain notions of human competence demand shared definitions to provide a substrate of common ground to form an enlightened basis of theory capable of explaining this process.

McKelvey's (1995) attempt to relate extended evolutionary constructs onto organizations is steeped in the positivist, reductionist fiction that somehow science will ultimately lead to a unifying theory for organization theory. McKelvey's attempt to move further up the theory chain is commendable. Unfortunately, the theory does not appear to substantially advance the field since it is hidebound by the conceptual myopia of the positivist prison. McKelvey's theory proposes that organizations undergo an evolutionary process analogous to artificial selection. This idea appears as merely a variation on the assumption that Western science is a unique force with the capacity to explain organization phenomena. This work is a clever, if not convoluted, revisit of an aberrant line of perception that seems suspiciously like a recant of the Taylor/ Mayo scientific management mindset.

Duality experienced from the knowledge of good and evil, resulting in a cleavage of the psyche, is manifest by the disassociation of strategic theory from the realities of strategy practice. For the firm to achieve strategic alignment, (become whole again), it must re-unite the anima (male signifier content) with the animus (mother image of process). A hostage is one with no loyalty or affinity to its host, but who is forced into the relationship by circumstance. When bonds are broken, hostages flee with a vengeance. This requires ceasing to hold product and process as separate hostages and allow them to be reunited into a unified whole.

In Aristophanes' story mentioned earlier, humans were being destroyed when Zeus, in pity of them, invented a new plan. He turned the parts of generation around to the front, for this had not always been their position, and they sowed the seed no longer as hitherto like grasshoppers, in the ground, but in one another; and after the transposition the male generated in the female in order that by mutual embraces of man and woman they might breed and the race might continue; or if man came to man they might be satisfied, and rest, and go their ways to the business of life: so ancient is the desire of one another which is implanted within us, reuniting our original nature, making one of two, and healing the state of man.

Each of us, when separated, having one side only, like a flat fish, is but the indenture of a man, and is always looking for his other half ... and when one of them meets with his other half, the actual half of himself ... the pair are lost in an amazement of love and friendship and intimacy, and one will not be out of the other's sight, as I may say, even for a moment; these are the people who pass their whole lives together; yet they could not explain what they desire of one another. For the intense yearning which each of them has for the other does not appear to be the desire of lovers' intercourse, but of something else which the soul of either evidently desires and cannot tell, and of which she has only a dark and doubtful presentiment (Plato, Jowett, trans, *ibid.*).

### 3.0. The Human Ecology Economics (HEE) Framework

Now returning to academic disciplines, and searching initially for a ‘big inclusive tent’ for the dualities in SM, the authors propose the language of Human Ecology. Academic textbooks proposing to summarize the field of Human Ecology are scattered in various departments ranging from Bioscience to Business and Economics and Environmental Design. They include the early environmental-conservationist effort *Human Ecology: Problems and Solutions* (Ehrlich, Ehrlich, and Holdren, 1973), and the more recent *Fundamentals of Human Ecology* (Kormondy and Brown, 1998). The former focuses on “the biological and physical aspects of man’s present problems and on the ways that they can be solved (p. v),” and the goal of the latter “is to present the fundamentals of ecology and their application to humans through an integrated approach to human ecology, blending biological ecology with social science approaches.” (p. xvii).

Discussions of ‘human ecology’ often include an important role for culture, as when anthropologists such as Brown (ibid) handle the subject. In *Human Ecology as Human Behavior: Essays in Environmental and Developmental Anthropology*, Bennett finds that:

‘human ecology’ is simply the human proclivity to expand the use of physical substances and to convert these substances into resources – to transform Nature into Culture, for better or worse...Humans exploit and degrade, but they also conserve and protect. Their ‘stewardship’ refers to constructive management of Nature, not cultural determinism. (Bennett, 1996, p. 13).

The authors’ use of the term HEE, as developed in this paper, allows for most of these approaches, including a major role for the humanities and the interdisciplinary social sciences. The framework used below can sort out various perspectives, rather than limit the reader to one or the other. Essentially, we propose a definition of ‘the economic system’ as a subsystem of ‘the human ecology’, which among other benefits can integrate the traditional economics versus sociology approaches to SM. Therefore, ‘economics’ (the study of the economic system) can be seen as a sub-field of ‘human ecology’ (the study of the human ecology) rather than the converse. Given this broader definition of ‘economics,’ actually as ‘human ecology economics,’ SM can be seen as a sub-field of ‘human ecology economics.’ This ‘human ecology economics approach to strategic management’ is proposed to give SM maximum conceptual freedom to rethink the boundaries and methods of its discipline—so that all can participate more fully in, and reconcile (i.e., understand if not unify) the strategic dualities mentioned in Section II of this paper.

**Figure 1: Structural Condition in the Human Ecology**

<p><b>BELIEF SYSTEMS</b></p> <p>Mythologies Religions, Faiths Ideologies, Philosophies Mathematics, Science Various Academic Fields</p>	<p><b>SOCIAL AGREEMENTS</b></p> <p>Politics, Law Use of Money Communications Culture, Etiquette</p>
<p><b>PHYSICAL ENVIRONMENTS AND RESOURCES</b></p> <p>Land, Air, Water, Energy City/Regional Spatial Arrangement Transportation, other Infrastructure</p>	<p><b>INSTITUTIONS ORGANIZATIONS MESO UNITS</b></p> <p><b>HUMAN POPULATIONS</b></p> <p>Birth, Fertility, Death Rates Population Age Structure Migration Spatial Distribution</p>

In common usage, ‘institutions’ are sometimes closely synonymous with ‘organizations’, sometimes more synonymous with ‘social agreements’, and sometimes used in reference to broader phenomenon involving all four quadrants (e.g., the military-industrial complex or the national park system as *institutions*).

A useful definition for human ecology (similar to social agreements) from Douglass North (1997) is “Institutions are the rules of the game—both formal rules and informal constraints (conventions, norms of behavior, and self-imposed codes of conduct)—and their enforcement characteristics.” (North, 1997, p 225).

Shown with organizations and institutions in Figure 1, from the language of evolutionary economics, is a ‘meso structure’ unit. The version of evolutionary economics referred to here is the ‘Micro-Meso-Macro’ framework of Dopfer, Foster & Potts (2004). This framework centers around two concepts: rules, and meso units. A rule is a pattern that agents follow in their everyday economic behavior; it may be cognitive, behavioral, technological, institutional, organizational, sociocultural, etc. Rules may be nested in other rules: we might talk about a motorcycle rule that includes engine rules, tire rules, etc. or a market rule that includes a double auction rule, a fixed-price rule, etc. Rules are carried out (actualized) by microeconomic agents (individuals, families, organizations). A meso unit is a rule plus its population of actualizations (e.g., the motorcycle meso is the motorcycle rule plus all agents (or stakeholders in the language of SM) who make, sell, repair, or drive motorcycles). An economic system (assumed to be complex adaptive) is a collection of meso units evolving over time. Macroeconomic behavior is the result of interactions among meso units. Economic evolution is the process by which new rules originate and diffuse through the population.

