

ECOCENTRIC MANAGEMENT: AN UPDATE¹

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ABSTRACT

In an article published in 1995, Paul Shrivastava coined the notion of an ecocentric management paradigm. The ecocentric paradigm provided an integrated and holistic view of the organization at peace with the natural environment. This paper updates the idea of ecocentricity and enriches it with facts and fears that have emerged since then. We suggest that Shrivastava's original formulation was an improvement of the industrial paradigm, advance an alternative reconceptualization of ecocentricity, and discuss some of the possible obstacles to the emergence and adoption of ecocentric management.

Keywords: Ecocentric management, anthropocentrism, risk society, Paul Shrivastava, organizations, natural environment.

In the mid 1990s, a number of scholars attempted to incorporate the natural environment in management theorizing. Among them, Paul Shrivastava (1994, 1995, 1996) was arguably one of the most influential of these authors because of his concept of ecocentric management. He argued that the natural environment should be explicitly and genuinely considered in the study and management of organizations. A decade later, most research still sees the environment as it always has: as an externality. There are many journals explicitly devoted to the relationship between organizations and the natural environment, but the topic is still peripheral to mainstream publications. Despite the relevance of organizations in some of today's most pressing environmental problems, both the business and the academic communities have yet to seriously consider how to transit from a post-industrial paradigm to one of genuine ecocentric management. Some researchers argue that a managerial appropriation has occurred, in which business appropriated the sustainability discourse and adulterated the genuine meaning of ecocentrism and the sustainability purpose (e.g., Iyer, 1999; Valor, 2005). According to this view, such a "capture" explains the limited ability of the corporate social responsibility philosophy to improve corporate accountability: the environmental issues are not seen as an end in themselves. Instead, they are

“a source of competitive advantage or a condition to be competitive. Hence, it seems that the neoclassical model of corporate control remains untouched: companies should create value mostly for shareholders because they are the only or most legitimate agent for sanctioning failure” (Valor, 2005, p. 199).

This paper provides an alternative explanation for the apparent lack of progress on the research and practice of ecocentric management. We critically review Shrivastava's paper, reorganize the discussion on the eras of the relationship between organizations and the natural environment, and suggest that Shrivastava's conceptualization was more an extension of the industrial paradigm than the proposition of a truly new one. Our goal is to highlight the challenges that scholars need to address when studying and theorizing ecocentric management, in order to promote further research on this topic.

We use knowledge that has accumulated since the publication of this author's work and re-theorize the important ideas outlined by Shrivastava. Our paper contributes to the organizational and natural environment literatures by reanalyzing the notion of ecocentricity and by relating it to the historical evolution of the theories of organization. We start our discussion with an analysis of the idea of ecocentric management. Next, we revise the contrast between ecocentric and non-ecocentric management. We suggest that to understand ecocentric management, one needs to distinguish it from three other paradigms: the pre-industrial, industrial and post-industrial ones. We further add that Shrivastava's formulation may be better qualified as post-industrial (or, at the best, as ecocentric with an anthropocentric bias; Sutter, 2001) rather than as corresponding to a new paradigm that puts the environment/nature at the core of organizational thinking. We thus contribute to the reanalysis of a pioneering concept in the organization theory literature, one that once put the environment at the heart of organization theorizing. The notion of ecocentric management was described by Stead and Stead (p.181) as "a very good place to begin" the analysis of the relationship between organizations and the natural environment. In this sense, we recover the concept to take stock and to make sense of the evolution of the relationship between organizations and the natural

environment as well as of the challenges ahead. We therefore present the possible alternative contours of ecocentricity, and conclude with a brief discussion of the promises and obstacles to this nature-centric paradigm.

THE IDEAL OF ECOCENTRIC MANAGEMENT

In an article published in 1995 in the *Academy of Management Review*, Paul Shrivastava discussed the need to incorporate the natural environment into organizational theory. He proposed the adoption of what was labeled “ecocentric management, [...] a vision of ecologically sustainable organization-environment relations” (p.127). This was “a tentative, provisional, and incomplete” (1995, p.127) effort to move the organization forward to a new understanding of its relationship with the natural environment:

“Organizations in the ecocentric paradigm are appropriately scaled, provide meaningful work, have decentralized participative decision making, have low earning differentials among employees, and have non-hierarchical structures. They establish harmonious relationships between their natural and social environments. They seek to systematically renew natural resources and to minimize waste and pollution” (Shrivastava, 1995, p.130).

This new ecocentric management paradigm was justified by the increasing risks confronting human societies and resulting from a previous paradigm – anthropocentric in the sense of taking nature and the planet as “external” dimensions, to be freely handled for human needs and wants (for a comparison between anthropocentric and

ecocentric ethics, see e.g. Hoffman & Sandelands, 2005; Kortenkamp & Moore, 2001). These risks include nuclear catastrophes, natural disasters precipitated by human intervention, pollution, soil degradation, and the depletion and extinction of species, among others. These problems are technological and economic, but mainly behavioral and cultural (Hoffman & Sandelands, 2005). As Fricker (2002) regretted, the anthropocentric and utilitarian ethics that supported the previous paradigm risked undermining “the capacity of the earth to sustain us”, in such a way that “even the survival of humanity is threatened” (p. 430). Ryuzaburo Kaku (1997), a former CEO of Canon, observed that:

“Many companies around the world believe that they have a moral duty to respond to global problems such as (...) the deterioration of the natural environment (...). But few have realized that their survival actuality depends on their response. (...) To put it simply, global companies have no future if the earth has no future” (p. 55).

