

Linking Organizational and Field Level Analyses: The  
Diffusion of Corporate Environmental Practice

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The Diffusion of Corporate Environmental Practice**

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**Abstract**

This paper examines the diffusion of corporate environmental practice in the context of field level dynamics. It builds a conceptual model that makes links between (1) the complex constituency of the institutional field driving environmental concerns, (2) the multiple cultural frames that emerge from that constituency, and (3) the corresponding structural and cultural routines that become enacted within firms. It offers contributions for research in the domains of both environmental practice and institutional theory. For environmental practice, this paper attends to the genesis and diffusion of environmental practice that go beyond individual organization level. For institutional theory, this paper moves beyond the traditional focus on isomorphism and elaborates the processes of field-level dynamics. It shows how field level heterogeneity can occur by depicting inertia, traditionally a phenomenon attributed to the field, as the result of individual organization level dynamics that resist change. The paper concludes with ideas for future research.

**Keywords**

institutional field, institutions, culture, cultural frames, occupational communities, environmental protection.

## **Introduction**

Waste minimization, pollution prevention, product stewardship, corporate environmental reporting, green marketing. How do commonly accepted ideas and beliefs about corporate practice such as these form and diffuse throughout organizational populations? The question is important to organizational theorists and managers alike. A central concern for organizational scholars today is to understand field level processes by which "collective rationality" first emerges and then subsequently changes (DiMaggio, 1995). A central concern for managers is developing corporate strategy during periods of change, instability and uncertainty, when multiple interests have a stake in defining appropriate corporate action. In both cases, these periods of flux often involve the interests of diverse parties both inside and outside the organization. And the issues about which they are concerned are often social issues, such as environmental protection, health care, international relations, labor trends, and the global economy.

Stern and Barley (1996) argue that organizational theorists should contribute their analyses to these kinds of contemporary social issues. They argue that most academic contributions to such issues presently come from the disciplines of economics and law. But, these disciplines focus narrowly on overly rational conceptions and coercive mechanisms for identifying and solving key issues of public concern. They neglect the systemic organizational contexts that establish parameters for individual choice and action. This paper is an answer to this call. It is a model building paper that offers contributions both for expanding institutional analysis and elaborating the genesis and diffusion of corporate environmental practice.

Recently, critics of existing institutional research (Hirsch, 1997; Hirsch & Lounsbury, 1997) have argued that institutional literature (DiMaggio & Powell, 1991; Scott, 1995) places

too much emphasis on the homogeneity of organizational populations and not on the processes that may or may not create this outcome. This preoccupation facilitates a popular misconception of the theory as embodying only stability and inertia as its central defining characteristics (DiMaggio, 1995; Greenwood & Hinings, 1996). By focusing on these characteristics, the complexity of organizational action is removed from field level models. Unified or monolithic institutional forces are deemed to create isomorphic organizational responses (DiMaggio & Powell, 1983). Recent studies surveying organizational action in the context of their environmental and institutional contexts (Holm, 1995; Kraatz & Zajak, 1996; Greenwood & Hinings, 1996; Hirsch & Lounsbury, 1997) underscore the need for more work and more complex models in this area.

Similarly, much research into the relationship between organizations and the natural environment has focused mainly on the strategic actions of individual organizations (e.g. Lawrence & Morell, 1995; Shrivastava, 1995; Lober, 1996). For example, Hart advances a “theory of competitive advantage based upon the firm’s relationship to the natural environment” (1995: 986) and Porter & van der Linde argue that “companies must start to recognize the environment as a competitive opportunity” (1995: 114). But this article highlights the benefits of applying existent theories of organizational behavior towards understanding this phenomena. By applying institutional theory to explaining the evolving conceptions of environmental management, this article examines the cultural and institutional systems of which organizations are a part. It goes beyond assessments of individual action to ask questions about the fundamental sources of those actions.