Figure 2 shows a possible bundle of structural elements that might be used to describe the economic system from a HEE perspective. In the authors’ scheme, economic systems are shown to have important elements from each of the four basic structural conditions. Regarding belief systems, the HEE approach proposes that the economic system relies heavily on mathematics, science, (traditional textbook) economics, ideals, faith and myth among other factors. Also, an orientation toward philosophical ‘materialism’ versus ‘transcendentalism’ might lead to different understandings of how the economy works, ‘money and value’ creation, etc., and thus both are listed. The types of social agreements, which are important in the economic system, include, but are not limited to, the use of money, policy, regulation, networks and culture. From human populations, there are workers, entrepreneurs, consumers and policymakers among others, and from physical environments and resources there are commodities, infrastructures and natural resources, among other tangible goods and structures.

**Figure 2: Structural Conditions in the Human Ecology: The Economic System**

<p><b>BELIEF SYSTEMS</b></p> <p>Mythologies Religions, Faiths Ideologies, Philosophies Mathematics, Science Various Academic Fields</p>	<p><b>SOCIAL AGREEMENTS</b></p> <p>Politics, Law Use of Money Communications Culture, Etiquette</p>
<p><b>ECONOMIC SYSTEMS</b></p> <p>Materialism, Transcendentalism Science, Math, Econ, Ideals, Faith Commodities, Infrastructures Natural Resources</p>	
<p>Money, Policy, Regulation Networks, Culture Workers, Entrepreneurs Consumers, Policymakers</p>	
<p><b>PHYSICAL ENVIRONMENTS AND RESOURCES</b></p> <p>Land, Air, Water, Energy City/Regional Spatial Arrangement Transportation, other Infrastructure</p>	<p><b>HUMAN POPULATIONS</b></p> <p>Birth, Fertility, Death Rates Population Age Structure Migration Spatial Distribution</p>

Compared to most economics literature, which minimizes the importance of belief systems, social agreements, institutional change and the integrity of physical environments and resources, the human-ecology framework might allow for a more comprehensive identification and explanation of economic processes.

Also, in contrast to much of the economics literature, these structural components are assumed to interact with each other ‘endogenously’ over time. That is, each structural condition, defined broadly as per Figure 1, co-evolves with each of the others in complicated feedback processes, and all structures change. Broadly defined, no structural condition is absolutely fixed or ‘exogenous’ or serves as a ‘global controller’ of the others.

This four-quadrant HEE diagram is also useful in defining ‘sustainability.’ Essentially the challenge for strategic managers is to fill out the four-quadrant diagram with structural elements—to construct the ontology of one’s organization, or economic system as one sees it—while determining which elements should be sustained and which elements might have to be eliminated so that preferred elements can be sustained. The role of the upper two quadrants remains vaguely defined at best, in current sustainability studies (Allen, 2008).

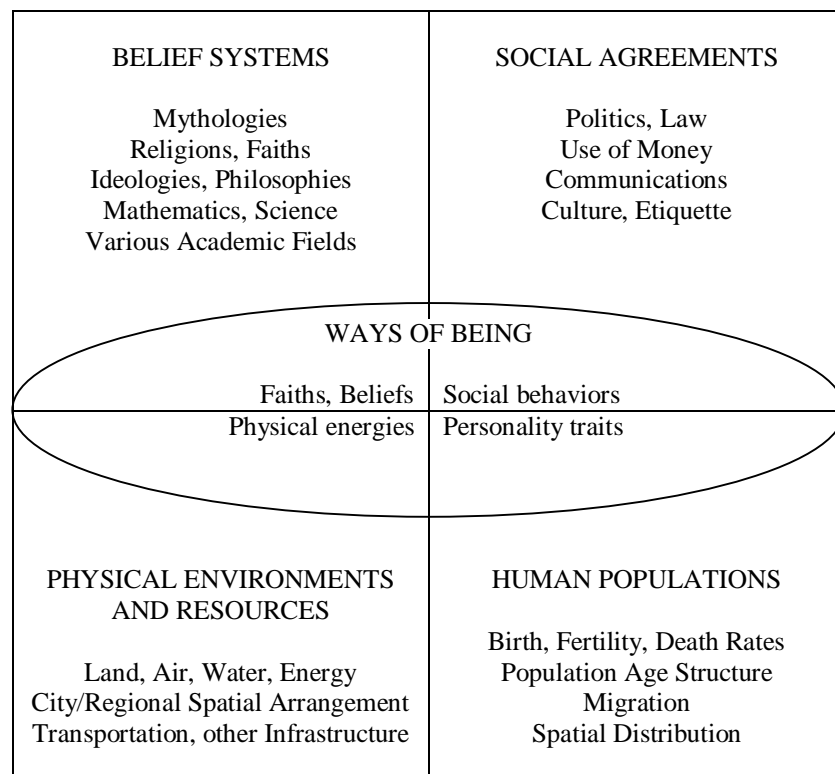
#### 4.10 Strategic Management (SM) in the HEE Framework

In corporations and other organizations, SM generally refers to the highest level of strategy—applying to all parts of the organization—while also incorporating the longest time horizon. It provides the framework for the organization’s values, culture, goals, mission and vision statements. To demonstrate how the HEE approach might guide SM, two examples are provided in this section. First, the HEE approach can help strategic managers articulate and establish what the authors would call a ‘way-of-being’ for the organization. Second, the SM of a bank is discussed as an example of how managers might use this framework within a specific industry.

##### 4.1. Example 1: Establishing a ‘Way-of-Being’ for the Organization

From the four structural quadrants in the Human Ecology framework other structural conditions emerge, such as ‘ways of being.’ As shown in Figure 3, the authors would define a way-of-being as a bundle of faiths, beliefs, social behaviors, personality traits, and physical energies. Ways of being can change and co-evolve along with belief systems, social agreements, human populations, and physical environments and resources. Ways of being are thus derived from each of these four structural components of the human ecology, as opposed to ideologies (systems of ideas and ideals), mythologies, and other examples of one structural component—belief systems.

**Figure 3: Structural Conditions in the Human Ecology: Ways-of-Being**



As defined, ways-of-being are similar to the notion of a god in Greek mythology, and thus in Allen’s research to identify various ways of being at play in the human ecology (Allen, 1997, 2008), they are given names derived from Greek and other ‘gods.’



Ways of being are broader than what people might call ‘cultural types’ or ‘personality types,’ because they also include ‘physical energies’ animated by environmental conditions—just as many of the Greek gods not only represent aspects of human mind and spirit, but also partner those intangibles with more tangible physical and material forces (e.g., Zeus’s patriarchal cultural order was associated with the most aggressive, competitive energies and even ‘lightning bolt’ enforcement characteristics...). That is, the physical environment and resources used by the firm are seen as helping to shape the way-of-being; for example the way-of-being of the same individual(s) on the farm would differ from in the office.