In this paper we reconceptualize the ecocentric paradigm through a more fine-grained analysis of the evolution of management thought with regard to the environment. We suggest that (1) the consideration of four rather than two major paradigms will help to better capture the environmental challenges that organizations are facing, and (2) we suggest that the ecocentric paradigm, as originally formulated, preserved in great degree the Cartesian duality between natural and human systems (Iyer, 1999). It corresponded to a “post-industrial” paradigm rather than to a genuine ecocentric one, and as such, needs to be critically discussed and updated.

THE AGES OF ORGANIZATION AND THE NATURAL ENVIRONMENT

In his 1995 paper Shrivastava contrasted traditional and ecocentric management. The transition from one mindset to the other would be the result of a growing awareness of human societies as risk societies. The risks of the industrial society were rooted in a process of industrialization with destructive consequences in the natural ecology: “Modernization, in seeking economic growth, inadvertently but systematically unleashes risks and hazards” (p.121). Hence the need to consider a new mindset for organizing. We suggest, as an alternative, that in order to understand the evolution of the relationship between organizations and the natural environment in a more textured way, one needs to consider four major stages: pre-industrial, industrial, post-industrial and ecocentric. The distinction between the phases that we propose here, namely between industrial and post-industrial organizing, is well established in the literature (e.g., Hatch, 1997). The major characteristics of the three historical mindsets are briefly sketched in Table 1 and are discussed next.

Table 1 about here

PRE-INDUSTRIAL ORGANIZING

The key concept for understanding organization processes in pre-industrial societies was, and still is, scarcity. Individuals, clans and small organizations produced limited quantities of goods and were vulnerable to famine. The poorer, not only in pre-industrial societies but also in the developed world are, as the Katrina hurricane recently showed, more vulnerable to the forces of nature. For pre-industrial societies the natural environment was *the* environment. This environment was imposed upon human activity. Given the predominance of agriculture and the lack of control over the environment, the

natural world imposed itself as a major and constant force, whose power could hardly be dismissed or discounted. People living in communion and harmony with nature are a common representation of these pre-industrial times. In the pre-industrial world of craft production, owners and crafters worked for themselves and for their relatives. The mindset was local. Organizations were teams of craftsmen working together through bonds of solidarity. In this local world, many people developed a tribal identity. Some approaches to the future of work envision the return to this pre-industrial ideal, when people controlled their work. According to some authors, this understanding of work prevailed until the labor process was degraded by the industrial revolution and later by the advance of Taylorism (Braverman, 1974; Burawoy, 1979).

INDUSTRIAL ORGANIZING

The process of industrialization created a completely different world, a brave new world, as put by Aldous Huxley. If in the initial phases of the industrial era the craft logic persisted for some time, the advent of mass production introduced a radical change in the relationship between organizations and the natural environment (Hart, 1993). Organizations, designed according to the management principles advocated by Taylor (1911), became forces of mass production, leading to a society of abundance – and, the critics said, of alienation (Seeman, 1959) and destruction (Shrivastava, 1994). Individuals became producers (of goods X) and consumers (of goods Y). In a downward spiral, people want/ “need” to produce/work more to get more resources (money), to be able to consume more and more, thus feeding the corporation’s aim of selling and gaining ever more. Gross national product “needs” to grow continuously, and more and more products and services are “necessary” for nourishing the spiral – and any slight sign of slowing down becomes a source of anxiety that challenges

governments and corporations, and leaves some people with the misfortune of unemployment and the inability to continue to consume and to participate in the job market. For nourishing the spiral, more and more resources are necessary, with ecological footprints (a measure of how much nature is used) usually exceeding ecological capacities (how much nature there is to use), mainly in developed nations at the top of the economic pyramid (Fricker, 2002; Wackernagel & Rees, 1996).

In this new industrial world, nature became distant, a resource base to be exploited. Organizational scholars used “denatured” concepts of the environment (Shrivastava, 1994, p.705). Changes in the transportation infra-structure increased the reach of organizations that evolved to international scale and scope. Larger organizations produced greater profits for a small number of people. The widening gap of wealth between the very rich and the rest of society led to a suspicion of some toward organizations, their owners and managers. Organizations, viewed as machines of efficiency and predictability, engaged in furious processes of competition. The process of industrialization produced a great number of positive consequences and significant human progress, but its narrow vision of the natural environment, abstract, shallow, exploitable and denaturalized, as Shrivastava (1994) put it, also led to a number of negative consequences: pollution, global warming, natural and human-made disasters, species extinction and so forth. The symptoms of nature’s unrest became clearly visible in the second half of the 20th century. The risks created by industrialization led to the quest for a post-industrial society.