To extend our understanding of institutional processes as they mediate between the firm and the natural environment, this paper seeks to integrate organizational action into models of

field level dynamics by allowing more complexity in the framing of the institutional field and developing corresponding connections to organizational structure, culture and practice. By paying balanced attention to both the influence of the institutional environment and the role of organizational self-interests and active agency within that environment (Covaleski & Dirsmith, 1988; DiMaggio, 1988; Perrow, 1985), this paper advances the argument that organizational action is not a strict reaction to the pressures dictated by the field. Conversely, organizational action is not defined autonomously without the influence of external bounds. Institutional and organizational dynamics are tightly linked (Thomas, Meyer, Ramirez & Boli, 1987; Bazerman & Hoffman, 1999).

The notion of "collective rationality" is to be seen, not as an argument of strict environmental determinism, but rather a choice among a bounded set of legitimately available options. Differential field effects occur at both the institutional and organizational levels, directed by both the institutional channels through which field level influences impact organizational behavior and the organizational routines through which those influences are received, interpreted and acted upon. Institutional analyses answer questions about how social choices are shaped, mediated, and channeled. Organizational analyses answer questions about which social choices are chosen for action. As shown in figure 1, this paper will build this institutional model by making links between (1) the complex constituency of the institutional field, (2) the multiple institutional definitions of legitimate repertoires that result from that constituency, and (3) the corresponding cultural routines that become enacted within firms. It will elaborate this model through an empirical application to the domain of environmental protection that includes each of these levels of analysis. Finally, it will offer a discussion of the implications and future research to further test this model.

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Insert figure 1 about here

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**Theoretical Development:**  
**Organizational Dynamics in a Field Level Context**

Firms are not autonomous units, able to develop and implement strategy in isolation from the influence of the external environment. Institutional arrangements and social processes are central to the formulation of organizational action (Orru, Biggart & Hamilton, 1991). They bound the range of possibilities such that organizational action must correctly be seen as a choice among a set of legitimate repertoires determined by the group of organizations which comprise the firm's institutional **field** (Scott, 1991). The field is a composite of constituents within the firm's external social, political and economic environments (Powell & DiMaggio, 1991; Scott, 1995). But the field is not monolithic. Harrison White suggests we think of the social structure of the institutional field, not as some tidy atom or embracing world, but rather as a "mineralized goo, some amazing swirl of local nuclei and long strands of order among disorder" (1992: 127). This is hardly a useful construct for measurement, but it highlights the complexity and amorphous nature of the concept of the institutional field.

The field constituency defines both how to view organizational issues and what the appropriate responses should be. But more than just a collection of influential organizations, the field should be thought of as the center of common channels of dialogue and discussion. The field forms around a central issue — such as the protection of the natural environment — whereby competing interests negotiate over issue interpretation (Hoffman, 1999). The process may more resemble institutional “war” (White, 1992) than isomorphic dialogue. As such, it is

important to distinguish between the organizational field and individual populations (or "occupational communities" as will be discussed later) within that field. In practice, the field is comprised of critical exchange partners, sources of funding, regulatory groups, professional and trade associations, special interest groups, the general public, and other sources of normative or cognitive influence which effect individual or organizational action (Scott, 1991). Within this collective of actors, concepts of corporate practice are formed, defined and subsequently redefined.

The form of this influence is manifested in three levels of **institutions**: (1) regulative, (2) normative and (3) cognitive (Scott, 1995). Each level differs in the degree to which it is visible and ranges from the directly coercive to the taken-for-granted (Zucker, 1983). Yet, these three levels form a composite of institutional pressures (Hoffman & Ventresca, 1999) that create descriptions of reality for the organization; explanations of what is and what is not, what can be acted upon and what cannot. As the institutional field establishes new codes of conduct, the emergent institutions will reflect these evolving perceptions, both as a source of empowerment (defining what they ought to do) and as a source of control (limiting options for consideration) (Jepperson, 1991; Fligstein, 1992). Hirsch (1986) describes these evolving perceptions as **cultural frames**. For example, he described how the cultural framing of hostile takeovers evolved from the 1960s, where it was considered a "deviant practice" to the 1980s where it became institutionalized as an accepted practice with its own specialized language.