For the strategic manager assigned to lead the organization’s values, culture, goals, vision and mission statement, ‘ways of being’ should be seen as fundamental to all of these assignments. For example, vision and mission statements (and the strategic planning goals that they generate) require specific social behaviors and agreements that support the shared faiths and beliefs of these statements. And, organizational culture that can be built up in this way must be consistent with the personality traits and the environmentally-influenced physical energies of its stakeholders.

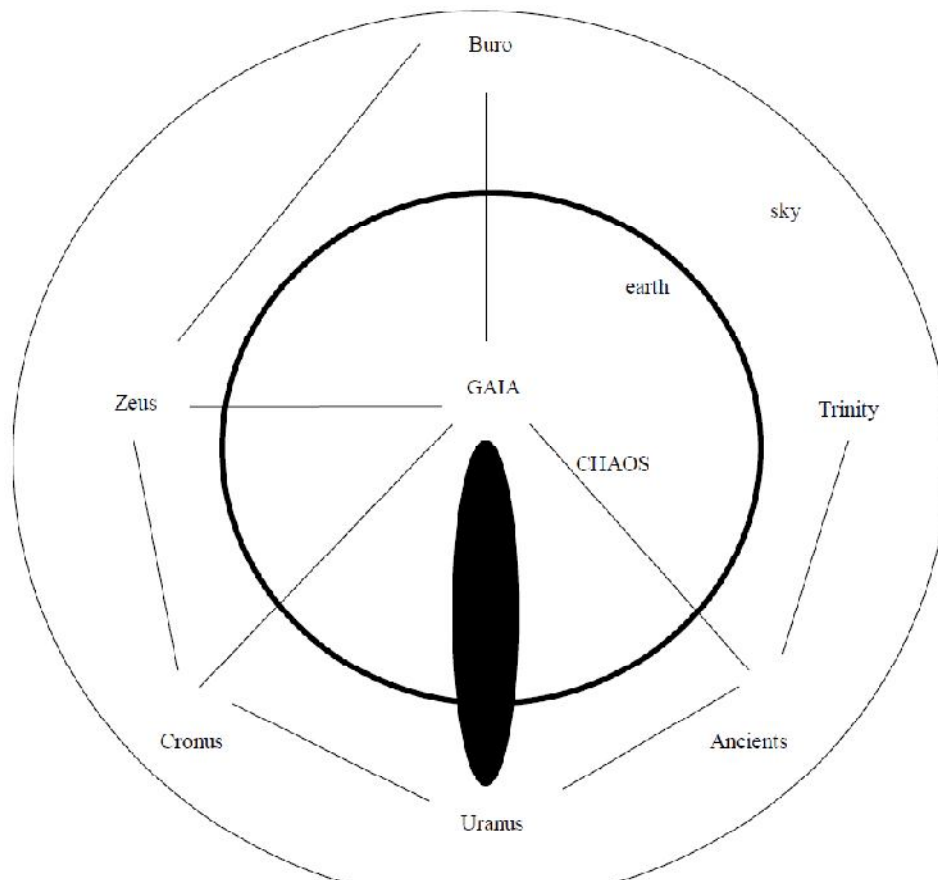
**Table 1: Examples of Ways-of-Being in the Human Ecology**

<b>Chaos:</b>	Various powers leading toward random inertness or failure of the living ecology
<b>Gaia:</b>	That which nurtures and sustains the living earth or ecology
<b>Zeus:</b>	Aggressive, competitive, expansionist powers; pre-modern, patriarchal discipline
<b>Trinity:</b>	Integrative, cooperative, contractionist tendencies; unconditional love, mercy, compassion
<b>Cybor:</b>	Modern, innovative, scientific, rational, moderate-individualism tendencies
<b>Buro:</b>	Modern, hierarchically-organized, communitarian-disciplined tendencies.

The authors’ work includes other ways-of-being, but for the purposes of this paper these six are intended as primary archetypes—an initial framework—to illustrate the HEE approach, and it is left to the reader or strategic manager to identify variations and hybrids of these six, as well as other ways of being more specific to the individual or organization. Examples of ways-of-being in the authors’ pantheon (and many others including hybrids can be considered) include Chaos—various powers leading toward random inertness or failure of the living ecology, Gaia—that which nurtures and sustains the living earth or ecology, Zeus—aggressive, competitive, expansionist powers; pre-modern, patriarchal discipline, Trinity—integrative, cooperative, contractionist tendencies; unconditional love, mercy, compassion; Cybor—modern, innovative, scientific, rational, moderate-individualism tendencies, and Buro—modern, hierarchically-organized, communitarian-disciplined tendencies (Table 1).

To one degree or another, all of these ways of being (and others) are ‘at play’ both within the human psyche and thus within organizations. One challenge of SM is to recognize, reconcile and prioritize them. If balance or integration between these ‘gods’ is not allowed, there may be war—either within the human psyche, or in the organization and its broader ecology. As per a review of this pantheon (in *Ecological Economics*, 1998), pursuing any one of these six archetypes alone “in pure form will not take us any place any mentally healthy person would want to go” but instead the challenge is to recognize and find sustainable balance between these pure forms and others.

To help with reconciliation between ways of being, the cosmological diagram called a *mandala* is often used, meaning ‘circle’ in Sanskrit. Similar to the Greek pantheon of gods, mandalas animate and organize forces which tend to fall apart or oppose each other. By organizing seemingly irreconcilable forces on opposite sides of the circle or in concentric rings, there is an attempt to ‘find the center’ or ‘find unity’—an attempt to overcome or better ‘live-with’ conflict and ambiguity, which is related to the religious path toward enlightenment and the psychological attempt advocated by Jung and others to overcome dissociation or disorientation (Storr, p. 235-8). A well-known mandala in the Hindu religion shows “Cosmogenesis” (Smith, 1994, p. 23) whereby the universe evolves from dense matter into more ethereal spheres. Mandalas can thus represent various evolutionary or time-based processes as well as timeless or static processes.

**Figure 4: A Mandala for the Human Ecology**

Similar to Cosmogogenesis, Figure 4 shows how some ways of being or gods, such as Gaia and Chaos, are more 'earth-centered,' or oriented toward dense matter and physical processes (empirical, tangible processes would be emphasized), and some gods, such as Trinity and Cybor, are more 'sky-based' and transcendent of physical processes (processes of mind, spirit, and social values would be emphasized). Earth gods are located more to the center of the concentric figure, and sky gods are located more to the periphery. Gaia and Chaos are considered to represent the most primary processes in the human ecology from which other processes are allowed. Following a more empiricist than transcendentalist focus, they, especially Gaia, are located in the center of the mandala to give 'grounding' to the other ways-of-being.

The dashed lines between gods in Figure 4 represent 'interpenetration' or 'dialectic,' which means the ability of the two gods to: (A) change each other; or (B) define each other in meaningful contrast. And, as per Greek mythology, starting with Gaia and Chaos, (C) one god is created from the other(s). In mythological terms, Figure 4 is a 'family tree' with the polygamous Gaia in the center, and in each case the dashed lines go between parent and offspring. In Greek mythology, Chaos and Gaia are the 'father and mother' of gods, respectively, and their first 'offspring' is Uranus (sky) who is generated from the black void at the bottom of the figure. New gods are then generated, and the historical succession proceeds from the bottom of the figure to the top of the figure. In philosophical terms, the dialectical relation between thesis and antithesis results in a synthesis which becomes a new thesis.