POST-INDUSTRIAL ORGANIZING

A central author in the understanding of the post-industrial society as a risk society was Ulrich Beck. In the famous book published in 1992, *Risk Society*, the author suggested that the central concern of the post-industrial world would be the assessment and neutralization of the risks, technological and environmental, caused by the process of industrialization. Beck equated the post-industrial society with the risk society, pointing out the “lack of innocence” of the productive forces of the industrial world. This society has been represented in numerous art works, including the movie *Blade Runner*, whose scenery is a polluted, populated, and dark megalopolis of the future, that shares some similarities, for example, with contemporary São Paulo (Wood, 2006).

Shrivastava’s (1994, 1995) description of the ecocentric paradigm was elaborated in this context: as a form of management for a risk society. Risk thus emerges as the central concept in the author’s theorizing. Given the disturbances introduced by human activity in the path of nature, the natural environment (“victim” of an anthropocentric perspective) became a menace (for the anthropocentric wants). This argument would later be described by James Lovelock (2006) as Gaia’s revenge. The super-organism reacted to human interference with a threat. The increased scrutiny of business activities by the community led organizations in this post-industrial world to invest in stakeholder management, environmentally-friendly products and green marketing approaches. Concern with the organization’s impact on the surrounding world, including the natural world, were voiced by organizations that increasingly tried to express their citizenship and social responsibility. The notion of industrial ecosystems was advanced as a way of operationalizing the networked logic to minimize ecological impact (Shrivastava, 1995). Organizations are invited to cooperate in order to address common ecological problems

(e.g., UN Global Compact: <http://www.unglobalcompact.org/>; Caux Round Table: <http://www.cauxroundtable.org/>) and to develop a “spirit of cooperation in which individuals and organizations live and work together for the common good” (Kaku, 1997, p. 55). Competition therefore needs to be combined with cooperation, through “coopetition” (Luo, 2005), in order to address problems that can no longer be viewed as externalities. The dictionary of sustainable management (www.sustainabilitydictionary.com/) defines coopetition as “the natural balance of healthy ecosystems in which growth is based on innovations brought about by competition and markets are made viable and stable by cooperation. Both are necessary for a healthy, growing market, industry, or economy.” Public opinion and regulatory changes are leading to the internalization of the former “externalities”. Globalization combined with the NIMBY (not in my backyard) attitude, created the need to take environmental issues as “glocal” (Warren et al., 2005). People care about the resolution of the world’s environmental problems, but do not want these solutions to inconvenience their own vicinities. The organization of the world into political and economic blocs (the European Union, NAFTA) creates a “blocal” identity, which facilitates the creation of supra-national institutions and regulations, namely in the environmental sphere.

POST-INDUSTRIAL ≠ ECOCENTRIC

We argue that the post-industrial mindset as outlined by Shrivastava nudges management theory and practice in the direction of a genuine ecocentric approach, but does not lead either of them through the process of developing such a stance toward the appropriate relationship between organizations and environments. It can be viewed as an intermediate step between the industrial and ecocentric mindsets. We suggest that we

are still living in this transitional phase, as Porter and Van der Linde (1995, p.127) have described it: companies are still inexperienced and insecure (and hesitant when profits are at stake) on how to appropriately handle environmental issues. Companies adopt environmentally-responsible actions because they recognize those pressures and acknowledge that it is necessary to reconcile economic efficiency and environmental priorities for instrumental reasons – not because the value of the nonhuman world is independent of its utility to the human world, which is the essence of the ecocentric paradigm. This sustainable business logic “merely reformulates the concept of traditional efficiency to include adverse environmental effects” (Iyer, 1999, p. 277), in such a way that “environmental sustainability for business is not a measure of sustainability of environment, but the sustainability of business given environmental pressures (Iyer, 1999, p. 278). Green consumerism, for example, calls for a change in the personal lifestyles of consumers, but the aim frequently consists of improving the overall image of the company (and the self-image of “politically correct” consumers) with few attempts actually being made to influence consumers to consume *less*, i.e., within environmentally sustainable limits (Hardner & Rice, 2002; Irvine, 1989; Iyer, 1999; Pedersen & Neergaard, 2006). Frequently, natural resources are not really saved and the essence of “being responsible” boils down to the use of public relations aimed at improving company reputation and profits (Iyer, 1999; Kersi, 1995).

Given its transitional perspective, the ecocentric argument can be subjected to several criticisms. First, the notion of ecocentricity in the original formulation was an adaptation of the industrial logic to the risk society, a well articulated synthesis of environmentalism with mainstream organization theory, feminist theory, and a humanistic approach. It was not a genuinely environmental paradigm, but rather an

improvement of the existing paradigm. As Shrivastava (1995, p. 118) noted, ecocentric management “seeks to minimize the environmental impact of organizational vision, inputs, throughputs, and outputs”. Thus, this approach seems to struggle to depart from the discourse of the dominant paradigm to the extent that sustainable development is proposed as a new standard by those who do not genuinely want to change the current pattern of development (Fricker, 2002). In this sense, sustainable development rhetoric “may in fact support the longevity of the unsustainable path” (Yanarella & Levine, 1992, p. 759; see also Valor, 2005).