As the field is comprised of sub-populations, each employing its own language and cultural frame for understanding the issue being debated within the field, the form of institutional pressure becomes equally diverse in its form and frame. The locus of these sub-populations is termed **occupational communities** - groups of constituencies that cut across organizations and



share common language, perspectives and assumptions about the nature of business (Schein, 1996). Occupational communities making environmental demands do so in the strategic language and perspective from which they reside. They redefine and transmit corporate norms and beliefs into terms, institutions and cultural frames that represent their interests and culture.

At the **organization level**, the firm responds to these pressures through pre-existing channels of communication traditionally employed to engage these occupational communities and interpret and act upon their demands. The firm is a composite of core organizational responsibilities, each with (sub) cultural differences established in part by linkages to its own relevant constituency of the external environment. Thus, the organizational response is reflected in functional competencies and the cultural frames that are embedded within each. Culture shapes individual consciousness throughout the organization, imposing routines that reflect socially approved, purposive action (Jackall, 1988). It guides the perception and behavior of all members as it develops over history and is formed around critical incidents and organizational responses (Schein, 1992). It is embedded and perpetuated by organization-level systems that lie on three levels: (1) artifacts, (2) espoused values, and (3) basic underlying beliefs (Schein, 1990, 1992). Each level differs in the degree to which cultural phenomena are visible and ranges from the very tangible, overt manifestations that one can see and feel to the deeply embedded, unconscious basic assumptions that form the essence of culture (Schein, 1992). Yet, together they form the composite for how constituents within the organization perceive and make sense of changes within the external and internal environments.

In sum, the model presented in this paper ties the level of the field with the level of the organization through cultural frames that lie within the communication channels of the firm's occupational communities. The form of organizational response is as much a reflection of the

institutional pressures that emerge from outside the organization, as it is the form of organizational structure and culture that exists inside the organization. At this interface lies a fundamental inter-relationship between institutional and cultural forms (Bazerman & Hoffman, 1999). More explicitly, the three levels of institutions - regulative, normative and cognitive (Scott, 1995) - can be seen as having direct parallels to the three levels of culture - artifacts, espoused values, and basic underlying beliefs (Schein, 1990, 1992). The deepest level in both domains represent beliefs about appropriate action that are taken-for-granted and perceived as non-negotiable. It is the most difficult level of culture and institutions for the researcher to detect and for the organizational or field members to articulate. Underlying cultural beliefs create "behavioral, emotional, and cognitive elements of the group members' total psychological functioning" (Schein, 1992: 10). Cognitive institutions guide our understanding of the nature of reality and the frames through which that meaning is developed. Both form a culturally supported and conceptually correct basis of legitimacy which becomes unquestioned.

The importance of this linkage is that the essence of organizational culture and the essence of institutions are described on the very same terms. The connections between them become an important component of any model of organizational change and can be seen in the taken for granted structures. Basic underlying beliefs of organizational culture and cognitive institutions each represent common concepts of unquestioned beliefs that perpetuate behavior without the knowledge of the actor, thus making them difficult to uncover. They can be shared from one organization to the next through organizational communities, as described in the cultural literature or through institutional fields as described in the institutional literature. Further, given their institutional and cultural linkages, organizational behaviors affect what

becomes institutionalized and visa versa. The two must be seen as interconnected and recursive. Social structure is both the mediator and the outcome of organizational practice (Giddens, 1979).

### **Field Level Dynamics and Corporate Environmental Practice**

Why do firms incorporate concerns for environmental protection into corporate practice? The answer has both institutional and cultural components. It requires an understanding of who within the field is driving that concern, what cultural framing of the issue results and how the organization enacts that frame and invokes a response (Hoffman & Ventresca, 2001). We must understand both external and internal dynamics to create a complete model for understanding the formation and diffusion of commonly accepted ideas and beliefs about organizational practice. We must look to certain organizations within the institutional environment that possess the power and capability to influence or establish the rules and norms of corporate behavior (Fligstein, 1991). Governments are the most prominent (and the most studied in both institutional and environmental analyses), able to establish laws which bind organizations to certain practices and procedures. Similarly, many empirical analyses look to social activists as lying at the center of social movements such as environmentalism (Olson, 1965; Zald & McCarthy, 1987). Neither is monolithic, but in fact represent two occupational communities which have been the most visible drivers of corporate environmental practice. As a result, the two traditional cultural frames of corporate environmental practice represent their respective interests: regulatory compliance and social responsibility.