Moving from the archaic bottom of Figure 4 to the modern top of Figure 4, a more modern 'sky-god' is generated from a more archaic sky-god (father) as well as (mother) Gaia. It would be somewhat misleading to call the axis going from the bottom to the top of the figure the 'time axis,' because chronological time was an early transcendental construct, generated by the god Cronus in Greek mythology. Cronus is in the lower portion of the figure, and shares the same (horizontal) archaic status as other Ancient gods that are not discussed in this paper. Figure 4 and the authors' pantheon are consistent with Greek mythology, except that the authors 'update' Greek mythology by adding Trinity (similar to the way-of-being that is idealized in most monotheistic religion), Cybor and Buro (the authors' 'creations') to the classical Greek pantheon.

In the authors' mythology, Cybor and Buro were generated from Zeus and Gaia, and they contain some properties of Gaia and Zeus while also possessing modern attributes that stand in meaningful contrast to Gaia and Zeus. The 'modern age' can be considered as the top half of the figure, and the pre-modern age is the bottom half. Therefore, Cybor and Buro are the only two entirely modern-age gods represented here. Zeus, Gaia, and Trinity are neutral with regard to modern versus archaic distinctions.

In the 'Western' traditions of Greek mythology, represented on the left side of Figure 1, interpenetration or dialectic between Gaia and Uranus first produces Cronus. Cronus eventually replaces Uranus and becomes the dominant Western sky god, and then dialectic between Cronus and Gaia (actually Gaia's byform Rhea) produces Zeus. The process repeats as Zeus eventually dominates Cronus. In the authors' update of Greek mythology, Zeus consorts with Gaia to produce the twins Cybor and Buro. Shown at the top of the figure, Cybor and Buro are the current dominant sky gods over Gaia, with Cybor even more transcendent than Buro. Cybor and Buro, while arising out of more Western traditions, now have considerable dominance in the East as well as the West, and therefore they are horizontally centered in Figure 4. New ways-of-being in the human ecology thus arise from old ways, and they now spread globally.

In 'Eastern' traditions, represented on the right side of Figure 1, various Ancients are generated from Gaia and Uranus. Then, from these Ancients, Trinity is generated. In the author's view, Trinity is the one sky god that was not directly generated from Gaia (no dashed line from Trinity to Gaia). In the authors' mythology, the ever fertile, sensuous earthy-orgiastic Gaia did not play an important direct role in generating the god Trinity that is idealized in most monotheistic religion. Instead, Gaia's presence in Trinity comes more indirectly in the second generation through other Ancients from eastern as well as western traditions. There is also no strong dialectic between Trinity and any other god after the Ancients—no other dashed lines—indicating that Trinity has largely broken free from processes of dialectic and historical change.

The most basic reconciliation and integration in the authors' pantheon is provided between Chaos and Gaia: various powers leading toward random inert disorder (Chaos), versus that which nurtures and sustains the orderly chemical and temperature conditions of life on earth (Gaia). Chaos, literally 'the void,' (represented by the shaded ellipse in Figure 4) nevertheless provides the material basis from which life springs forward—the creative void (Chaos) versus the creative impulse (Gaia). All other human challenges and debates are played out in the context of whether 'orderly and sustainable life' (for individuals, organizations, and ecologies) is possible in otherwise chaotic and harsh conditions. And, entrepreneurship and innovation in the modern business world are often seen to occur at 'the edge of chaos' or where there is 'creative chaos'—where the right balance between Gaia and Chaos is established as opposed to states of excessive order ('dischaos') or disorder. Similarly, Joseph Schumpeter argued (Schumpeter, 1912) that 'creative destruction' of existing economic structures, recessions and other 'chaos' are necessary so that inefficient or non-progressive structures can be eliminated and new creativity allowed. And, practitioners talk about the desirability of 'disruptive' technologies. These dualities are worked out in the earliest Greek mythologies. For example, in Hesiod's *Theogony* (trans. 1983): Chaos was born first and after came Gaia the broad breasted, the firm seat of all the immortals who hold the peaks of snowy Olympus, and the misty Tartarus in the depths of broad-pathed earth.

In more modern times, if Chaos and Gaia are understood as inseparable partners, then it is easier to understand why the Gaia Hypothesis and the Chaos Revolution were both named and popularized simultaneously in the 1970s. Prior to publishing the Gaia Hypothesis in 1972, James Lovelock's "frustration with the madness of the planet's chaotic system" was what "...transformed to awe over the method behind it all (Joseph, p. 30)." Similarly, the renowned biologist Lynn Margulis, who worked with Lovelock on the Gaia Hypothesis, was able to understand the symbiosis and cooperation between all life on earth, including the smallest microbes, as a self-sustaining order only in contrast to what otherwise would be a chaotic and life-hostile environment.

In his book *Chaos, Gaia, Eros...* Chaos pioneer Ralph Abraham claims that:

The mythic struggle between Chaos and Order [Gaia] is the emotional motor driving (and resisting) the Scientific Revolution now in progress. In the 1970s the mathematical waves of chaos theory crashed on the beaches of the sciences. First struck, in 1971, was fluid dynamics, an event occasioned by the proposal of Ruelle and Takens to model turbulence in fluids with a chaotic attractor. Then, in 1975, population dynamics was given a chaotic mathematical model. Rapidly, the other physical and biological sciences followed suit. Recently, the earth sciences, social sciences, and even psychoanalysis, have fallen into the new paradigm of chaos. (Abraham, p. 124).

As per his title, Abraham discusses the role of Eros, as used in ancient Delphic traditions, to understand and reconcile Gaia and Chaos.

Another basic reconciliation and integration in the authors' pantheon is provided between Trinity and Zeus. Trinity's qualities—integrative, cooperative, and contractionist—are more stereotypically 'feminine', especially when combined with the stereotypically 'motherly' principles of unconditional love, mercy, and compassion. Zeus then represents the stereotypically opposing 'masculine' qualities—aggressive, competitive, expansionist—especially when combined with the stereotypically 'fatherly' principles of conditional love as based on achievements and proper moral codes of justice. In Figure 4, Trinity and Zeus are thus located on opposite sides of the mandala to represent extreme opposition.

If an individual or organization embraces Trinity in ideology, but accepts Zeusian codes of conduct in practice, then, in this mythology, it can be said 'to be worshipping both Zeus and Trinity.' The type of joint worship of extremes is usually not sustainable as the two realms interpenetrate and clash with each other—in this case, mistaken ideology or false consciousness is revealed. The 'two-self individual' or organization may even experience hysteria or schizophrenia or some such loss of function or harmony. To the degree that there is unsustainable hypocrisy, Trinity and Zeus would have an 'uneasy alliance.'