Second, although a new management paradigm cannot emerge in the absence of significant governance changes at the global level, the ecocentric approach did not argue for changes in current institutions.

Third, advocacy for the ecocentric mindset drew on an ecological conscience. This option can act as a blind spot to significant business opportunities in the green revolution. The idea that competitiveness and caring for the environment are opposites corresponds to a mindset that can and should be challenged. Porsche’s chief executive, for example, recently commented that limits on emissions set by the EU were an attack on German luxury carmakers (Milne, 2007). This traditional logic, however, has often been contradicted in the past, when organizations reacted to the tightening of environmental regulations with innovation, eventually becoming greener and more competitive (Porter & Van der Linde, 1995). In the automotive industry, cars such as the Tesla Roadster (an electric, high performance sports car) and the Lotus Exige S 265E (a biofuel version of the Lotus Exige that is faster than its gasoline fueled counterpart) have shown that such constraints can be an opportunity for innovation. The

inclusion of *business* in the ecocentric mindset therefore seems critical for facilitating the emergence and diffusion of new green, business-based, solutions to problems. In the words of GE's CEO, Jeffrey Immelt: "I don't consider myself an environmentalist. I'm a business leader who says this is an important trend" (in Brady, 2006, p.33).

Taken together, the points above build upon the ecocentric model to frame environmentally-friendly business practices as a source of competitive advantage. The business world is devoting growing attention to the environment, but the ecocentric logic is still alien to the majority of organizations. Problems with the natural world have not been incorporated in the dominant business logic. On the contrary, environmental problems such as global warming seem to be even more serious than before. The scientific community has offered growing evidence of the relationship between global warming and human activity – namely the changes introduced by the industrial lifestyle. However, managers have yet to incorporate these findings into their strategy-making practices. Indeed, many of the environment-oriented practices adopted by organizations are incremental attempts to reform the industrial mindset. These changes, in essence, have not altered the state of the natural environment. They have not diminished the risk because ecocentric management is still little more than an ideal. However, a number of factors have placed the natural environment at the top of the business and government agendas:

- Public opinion around the world is increasingly interested, aware of and concerned with the bad news from the environmental front – as expressed by the massive success of Al Gore's film, *An Inconvenient Truth*.

- Regulations on emissions are becoming tighter, namely in California and the European Union. In Europe, the President of the EU Commission, Jose Manuel Barroso, proclaimed in 2007, with the new energy policy, a societal change in the direction of a low carbon economy.
- The political situation in some of the world's major oil producers poses a number of security concerns, urging governments in the west to reduce the importance of petroleum in their societies.
- Last but not the least, some large companies have realized that the environmental concerns may be an opportunity rather than a threat.

All the above factors suggest that the shift to an ecocentric paradigm may be about to occur. But it should not be overlooked that the same shift has been announced a number of times in the past (e.g., Kirkpatrick, 1990) with no significant results. In the next section we outline the major characteristics of such a mindset, which represents an updated reading of an ecocentric paradigm.

TOWARD ECOCENTRIC ORGANIZING

In a genuine ecocentric paradigm, sustainability is the fundamental concept, and nature (i.e., human and nonhuman) holds the center of the stage. Sustainability, as the World Commission on Environment and Development defined it, refers to a model of development that “meets the needs of the present without compromising the ability of future generations to meet their own needs” (WCED, 1987, p.43). In this mindset, the natural environment may be viewed as the super-organism described by the Gaia metaphor (Lovelock, 1979). The ecocentric perspective stresses the centrality of all ecosystems, their integration and planetary processes above any individual or species. It

considers nature as an “integrated community, with organisms, biological communities and ecosystems comprising the biosphere, the thin mantle of life surrounding the planet” (Kopstein & Salinger, 2001, p. 62). It places importance on individual species (such as humans), but not necessarily at the expense of the existence of others. It recognizes that the nonhuman world is important for its own sake. In this paradigm, a thing, action, decision, policy or organization is right if “it preserves the integrity, stability and beauty of the biotic community” (Kopstein & Salinger, 2001, p. 63).

Therefore, the activity of organizations is part of the equilibrium of the super-organism and cannot be dismissed by them as an “externality”. The planet becomes the ultimate and key stakeholder in a genuinely ecocentric paradigm: holistic well-being and relational holism, rather than “egoistic” profit as an end in itself, would be the goal of the ecocentric organization. Products become increasingly ecological and organizations indicate not only their ingredients and functionalities but also their ecological impact, much like Tesco’s decision to become the first supermarket chain to assign a carbon rating to its products (Rigby & Birchall, 2007). This paradigm argues that humans will see themselves as one species on the planet, in a context of biospecies egalitarianism close to the more radical forms of environmentalism (Egri & Pinfield, 1996), and not the dominant species that exploits nature without considering the rights of the planet itself – as an identifiable stakeholder (Vos, 2003).

Nature, then, must be cared for and recovered. The dominating metaphor would be that of the ecosystem: organizations are parts of successive ecosystems that evolve from the local community to the planet. The goal should not simply be the elimination of risk, but the consideration of the biosphere as a major concern of human activity.