In the frame of "regulatory compliance," the relationship between corporate practice and environmental protection becomes institutionally defined in terms of how environmentalism acts as a regulatory constraint. Through this lens, environmental protection is lamented as a useful

social endeavor but a decidedly unproductive intrusion into corporate affairs (Walley & Whitehead, 1994). It is a restriction on or deviation from the central corporate activities. Environmental problems are treated as an economic “externality” or market failure (Cropper & Oates, 1992) and solutions must be artificially introduced through regulation. Responsibility is delegated to a regulatory affairs function with a focus on what companies “must” do to remain legal members of the community.

In the frame of "social responsibility," the relationship between corporate practice and environmental protection becomes institutionally defined in terms of the impact of that practice on environmental ecosystems. In this format, social activists call field level attention to the environmental damages of industrial activity, pointing out that US industry releases up to four billion pounds of hazardous or toxic chemicals each year (to the air, water or land) (US Environmental Protection Agency, 1992) and contributes to increasing problems of greenhouse gas buildup, ozone depletion, and air and water pollution. Faced with such a cultural frame, corporations delegate responsibilities to a public affairs function with a focus on what corporations “should” do to offset these transgressions and remain legitimate members of society.

In both cases, corporations will be expected to do little to protect the environment unless the government forces them or activists shame them. Institutional pressures are coercive in nature, driven by the threat of either legal sanction (civil, administrative and criminal penalties) or social sanction (protests, negative press, diminished reputation and image). The environmental issue becomes institutionally defined as external to business interests, a threat or an unwanted restraint on corporate affairs from sources separate from the key drivers of the market system.

Corporate environmental practice is then predicated on buffering the operating core and managing these constraints on corporate objectives.

But more recently, the field level drivers of environmental protection have become more complex, creating more diverse cultural frames than merely regulatory compliance or social responsibility. Environmental concerns are now originating from occupational communities such as academic institutions, trade associations, competitors, banks, insurance companies, investors, religious organizations, local communities and the press, each of which are altering the definitions of legitimate corporate environmental practice (Hoffman, 2000). Through a complex web of constituents, environmental protection is becoming culturally reframed from something external to the market environment to something that is central to the core objectives of the firm. This triggers a more complex set of strategic responses than have been traditionally invoked. As such, organizations must devote resources towards environmental initiatives in a way that simultaneously satisfies their economic objectives. Rather than denying or lamenting environmental pressures, organizations are now considering how environmentalism and business strategy can be mutually developed (Porter & Van der Linde, 1995; Miller, 1998). By looking to the expanding field of environmental pressures, we can see how the issue is being institutionally redefined, culturally reframed and organizationally acted upon.

### **Field-Level Drivers of Corporate Environmental Practice.**

Field level drivers of corporate environmental practice have been studied within the context of inter-organizational relationships (Starik & Rands, 1995; Clarke & Roome, 1999) and stakeholder management (Berman, Wicks, Kotha & Jones, 1999; Clarkson, 1995). Many of these studies have individually identified organizations such as government, trade associations,

financial institutions, accounting professions, suppliers, partners, NGOs and employees as being critical in this process. But, few studies to date have empirically collected a composite analysis of this field level effect. By building upon and linking the individual analyses that exist, the foundation of this composite can be constructed and built upon.