There may be both Zeus and Trinity qualities in people and groups; who may be subject to various balances between the aggressive power-seeking and the integrative loving—although a reading of Nietzsche (1909) might conclude that 'it is all about power seeking.' To avoid loss of function or loss of harmony and a destructive excess of the aggressive, competitive, expansionist way-of-being, we need to find ways that Trinity can restrain Zeus instead of having to "go away into the dark alleys of the town" (as the true Lord does at the end of Dostoevsky's parable "The [Zeusian] Grand Inquisitor").

Cybor and Buro are ways of being which are derived from (i.e., 'sons of') the Zeusian way-of-being; thus they also represent aggressive, competitive, expansionist, power-seeking systems, but they use more modern methods, ideologies, and regime rules. For example, Cybor represents a more moderate individualism compared to Zeus' more heroic individualism. Military-adventurer-sportsman heroes are more Zeusian 'in-your-face' individuals, aggressive business entrepreneurs and other individuals who 'mask' their competitiveness are more 'Cyborian.' The Zeusian way-of-being enforces strict discipline, with violence if necessary, through family-based models of organization. Organized crime networks are generally Zeusian, with their 'gold, goons, and guns.' Some organizations have Zeusian structures, with arbitrary 'cloak and dagger' hierarchies enforced by the dictatorial founder or 'good old boys.' When defeat is near, the Zeusian-patriarch may suffer a denial-syndrome, decision-paralysis, or even choose 'death with honor' for himself and his patriarchal clan, because the admission of defeat is demoralizing and antithesis to the aggressive, competitive, expansionist Zeusian character. Examples include the inability of dictators to surrender, the Japanese tradition of hara-kiri, the relentless expansion of certain corporations to gain market share at the expense of profits or even sustainability, and as discussed below in the banking example, 'rogue traders' unable to stop their reckless gambling away of company assets as losses mount.

The way-of-being called Cybor—modern, innovative, scientific, rational, moderate-individualism tendencies—in the authors' framework grew out of the scientific and industrial revolutions of the 1700s and 1800s. The 18th century Enlightenment was characterized by a new rationalism, and the new economic relations treated land, labor, and capital as commodities which could be increasingly disembedded from older social relations by the force of the money economy and the pursuit of profit. (e.g., Karl Polanyi's *The Great Transformation*, 1944). In *The Theory of Moral Sentiments* and *The Wealth of Nations* Adam Smith identified and advocated this way-of-being as appropriate to the new market capitalism. What the authors call 'moderate-individualism' in this way-of-being is consistent with Smith's new emphasis on liberty and restrained (as opposed to heroic-warlike-Zeusian) individualism as per Smith's profit-seeking "prudent man" (*Moral Sentiments*, Part VI, Section 1).

*The Theory of Moral Sentiments* is thus, in its largest focus, a book about the socialization of men and women who have emerged from the straitjacket of a traditional [pre-modern] often dogmatic social order, and must create a workable system of morality and social order in a new condition of 'perfect' liberty. (Heilbroner, 1986, p. 62). As elaborated elsewhere (Allen, 1997, 2008), this way-of-being called Cybor is named because, in the current period, these tendencies have encouraged "cybernetics", "cyborgs", and "cyberspace".

The way-of-being called Buro by the authors—modern, hierarchically-organized, communitarian-disciplined tendencies—in the author’s framework co-evolved with the Cybor way-of-being in the 1700s and 1800s (i.e., Cybor and Buro are ‘twins’ and represented next to each other in Figure 3). This period was not only characterized by new rationalism, innovative scientism, and new notions of liberty (Cybor’s doing), but it was also a time when powerful, modern, secular nation-states were built at the expense of more traditional political-economic regimes such as the Holy Roman Empire which formally ended in 1806 with the renunciation of title by Francis II. In the authors’ mythology, the Holy Roman Empire combined the older ways-of-being of Zeus and Trinity in ‘uneasy alliance.’ The more modern nation-state has a hierarchical-organized structure, but it developed with an increased civic concern for the dignity and welfare of the population at large, which the authors would call communitarian-disciplined, rather than Zeusian-patriarchal or hierarchical-disciplined. Individuals, organizations, and nations are seen to be the most effective when they have worked out the appropriate balance and integration between Cybor and Buro.

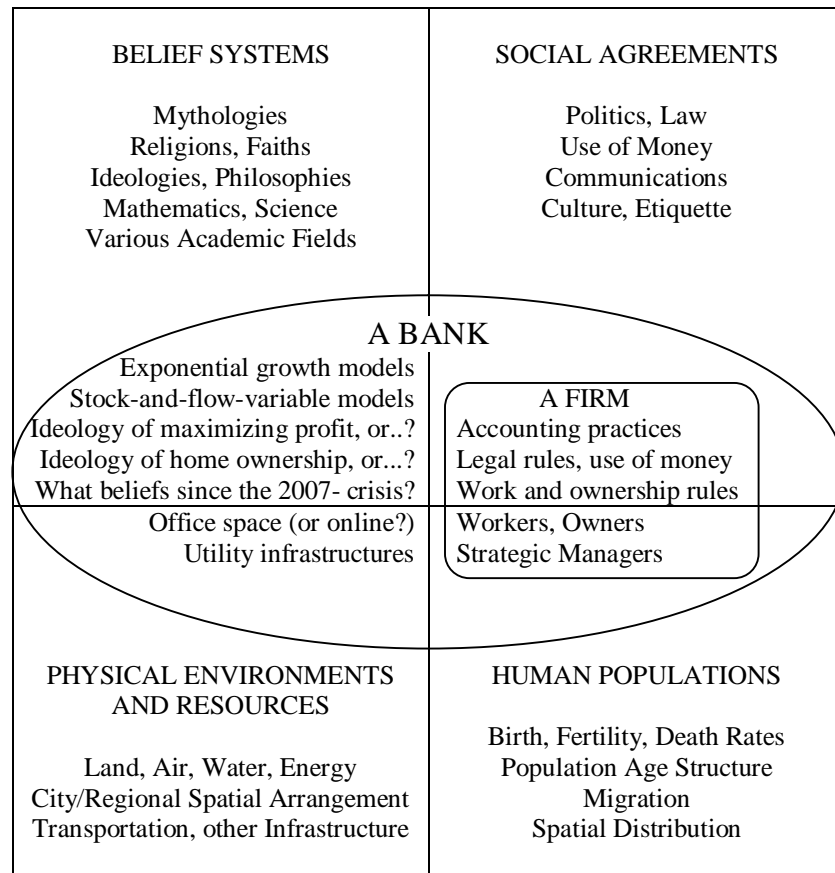
In the authors’ framework, the Buro way-of-being is named because of the modern bureaucracies which formed along with the modern nation state, and because of what it is like to work in a modern ‘office’ for which the German word is *büro*. When these types of organizations become too domineering and pervasive, as per Orwell’s 1984, then we develop the sentiment that “big brother is watching us.” In the author’s framework, of the twins Cybor and Buro, Buro is the ‘big brother’ who inherited some of Zeus’s ‘in-your-face’ aggressive-controlling tendencies. The Cybor way-of-being, with its emphasis on high-tech cybernetic systems and management of information flow, can in some cases also be aggressive-controlling over human activity, but the control mechanisms are often more ‘masked’ so that the way-of-being maintains at least an ideology of individualism. The life work of Michel Foucault sorts out these distinctions, as per the close surveillance of the individual by various social mechanisms that can happen in more open societies.