Cooperation at several levels would be necessary to tackle the major challenges. The lack of precedent of this type of collaboration, labeled by Senge et al. (2007) as systemic collaboration, is a challenge in itself. It demands that consumers, companies, governments and institutions assume ecocentric responsibilities, not for utilitarian or aesthetic purposes, but due to a genuine belief that human systems mirror natural ones (Iyer, 1999), as in the logic of biomimicry (Benyus, 1997). It calls for a new kind of consumer, a “Galilean inversion” that displaces the consumer and grants nature the central status (Iyer, 1999, p. 285). It requires a paradigm shift in education, replacing anthropocentric consciousness for an ecocentric one, where nature is central to survival and progress (Hage & Rauckiené, 2004; Iyer, 1999).

There are two major possibilities for avoiding an unsustainable future and building a sustainable one. The first is an idealistic possibility of societal transformation. It consists of: (a) diminishing our “noxious wants” that reduce the capacity of the earth to sustain us, and (b) developing the “ethics of enough” that inspire us to cultivate the virtues of prudence and temperance in seeking to satisfy our primary needs (food, water, shelter, clothing and health) and the virtues of justice and love for satisfying our secondary needs (e.g., love, relationships, education, belonging) that are crucial for “living, making the life enjoyable and provid[ing] meaning” (Fricker, 2002, p. 430). The question is whether this is possible without a profound change in cultural, political and cultural contexts. As Iyer (1999) argued, “[t]he crux of the matter is the transformation of relevant political and cultural institutions such that these project harmony with ecosystems and values they instill in individuals are those that are compatible with environmental ideals” (p. 286). This raises two other questions: (1) will we need a Kuhnian revolution (Kuhn, 1962; Korhonen, 2002) in the business, cultural,

societal, political and institutional domains? (2) considering the actual state of affairs and the prevalent “economic imperialism” invading the contemporary intellectual territory (Lazear, 2000), can we expect, with a reasonable likelihood, such a revolution?

The second major possibility is a business perspective. It consists of the authentic integration of nature in the concerns of organizations and their members, as a stakeholder (Starik, 1995). In this sense, CEOs should act as chief environmental officers. Their role would consist of finding and capturing business opportunities as if the environment matters. Some organizational processes may be taken as examples of this new view of business as ecobusiness: the Ecomagination initiative at GE, the transformational change toward sustainability at Du Pont (Hart, 2005), and the recognition of the holistic interdependence between the social, economic and environmental spheres of life (Diamond, 2005; Schaefer, 2004; Prahalad, 2005), provide a window on how businesses may want to reposition themselves to balance and integrate differing stakeholder needs. As Cairncross (1995) discovered, organizations are often surprised with the financial gains resulting from environmental management activities, which may also lead to the development of valuable organizational capabilities (Sharma & Vredenburg, 1998). The leading role of corporations such as GE and DuPont may contribute to a better understanding of the environment as a source of potential and unsought discoveries – a source of green ocean strategies, to play with the notion coined by Kim and Mauborgne (2005). Ecocentrism, in this perspective, would incorporate business and would make of business a force for good, a trigger of environmental integrity, social equity and economic prosperity (Gladwin, Kennelly & Krause, 1995; Ghoshal & Moran, 2005). Business and the environment are not opposing forces and the notion of ecocentric management may have a crucial role to play in the

transformation of the relationship between firms and the natural environment. The major challenge would thus consist of developing a new synthesis between the poles that were previously perceived as thesis and antithesis: business and the environment.

FINAL COMMENT:

PROMISES OF AND HURDLES TO ECOCENTRIC MANAGEMENT

Many of the obstacles to the pioneering notion of ecocentric management still seem insurmountable but some progress is noticeable (Bansal, 2006). Table 2 reflects in a systemic way the tension between the forces that favor and impede an ecocentric logic. The table is structured around opportunities and obstacles at the organizational and societal levels.

Table 2 about here

Some forces at the societal and organizational levels converge as opportunities to a gradual emergence of an ecocentric mindset. This convergence creates what we have labeled a zone of opportunity. Some ecobusiness sectors are witnessing an unprecedented interest from major corporations, and companies are increasingly aware of a set of new managerial techniques with an environmental component. These include but are not limited to, cradle to cradle (McDonough & Braungart, 2002), biomimicry (Benyus, 1997), the triple bottom line (Elkington, 19998) and other approaches presented as part of a new sustainable management approach, including a number of standards that facilitate the adoption of environmental management practices (Tschopp, 2005; Oskarsson & von Malmborg, 2005). These forces of opportunity are perceived as

being mutually beneficial, even if sometimes received with skepticism (i.e., perceived as “greenwashing”).

A second group of societal forces tends to be perceived with less optimism from companies. We have described them as the zone of pressure. Pressure to the adoption of a new paradigm represents an obstacle to incumbent organizations. The vision of a new, carbon-free society represents an obvious threat to specific sectors, but also to the logic of societal organization, the prevailing economic model and the different perspectives on the meaning and importance of sustainability in different parts of the world (Mikkila, 2005). Regulatory pressures are rising in the developed economies and tend to be received with differing levels of enthusiasm.