For example, government action cannot be seen as an isolated force within the field. Their action is often the product of pressures from within the field. In a survey of Fortune 500 CEOs in 1995, Andrews (1998) found that coercive legal requirements and public perceptions were most important in driving environmental business strategy. But he also found that scientific evidence, shareholder expectations, customer requirements, industry norms, employee suggestions and supplier actions were also influential (in decreasing order). Using network analysis, Andrews considered how the government itself was an actor within the field, being influenced by these field level constituencies. Consistent within this theme, O'Leary (1991) studied how individual citizens, through citizen suit provisions of EPA statutes, were able to alter the policies and administration of the agency in the 1980s. Protess et al, (1987) found evidence of policy agenda-setting effects from media coverage of toxic waste issues. Pizzolatto and Zeringue (1993) studied the links between the passage of laws to protect the environment, consumer interest in environmental issues and corporate actions that seek to satisfy both. These linkages were found to be dual directional, with corporate action seen as both the cause and effect of external pressures. Each of these studies support the argument towards a field level analysis of environmental protection with the government as one part of the network both influencing and being influenced by constituents in the field.

These constituents can also impact corporate activity directly. Many existing studies have identified these pressures and their importance. In studying recycling initiatives, Jennings and

Zandbergen (1995) identified the constituency of the organizational field in terms of local organizations involved in the process, such as paper producers, paper purchasers, paper recyclers, governments and consumers. Lawrence and Morell (1995) studied eight manufacturing firms in Santa Clara County, California and found that firms were driven by regulations, followed by cost factors and pressure from stakeholders such as environmental NGOs and shareholders. Clemens and Douglas (2001) observed that the drivers of corporate environmental action in the steel industry were international agreements, federal and state agencies, consumers and industry standards (e.g. ISO14000). Dupuy (1997) studied the development of pollution control technologies in the Province of Ontario and found that, while government regulation was a critical motivator of technological development, the influence of suppliers and users of that technology were also strong. And finally, several studies have highlighted the field level dynamics by which environmental standards transfer across international boundaries. Anwar (1999) and Sorstrom (1999) studied the linkages among multi-national firms, international government agencies and environmental practices within China. Liverman, Varady, Chavez and Sanchez (1999) studied environmental management along the US-Mexico border and found that bi-national agreements were particularly important but also important were the actions of environmental NGOs in gaining their acceptance.

Each of these studies highlights the interconnections among field level constituencies. To create a structured model of the categories of occupational communities influencing corporate environmental practice, one must consider each constituency that has a direct impact on business practice, norms and beliefs. Nine occupational communities will be considered here: suppliers and buyers, consumers, financial institutions, shareholders, investors, insurance underwriters, trade associations, academic institutions and religious institutions.

The environmental impact of a product is the sum of the impacts of each input and output from **suppliers** and **buyers** in the value-chain (Goodman, 1998). Companies become tied to one another. If one company introduces a toxic material into the process, all companies must now consider how it should be handled. Further, if a company towards the end of the value chain is receiving a signal from end-users that the product is environmentally destructive, they must impose restrictions on their suppliers in order to remove it. Some companies, such as Nike and Proctor & Gamble, are considering the implications of the actions of other organizations up and down the value chain in the impact of their environmental activities (Smart, 1992; Jablonksi, 1994; Katz & Sharp, 1994). Similarly, some **consumers** are willing to make the connection between environmental performance and their buying decisions. SC Johnson & Sons conducted a study that found that this class of “green” consumers made up at least 25 percent of the population in 1993 and was growing (SC Johnson/Roper, 1993).

One important component of the supply chain is capital and some **financial institutions** are beginning to look at the environmental practices of the applicant, equating poor environmental performance with high financial risk. The European Bank for Reconstruction and Development (EBRD) has written into its establishing agreement that it will “promote in the full range of its activities environmentally sound and sustainable development” (EBRD, 1991). In April 1995, the government of Brazil required all banks and credit institutions to grant loans only to projects that take environmental impacts into consideration. In 1992, the United Nations Environment Program (UNEP) coordinated a declaration of environmental commitment of the banking industry with signatories committing to incorporate environmental factors into their daily business practices (Schmidhieny, 1996). In a survey of European banks, 15 participants



said they offered discounted rates for environmentally responsible companies, shaving as much as 50 basis points from the rate and halving the fees (Monroe, 1999).