## **4.2. Example 2: Strategic Management of a Bank**

We now explore SM of a particular organization, for example a bank which is considered as an essential artifact of modern capitalism; how might this HEE approach help managers frame a bank’s values, culture, goals, mission and vision statements? Several applications are illustrative, which could be applied to other organizations as well. First, HEE can help expand SM’s typical ‘environmental scan’ of the bank and its market into a broader ontology. This explores what a bank is and/or what it could be, and how it should be categorized relative to similar organizations according to similarities and differences—a key strategic question since the 2007 global banking crisis given rapid institutional change, bank failures, and many debates over appropriate regulation. Second, HEE can be used to identify a bank’s existing versus desirable ‘way-of-being’ as defined above in section 4.1, which can help with formation of organizational culture and values and drive mission and vision statement language and goals.

### **4.2.1. The Ontology of a Bank**

For strategic managers interested in the ontology of their firm or organization, each of the sub-elements in Figure 1 can be broken down into sub-sub-elements. For example, we may want to understand what a bank is, or what a bank could be. With regard to belief systems, perhaps a bank relies upon the mathematics of exponential growth and stock-and-flow-variable models, and maybe there is an ideology of maximizing profit (or shareholder value, or non-profit community goals) as well as an ideology of supporting certain kinds of home owners or other types of clients (but with what balance between stakeholder groups since the 2007 crisis?). In Figure 5, these sub-sub-elements of belief systems can be shown separately in the belief systems quadrant within the circle called ‘A Bank.’

**Figure 5: Structural Conditions in the Human Ecology: A Bank**

From the physical environment and resources, a bank may use office space and utility infrastructures, which are therefore shown separately in that quadrant. Or, perhaps an electronic or ‘offshore’ bank does not require a traditional office. Sub-sub-elements from social agreements (such as acceptance of the law of compound interest among other legal rules and use of money) and human populations are also identified, and when all sub-sub-elements are bundled together, we have the structure of ‘a bank.’ And what type of organization (human population bound by social agreements) is a bank? As shown in Figure 5, when the bank-structural-elements from human populations are bundled together with the bank-structural-elements from social agreements, then the new bundle is what we commonly call ‘a firm.’ Of course firms must strategically choose and use various belief systems and physical environments and resources, but to exist as a legal entity only firm-specific human populations and social agreements are required.

Exploring the overlap of the social agreements and human populations quadrant more deeply, managers could identify key ‘meso units,’ as defined above to be ‘a rule and how the rule is actualized by stakeholders’—not only rules actualized by the stakeholders of the bank such as owners, employees, customers, and others who can be directly affected by, or affect the actions of, the bank, but also rules actualized by the stakeholders of the rule. Focusing on the latter instead of the former might help managers better understand the broader social forces that are changing the ontology of the bank and its economic environment. In evolutionary and complex adaptive systems approaches favored by the authors, changes in meso units are important drivers of change—generally more important across the broad social system in an evolutionary sense than the microeconomic actors who adhere to the meso patterns or the macroeconomic structures that result from them (Dopfer et al., 2004).

For example, the law of compound interest (the rule) and all who accept it and enforce it (stakeholders of the rule) is a meso unit. Another meso unit is: interest rates and other terms of borrowing and lending should be set in the ‘free market’ rather than controlled by government (the rule) along with all who accept and support this rule. Obviously, dramatic ‘creative destruction’ and evolution in Islamic banking would occur if its prohibition on usury (an alternate rule) were to give way to acceptance of the laws of compound interest and free market lending.

Chinese banking also flirts with this change, which could have extraordinary consequences (*The Economist*, 2012).

Less obviously, it has been argued that the rapid spread of these two meso units across the global economy starting in the 1980s—especially as supported by government deregulation of financial markets during the ‘Thatcher revolution’ in the U.K. and the ‘Reagan revolution’ in the U.S.—were major causes of the 2007 global banking crisis (Allen, 2009). In the U.S., the 1980 Depository Institutions Deregulation and Monetary Control Act and then gradual removal of Glass-Steagall prohibitions on banks supported the unsustainable growth of sub-prime mortgages along with the widespread securitization and commodification of other ‘toxic’ financial assets. As revealed in the 2007 crisis, strategic managers in banks did not understand how these meso units were driving the ‘financial fragility’ of the stakeholders of the rules, including even now some sovereign governments, to crisis stage in the long run (as per the terminology of Hyman Minsky, 2008) across the broader social system. What strategic managers in banks did seem to know before the crisis was how to create win-win situations for the more obvious stakeholders of the bank in the newly deregulated interest rate environment, but only in the short run.

The recent crisis has also drawn attention to differences between commercial banks, investment banks (in the U.S. required to become bank holding companies during the crisis to access the Federal Reserve system), cooperative banks, non-profit community development banks, global versus regional versus local versus offshore banks, etc. Each type of bank would likely have different ontological components in all four quadrants of Figure 5. For example, one dramatic change in the demography, geography, and regulatory environment of banks is the rise of ‘offshore finance,’ which can be defined as ‘markets where operators are permitted to raise funds from non-residents and invest or lend that money to non-residents free from regulations such as reserve requirements and taxes.’ Once money is raised, then without a reserve requirement, it can be loaned, deposited, re-loaned, re-deposited, re-loaned, and so on in offshore markets without limits imposed by the banking system. Thus, it is estimated that \$9 trillion in assets are now held in offshore accounts, which is \$2 trillion more than the total held ‘on-shore’ by U.S. banks (*The Economist*, 2011).

#### 4.2.2. The Way-of-Being of a Bank

Identifying the ‘way-of-being’ of bank requires digging deeper into the ontology of its intangible, illusive, and hard to measure components as shown in Figure 3: Faiths, beliefs, social behaviors, personality traits, and physical energies. Also, it requires an understanding of how these components cluster together such that a self-reinforcing way-of-being emerges. And ultimately, as discussed in section 4.1 above, in order to understand a way-of-being, it is necessary to place it in context with other possible ways of being as per Figure 4.

Allen argues (Allen, 1997, 2008 Chapter 9), that the dominant way-of-being in modern banking, however moderated by other ways, increasingly seems to be Cybor: modern, innovative, scientific, rational, moderate-individualism tendencies. As increasingly played out in the intangible networks of cyberspace with the automated communication and control mechanics of cybernetics, ‘Cybor-worshippers’ seek money and social power in aggressive, competitive, expansionist ways. But rather than through tangible ‘Zeusian’ face-to-face confrontation, they seek to ‘beat the average’ and gain social power with the innovations of financial engineering that rely on superior informational capital and the patience required from many hours at the computer.