Table 3 about here

A third quadrant in Table 2 refers to the space where business opportunities are met with social suspicion. We call it the zone of mistrust. The business firm is viewed in some social sectors as a force for evil (Child, 2002). Firms would pursue their financial interest regardless of the environment and the communities where they operate. They are presented as exploiting scarce natural resources that are not available to the people, as manipulative and in their own self-interest. Monsanto’s attempt to introduce genetically-modified plants attracted a wave of protest and rejection that led the company to step back. A potentially good idea was therefore killed because of the lack of public confidence in corporations.

A final confluence of forces is constituted by the meeting of social obstacles and organizational threats. We call this the zone of self-interest. Individual citizens are not interested in forgoing their habitual consumption for the good of the planet. Nation states are not willing to sacrifice their interests for the benefit of all. The governance of Gaia constitutes a major problem.

As Table 2 suggests, we are still far from an ecocentric management paradigm. But the forces in tension provide a number of practical possibilities (a sample is advanced in Table 3). The efforts of business organizations alone will not be sufficient to tackle environmental problems and challenges, but businesses in combination with other stakeholders (Cummins, 2004) will play a major role in the resolution of environmental problems.

A significant challenge to ecological sustainability and ecocentrism is the articulation of the processes by which societal and organizational changes occur. A clearer understanding of what will move corporate managers toward sustainable management practices is necessary. It is probably a combination of laws, regulations, personal value shifts, public pressure, consumer choices, environmental risks, and disaster and managerial values². The discussion also provides a number of implications for the facilitation of an ecocentric society. First, progress will be easier if organizations include communities and the environment in their business thinking. This may sound obvious, but the recent Monsanto crisis and the water conflict in Kerala, opposing the authorities to Coca-Cola and Pepsi, suggest that organizations may sometimes fail to create a zone of opportunity (Brady, 2007). Second, regulation is increasing. It is a pressure for change and seems unavoidable. Therefore, managers may consider the

environment as an opportunity and a megatrend rather than as a threat. Third, faltering reputations or isolation from communities may impede access to opportunities and escalate conflicts over scarce natural resources – as the soft drinks conflicts of Kerala demonstrates. Fourth, there are strong and basic self-interest forces against ecocentrism. The discovery of imaginative solutions such as servicizing (Rothenberg, 2007) and sustainable consumption (Kilbourne et al., 1997) will help to neutralize this threat. In summary, the goals and presence of organizations in social and natural worlds requires a new conceptualization, one that seriously addresses and updates the meaning and need for ecocentric management.

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REFERENCES

- Bansal, P 2006. Evolving sustainably: A longitudinal study of corporate sustainable development. *Strategic Management Journal*, 26, 197-218.
- Beck U. 1992. *Risk society*. Newbury Park, CA: Sage.
- Benyus J. 1997. *Biomimicry. Innovation inspired by nature*. New York: Harper Perennial.
- Brady D. 2006. General Electric, the Immelt way. *BusinessWeek*, September 11: 33.
- Brady D. 2007. Pepsi: Repairing a poisoned reputation in India. *BusinessWeek*, June 11, 46-54.
- Braverman H. 1974. *Labour and monopoly capital*. New York: Monthly Review Press.
- Burawoy M. 1979. *Manufacturing consent: Changes in the labor process under monopoly capitalism*. Chicago: University of Chicago Press.
- Cairncross F. 1995. *Green Inc*. London: Earthscan.
- Child J. 2002. The international crisis of confidence in corporations. *Academy of Management Executive*, 16(3): 142-144.
- Cummins A. 2004. The Marine Stewardship Council: A multi-stakeholder approach to sustainable fishing. *Corporate Social Responsibility and Environmental Management* 11: 85-94.
- Diamond J 2005. *Collapse: How societies choose to fail or survive*. London: Penguin.
- Egri CP, Pinfield LT. 1996. Organizations and the biosphere: Ecologies and environments. In *Handbook of organization studies*, Clegg SR, Hardy, C, Nord WR (eds). Thousand Oaks, CA: Sage: 459-483.
- Elkington J. 1998. *Cannibals with forks*. Gabriola Island, BC: New Society Publishing.
- Fricker A. 2002. The ethics of enough. *Futures* 34: 427-433.