Metaphorically, like spiders hidden in the ‘world wide web’ far away from the earthy farms and factories of the industrial age, they seek their power from the flow of the tangible assets of others. Although moderated by the hierarchically-organized, communitarian-disciplined tendencies of ‘Buro-worshippers’ in government and community organizations, Cybor-worshippers have increasingly prevailed since the 1980s as meso structures evolved to favor free-market deregulation and globalization of finance.

In banking, as in society at large, Cybor-worship or Zeusian worship is moderated by Buro-worship, Gaia worship and others. Buro-worship, which is reverence for the modern, hierarchically-organized, communitarian-disciplined tendencies within organizations and societies, can balance the destabilizing, Chaos-inducing excess individualism of Cybor and Zeus. For example, the ‘excess individualism’ of rogue trader Jérôme Kerviel, without organizational or social oversight, cost Société Générale 4.9 billion euros in 2006-08 before authorities caught up with him. However, communitarian discipline was too slow to catch up with Nick Leeson in 1995—losses of his rogue trading reached £827 million and led to the failure of Barings Bank.

These examples in banking are dramatic, but a challenge for strategic managers more generally is to maintain balance and compatibility between loyalty and discipline defined in organizational terms, and various kinds of

creative but potentially disruptive, as well as innovative individualism needed by employees and other stakeholders. On the other side of this balance, failure of an organization can be triggered by an excess interest in bureaucratic growth and discipline—including ‘Parkinson’s law’ (Parkinson, 1958) processes and the rising pyramid of supervisory staff—without creative adaptation to the dynamic environment of new technologies and opportunities and threats. And in banking as in society, there is the ‘greening’ and sustainability movement, which defines itself largely as ‘Gaia worship’—reverence for that which nurtures and sustains the living earth or ecology.

Brubaker (1984, p. 2) has argued that we have cultural convergence due in part to “the depersonalization of social relationships, the refinement of techniques of calculation, the enhancement of the importance of specialized knowledge, and the extension of technically rational control over both natural and social processes.” Concerning the rise of this new global ‘Cybor-rationality’ epitomized by modern banking, some commentators have expressed concern that it could reduce social capital and the sustainability of organizations—a cautionary tale for the strategic managers of banks who rely on the trust of social networks and the consonance of community values.” The bottom line in the political industry is this: financial capital— [along with] the wherewithal for mass marketing—has steadily replaced social capital—that is, grassroots citizen networks—as the coin of the realm (Putnam, 2000, p. 22).

Ancient Homeric Greek heroes and aristocrats or ‘masters’ did not desire to merely exist but strove for power, glory, and greatness. Frequently the young died in battle in an *agon*, a heroic contest. According to Nietzsche (1901), rarely does the desire for conservation take precedent over the ‘will to power.’ Nietzsche saw the ‘will to power’ as central to an affirmation of life, a place where doctrines that deplete life’s expansive energies should be challenged. For Nietzsche, the natural condition of life was profusion. In this ancient pantheon, the ‘will to power’ applies to all living things; adaptation is secondary as the struggle to survive is less important than the desire to expand power. Seen another way, Nietzsche argued that people and animals crave power; living is only a subsidiary purpose—something necessary to gain power.

Nietzsche’s notion of the will to power is contrasted by utilitarianism—a philosophy that claims that all people primarily want to be happy. The famous utilitarianism philosophy Jeremy Bentham (1776) argued that the purpose of public policy should be to maximize the sum of happiness in society. This led to the legendary utilitarian doctrine of ‘the greatest happiness for the greatest number.’ Such thinking seduced economists into believing that maximizing the personal utility of happiness was measurable and comparable across people. Noted economists of the late 20th century, such as Paul Samuelson, and John Hicks, founded transformation of economics into a ‘hard science.’ Economists mistakenly equated the ‘pursuit of happiness’ for the more narrow ‘pursuit of wealth.’ Increased personal wealth was erroneously assumed to lead to enhanced individual happiness. In the process, a mythical rational being, the ‘economic man (sic)’ was created. In a *History of Happiness in Economics*, Luigino Bruni (2005) alerts us to the irony of economists’ long held misunderstanding that all humans are rational beings who find happiness in maximizing their personal utility.

In *Happiness: Lessons from a New Science* Lord Layard (2005), demonstrates how increasing wealth is leading to decreasing happiness in the developed world. Layard observes that economic growth does not automatically increase social harmony. Instead, Layard argues for the unpopular position that increased taxes can improve the work-life balance of citizens and increase overall wellbeing in a society. Likewise, Paul Martin’s (2005) book *Making Happy People: the Nature of Happiness and its Origins in Childhood* argues that people are not always motivated by financial incentives, and in some cases, financial incentives can actually reduce motivation to expend energy on work and wealth creation instead of increasing it. Thus, in current literature, an antithesis to the Zeus-like domination and male aggression of capitalism has arisen with Gaia and Trinity qualities.

## 5.0 Conclusions

A HEE approach to SM is proposed here in an effort to create a more common discourse and a more common genealogy for reconciling the essential elements of the SM discipline. The HEE approach allows strategic managers a broader environmental perspective and better ontological understanding of their organization within its dynamic ecology.

Hopefully this scheme allows managers to ‘hold at arm’s length,’ contemplate, and prioritize various belief systems, social agreements, and ways of being which exist in their organizations and societies, and which drive these ecologies along their course.



Hopefully, clustering together various powers and principalities in a mandala as per Figure 4 is a useful way to reduce the massive chaotic flux of fragmented and haphazardly-turning knowledge. Maybe relegating Chaos to an appropriate place in the pantheon, and holding him and other 'gods'—as they were known in Greek mythology—at arm's length increases our ability to live with these gods. In Jung's terms, a god is then less able to "storm the citadel of the ego" because we are more aware of the presence of balancing gods. And, when we develop greater consciousness of the deep mythic structures, we might be less dysfunctional when Cybor or another god 'chooses us.' This argument seems especially relevant in the globalizing human ecology where previously separate cultures increasingly clash, and where the Cybor way-of-being is increasingly chosen as in the banking example discussed above.