- Ghoshal S & Moran P 2005. Towards a good theory of management. In J Birkinshaw & G Piramal (eds), *Sumantra Ghoshal on management* (pp.1-27). London: FT/Prentice-Hall.
- Gladwin TN, Kennelly JJ & Krause TS 1995. Shifting paradigms for sustainable development: Implications for management theory and research. *Academy of Management Review*, **20**: 874-907.
- Hage R, Rauckiené A. 2004. Ecocentric worldview paradigm: The reconstruction of consciousness. *Journal of Baltic Science Education* **2**(6): 60-68.
- Hardner J, Rice R. 2002. Rethinking green consumerism. *Scientific American* **286**: 88-95.
- Hart SL 1993. Commentary: Sustainable strategy in a greening world. *Advances in Strategic Management* **9**: 93-97.
- Hart SL 2005. *Capitalism at the crossroads*. Philadelphia, PA: Wharton Business School Publishing.
- Hatch MJ. 1997. *Organization theory: Modern, symbolic and postmodern perspectives*. New York: Oxford University Press.
- Hoffman AJ, Sandelands LE 2005. Getting right with nature: Anthropocentrism, ecocentrism, theocentrism. *Organization and Environment* **18**(2): 1-22.
- Irvine S. 1999. Consuming fashions? The limits of green consumerism. *Ecologist* **19**: 88-93.
- Iyer GR. 1999. Business, consumers and sustainable living in an interconnected world: A multilateral ecocentric approach. *Journal of Business Ethics* **20**: 273-288.
- Kaku R 1997. The path of Kyosei. *Harvard Business Review* July-August: 55-63.
- Kersi A 1995. Pulp, paper and power: How an industry reshapes its social environment. *Ecologist* **25**: 142-149.

- Kilbourne W, McDonagh, P & Prothero, A. 1997 Sustainable consumption and the quality of life: A macromarketing challenge to the dominant social paradigm. *Journal of Macromarketing*, Spring: 4-24.
- Kim, W.C. & Mauborgne, R. 2005. *Blue ocean strategy*. Boston, MA: Harvard Business School Press.
- Kirkpatrick D. 1990. Environmentalism: The new crusade. *Fortune* February 12: 24-30.
- Kopstein P, Salinger J. 2001. The ecocentric challenge: Climate change and the Jewish tradition. *Ecotheology* 6(1/2): 60-74.
- Korhonen J. 2002. The dominant economics paradigm and corporate social responsibility. *Corporate Social Responsibility and Environmental Management* 9: 67-80.
- Kortenkamp KV, Moore CF. 2001. Ecocentrism and Anthropocentrism: Moral reasoning about ecological commons dilemmas. *Journal of Environmental Psychology* 21: 261-272.
- Kuhn TS. 1962. *The structure of scientific revolutions*. Chicago: University of Chicago.
- Lazear E. 2000. Economic imperialism. *Quarterly Journal of Economics* 115(1), 99-146.
- Lovelock J. 1979. *Gaia: A new look at life on Earth*. Oxford: Oxford University Press.
- Lovelock J. 2006. *The revenge of Gaia*. Santa Barbara, CA: Allen Lane.
- Luo Y. 2005. *Coopetition in international business*. Copenhagen: Copenhagen Business School Press.
- McDonough, W. & Braungart, M. 2002. *Cradle to cradle*. New York: North Point Press.

- Mikkila, M. 2005. Observing corporate social performance empirically through the acceptability concept: A global study. *Corporate Social Responsibility and Environmental Management*, **12**: 183-196.
- Milne R. 2007. Porsche warns of business war over emissions. *Financial Times*, January 27/28: 9.
- Oskarsson K. & von Malmborg F 2005. Integrated management systems as a corporate response to sustainable development. *Corporate Social Responsibility and Environmental Management*, **12**: 121-128.
- Pedersen ER, Neergaard P 2006. Caveat Emptor: Let the buyer beware! Environmental labelling and the limitations of “green” consumerism. *Business Strategy and the Environment* **15**: 15-29.
- Porter ME, Van der Linde C. 1995. Green and competitive. *Harvard Business Review*, September/October: 120-134.
- Prahalad CK 2005. *The fortune at the end of the pyramid. Eradicating poverty through profits*. Philadelphia, PA: Wharton School Publishing.
- Rigby E, Birchall J. 2007. Tesco to put carbon use labels on all items it sells. *Financial Times*, January 19: 3.
- Rothenberg, S. 2007. Sustainability through servicizing. *MIT Sloan Management Review*, Winter, 83-89.
- Schaefer A. 2004. Corporate sustainability – Integrating environmental and social concerns? *Corporate Social Responsibility and Environmental Management*, **11**: 179-187.
- Seeman M. 1959. On the meaning of alienation. *American Sociological Review* **24**: 783-791.

- Senge PM., Lichtenstein BB., Kaeufer K., Bradbury H, Carroll J. 2007. Collaborating for systemic change. *MIT Sloan Management Review* Winter: 44-53.
- Sharma S & Vredenburg H 1998. Proactive corporate environmental strategy and the development of competitively valuable organizational capabilities. *Strategic Management Journal*, **19**: 729-752.
- Shrivastava P. 1994. CASTRATED environment: GREENING organization studies. *Organization Studies* **15**: 705-726.
- Shrivastava P. 1995. Ecocentric management for a risk society. *Academy of Management Review* **20**: 118-137.
- Shrivastava P. 1996. *Greening business: Profiting the corporation and the environment*. Cincinnati, OH: Thomson.
- Starik M 1995. Should trees have managerial standing? Toward stakeholder status for non-human nature. *Journal of Business Ethics*, *14*, 207-217.
- Stead, WE & Stead JG (1996). *Management for a small planet* (2nd ed). Thousand Oaks: Sage.
- Sutter GC. 2001. Can ecosystem be ecocentric? *Ecosystem Health* **7**(2): 78-79.
- Taylor FW. 1911. *The principles of scientific management*. New York: W.W. Norton.
- Tschopp DJ 2005. Corporate social responsibility: A comparison between the United States and European Union. *Corporate Social Responsibility and Environmental Management*, **12**: 55-59.
- Valor C. 2005. Corporate social responsibility and corporate citizenship: Towards corporate accountability. *Business and Society Review* **110**(2): 191-212.
- Vos JF 2003. Corporate social responsibility and the identification of stakeholders. *Corporate Social Responsibility and Environmental Management*, **10**: 141-152.