In Aristophanes' story, not even Zeus was able to reconstruct the androgyne after he realized his error, but at least he found a way to reconcile the two sides so that they could propagate and sustain a supportive coexistence. Hopefully strategic management can do the same with its many dualities

## **References**

- Bruni, L. (2005), *A History of Happiness in Economics*, London, United Kingdom: Routledge: California.
- Abraham, R. (1994), *Chaos, Gaia, Eros: A Chaos Pioneer Uncovers the Three Great Streams of History*, HarperCollins Publishers: New York.
- Allen, R., Bedford, N., and Margitay-Becht, A. (2011), "A 'Human Ecology Economics' Framework of Eastern Europe", *International Journal of Social Economics*, 38(3), pp. 192-208.
- Allen, R.E. (1997), *Cybor & Gaia: The New World Order*, Global Outlook Publishing: Oakland.
- Allen, R.E. (2009), *Financial Crises and Recession in the Global Economy*, Third Edition, Edward Elgar, Cheltenham: U.K., and Northampton, MA: U.S.
- Allen, R.E. (ed.) (2008), *Human Ecology Economics: A New Framework for Global Sustainability*, Routledge:Oxon, U.K. and New York.
- Allen, R.E., *Ecological Economics* 27 (1998), p. 330-1, Book Review of *Cybor & Gaia: The New World Order*.
- Arrow, K.J. (1972), "Gifts and Exchanges", *Philosophy and Public Affairs* 1 (Summer), p. 357.
- Aumann, R.J. (1987), "Game Theory", *The New Palgrave: A Dictionary of Economics*, 2, pp. 460-82.
- Bentham, J. (1776), *A Fragment on Government: Being An Examination of What is Delivered, on the Subject of Government in General in the Introduction of Sir William Blackstone's Commentarie*, London, Dublin: Printed for J. Sheppard, W. Whitestone, J. Hoey [etc.].
- Bernanke, B.S. (2007), "The Financial Accelerator and the Credit Channel", Speech at the Credit Channel of Monetary Policy in the Twenty-first Century Conference, Federal Reserve Bank of Atlanta.
- Bourdieu, P. (1984), *Distinction: A Social Critique of the Judgment of Taste* (in French, *La Distinction*), Harvard University Press: Cambridge, Mass.
- Brubaker, R. (1984), *The Limits of Rationality*, London: Allen & Unwin.
- Compelli, S.J. and Reynolds, D.W. (Oct., 1992), *Hopf Bifurcation in the Explodator*.
- Cornford, F. (1957), *Plato's Theory of Knowledge (The Theaetetus and the Sophist of Plato)*, Library of the Liberal Arts, Bobbs-Merrill, Indianapolis: New York.
- Dopfer, K., J. Foster and J. Potts (2004), "Micro, Meso, Macro", *Journal of Evolutionary Economics*, 14, 263–79.
- Foucault, M. (1980), *Power/Knowledge: selected interviews and other writings 1972-77*, ed & trans. Colin Gordon, Pantheon: New York.
- Gleick, J. (1987), *Chaos*. Penguin Books: New York.
- Golubitsky, M. and Stewart, I. (1984), Hopf bifurcation in the presence of symmetry, *Bull. AMS*. 11 (2) 339-342.
- Hammer, M.J and Champy, J. (2001), *Reengineering the Corporation*, HarperCollins: New York.
- Hanifan, L.J., (1916), *The Rural School Community Center*, *Annals of the American Academy of Political and Social Science*, 67, pp. 130-138.
- Hegel, Georg Wilhelm Friedrich. (1812), *Hegel's Science of Logic*. London. Allen & Unwin. Hesiod, *Theogony*, trans. by N.O. Brown (1953), Macmillian Publishing Co: New York.
- Heilbroner, R., ed. (1986), *The Essential Adam Smith*, W.W. Norton & Company: New York.
- Hosie, P, and Smith, R., (2009), *A future for Organisational Behaviour?* *European Business Review*, 21(3), 215-232.
- Joseph, L.E. (1990), *Gaia: The Growth of an Idea*, St. Martin's Press: New York.

- Kant, I. (1959), *Foundations of the Metaphysics of Morals*, Library of the Liberal Arts, Bobbs-Merrill, Indianapolis: New York.
- Layard, R. (2005), *Happiness: Lessons from a New Science*, Allen Lane: New York: United Kingdom.
- Levine, R. (1997), Financial Development and Economic Growth: Views and Agenda, *Journal of Economic Literature*, June, pp. 688-726.
- Lloyd, S. and Woodside, A.G. (2014), Advancing paradox resolution theory for interpreting non-profit, commercial, entrepreneurial strategies, *Journal of Strategic Marketing*, pp. 1-16.
- Martin P. (2005), *Making Happy People: The Nature of Happiness and its Origins in Childhood*, Fourth Estate: London, United Kingdom.
- McKelvey, B. (1995), Complexity versus Selection Among Coevolutionary Firms: Complexity Theory and Nash Equilibrium Fitness Levels, Working Paper, Anderson School: UCLA.
- Minsky, H.P. (2008), *Stabilizing an Unstable Economy*, McGraw Hill: New York.
- Nietzsche, F. (1909), *The Will To Power: An Attempted Transvaluation of all Values*, Allen and Unwin, Boston.
- Nietzsche, F. (1957), *The Use and Abuse of History*, Bobbs-Merrill: Indianapolis, N.Y.
- Nietzsche, F. (1973), *Beyond Good and Evil: Prelude to a Philosophy of the Future*, Penguin: Harmondsworth, England.
- Nitzan, J. (1998), "Differential Accumulation: Towards a New Political Economy of Capital", *Review of International Political Economy*, 5 (2), Summer.
- North, D.C. (1997), "Some Fundamental Puzzles in Economic Development", in Arthur W. Brian, Steven N. Durlauf and David A. Lane (eds), *The Economy as a Complex Evolving System II*, SFI Studies in the Sciences of Complexity, XXVII, Addison-Wesley: New York.
- Northcote, C. (1958), *Parkinson's Law: The Pursuit of Progress*. John Murray: London.
- Osborn, D. (1991), *A Joseph Campbell Companion*. Harper Collins.
- Pascale, R. and Millemann, M. (2000), *Surfing the Edge of Chaos*, Three Rivers Press, New York.
- Plato. (1952), *Timaeus* (B. Jowett, Trans.). In *Great Books of the Western World: Vol. 7. Plato*. Encyclopaedia Britannica: Chicago, pp. 442-477.
- Proceedings of the Royal Irish Academy. Section A: Mathematical and Physical Sciences, 92A(2), pp. 267-276.
- Putnam, R.D. (2000), *Bowling Alone: The Collapse and Revival of American Community*, Simon and Schuster: New York.
- Schumpeter, Joseph A. (1912), *Theorie der Wirtschaftlichen Entwicklung* [The Theory of Economic Development], Leipzig: Dunker & Humblot, translated by Redvers Opie, Harvard University Press: Cambridge, MA. (1934).
- Smith, A. (1759), *The Theory of Moral Sentiments*, Edinburgh, U.K.
- Smith, H. (1994), *The Illustrated World's Religions: A Guide to our Wisdom Traditions*, Harper Collins: San Francisco.
- Stephenson, C. (1995), History and the real: Foucault with Lacan, *Postmodern Culture*, January, 5(2): (www.pmc@jeferson.village.virginia.edu)
- Storr, A., ed. (1983), *The Essential Jung*, MJF Books: New York.
- The Economist (2011), "Trouble Island", October 15, p. 68.
- The Economist (2012), "Bending not breaking, Special Report on the Chinese Economy", May 26, p. 12-15.
- Veblen, T. (1923) (reproduced 1967), *Absentee Ownership and Business Enterprise in Recent Times: The Case of America*, Introduction by Robert Leckachman, Boston, MA: Beacon Press.