- Wackernagel M & Rees W. 1996. *Our ecological footprint: Reducing human impact on the earth*. Gabriola Island, BC: New Society.
- Warren CR., Lumsden C, O'Dowd S, Birnie RV. 2005. "Green on green": Public perceptions of wind power in Scotland and Ireland. *Journal of Environmental Planning and Management* **48**: 873-875.
- Wood T. 2006. Globalization or Brazilianization? *The Academy of Management Perspectives* **20**(2): 80-82.
- World Commission on Environment and Development 1987. *Our common future*. Oxford: Oxford University Press.
- Yanarella EJ, Levine RS. 1992. Does sustainable development lead to sustainability? *Futures* **24**: 759-774.

Table 1

The eras of organization and environment

	Pre-industrial	Industrial	Post-industrial	Ecocentric
Key concept	Scarcity (and <i>barter</i>)	Production	Risk	Sustainability
Natural environment	<i>The environment</i> (nature as “God”)	Resource base (nature to be exploited for human fruition)	Menace (nature to be managed with parsimony)	Gaia (nature to be lived “symbiotically” with humans)
Key stakeholder	Family and local community	Shareholders	Stakeholders	The planet (human and nonhuman nature)
Products	Craft	Mass	Customized	Ecological
Mindset	Local/communitarian	National toward international	Glocal (global & NIMBY)	Biosphere
Ontology	Humans fear/respect the (“Gods” of) nonhuman world	The nonhuman world is a storehouse of (infinite) resources at disposal of human needs	The nonhuman world must be preserved for serving human ends	The nonhuman world is important for its own sake
Individuals	Producers (or <i>producers</i> : producing X and consuming X)	Consumers (producing X for consuming Y)	Citizens (worried about the planet risks and green consumers)	Biospecies egalitarianism
Nature	Imposed (“Gods” to be respected)	Controlled (instrumental for human benefit)	Revolted (but continuing to be instrumental for human benefit)	Recovered (and to be respected for its own value)
Organizational finality	Local supply	Profit (and incessant growth)	Profit with legitimacy (e.g., being green can be profitable). Nature to be respected for instrumental reasons	Holistic well-being
Images of the organization	Teams of craftsmen	Machine	Networks of legitimate societal players	Ecosystem
Inter-organizational relations	Limited and local	Competition	Competition + cooperation	Systemic collaboration for ecosystem functioning (organizations as eco-partners)
Identity	Tribal/local/family/communitarian	Individuality inside national boundaries	Individuality inside “blocal” spaces	Shared (humanity; relational holism)
Individual ethics	Ethics of survival	Ethics of	Ethics of	Ethics of enough

		consumption	(responsible and “green”) consumption	(“a modicum of wealth to make life worthwhile”; Fricker, 2002, p. 431)
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Table 2

Social and organizational factors for and against ecocentrism

	Organizational opportunities	Organizational threats
Social forces	<p>The zone of opportunity:</p> <ul style="list-style-type: none"> ▪ Ecobusinesses ▪ New managerial techniques 	<p>The zone of pressure:</p> <ul style="list-style-type: none"> ▪ Paradigm change ▪ Regulatory pressures
Social obstacles	<p>The zone of mistrust:</p> <ul style="list-style-type: none"> ▪ Lack of trust in corporations ▪ Businesses as part of the problem 	<p>The zone of self-interest:</p> <ul style="list-style-type: none"> ▪ Governance & the tragedy of the commons ▪ Consumption logic

Table 3

Ecocentrism from theory to action

	Organizational opportunities	Organizational threats
Social forces	<p>The zone of opportunity:</p> <ul style="list-style-type: none"> ▪ Discover new ecobusiness opportunities (green ocean strategy) ▪ Implement environmental management techniques as a source of organizational change and corporate sustainability ▪ Adopt environmental standards 	<p>The zone of pressure:</p> <ul style="list-style-type: none"> ▪ Prepare your organization for a new carbon free economy ▪ Assume that regulatory pressures will not relax and take them as part of the business landscape
Social obstacles	<p>The zone of mistrust:</p> <ul style="list-style-type: none"> ▪ Build an ethical culture ▪ Present business as part of the solution ▪ Multi-stakeholder collaboration 	<p>The zone of self-interest:</p> <ul style="list-style-type: none"> ▪ Explore the potentialities of Gaia as a stakeholder ▪ Discover new forms of sustainable consumption

		(e.g., servicing)
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