Another source of capital, shareholders have exerted environmental pressure on corporations since 1989. The Council for Environmentally Responsible Economies (CERES) was the first to enlist investors to file environmental proxy resolutions in annual board meetings and seek the endorsement of its environmental principles. More recently, the environmental community has begun to engage this constituency. According to Julie Tanner, senior financial analyst at the National Wildlife Federation, “We have been training people all around the world about the role of financial institutions and where they can find points of leverage” (Monroe, 1999). Even without such outside influence, some shareholders have taken it upon themselves to exert environmental pressures on the companies in whom they own stock. The Maxxam Corporation and Occidental Petroleum Company have recently been targets (Waldman, 1999; Nieves, 1999).

Beyond banks and shareholders, broad-based investors are also an important source of capital. And like banks and shareholders, they are beginning to equate environmental performance with good management. Some studies have found a positive correlation between environmental and economic performance. The Alliance for Environmental Innovation reviewed 70 research studies and concluded that companies that outperform their peers environmentally also outperform them on the stock market by as much as 2 percentage points. ICF Kaiser found a similar correlation in a study of 300 of the largest public companies in the US (Feldman, Soyka & Ameer, 1996). With this correlation as a trigger, some funds are buying stocks that represent “best of class” in basic industries like paper and steel. These companies, according to fund managers, handle their environmental affairs responsibly relative to their industry competitors

and will likely manage their overall operations more responsibly. This type of screening has, for some, lead to greater returns (Bailey & Syre, 1998; Deutsch, 1998; Aspen Institute, 1998). In 1998, the New York Society of Security Analysts — the largest and most influential society of investment professionals in the world — launched *Uncovering Value*, a series of environmental seminars to examine how progressive corporate environmental practices contribute to a company's performance, profitability and growth (Descano & Gentry, 1998).

**Insurance underwriters** are beginning to see environmentally risky operations as being correlated with increased financial risk and are beginning to apply environmental criteria for minimizing that risk in their underwriting practices (Leggett, 1996; Schmidheiny, 1996). In this way, they are demanding sound environmental practices before a policy is written. In November 1995, the industry developed a UNEP-supported Statement of Environmental Commitment with 78 official signatories making commitments to include the environment as one of the value-drivers in their under-writing decisions (Frankel, 1996).

**Trade associations** are making environmental demands on their constituent members. Beginning in 1989 with the Chemical Manufacturer's Association (CMA) Responsible Care Program, similarly designed programs have flourished in other industries such as petroleum, printing, textiles, paper, lead, and automobiles.

Finally, shifting norms on the appropriate role of the corporation in interacting with the environment are taking place within the institutions of several fundamental social arenas. First, **academic institutions** are teaching students about the environment in ways that are far different than that of previous generations (Dembner, 1994). Not only students in grades K-12 (National Science and Technology Council, 1994), but also students at the university level are being offered a growing number of environmental courses in business, engineering, science,

journalism, law and public policy schools (Makower, 1993; Mangan, 1994; Pham, 1994; Wagner, 1994; Friedman, 1996; Finlay, Bunch & Neubert, 1998). Also, many of the world's **religious institutions** are changing their view of the morality of behavior towards the environment. The Presbyterian Church decided to place environmental concerns directly into the church canon, thus making it a sin to “threaten death to the planet entrusted to our care” (Associated Press, 1991: 4). The Roman Catholic Church equated environmental degradation with theft from future generations in its new catechism (Woodward & Nordland, 1992). His All Holiness Bartholomew I, spiritual leader of the world's 300 million Orthodox Christians, equated specific ecological problems with sinful behavior (Stammer, 1997).

All of these pressures add up to a collectively different set of field level pressures than what corporate decision-makers faced in the past. The notion that environmental pressures emerge from a monolithic institutional field is inaccurate. These pressures, in fact, emerge from many diverse sets of interests as depicted in figure 2.

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### **The Cultural Framing of Corporate Environmental Practice**

Out of this evolving field of constituents comes an evolving set of definitions for environmental issues, social issues and legitimate corporate practice. This field exists in dynamic form (Greenwood & Hinings, 1996; Hoffman, 1999) such that the cultural framing of environmental protection has been evolving steadily over the past decades. What was called ecology in the late 1960s has evolved successively into environmental management, waste minimization, pollution prevention, product stewardship, total quality environmental

management, eco-efficiency, industrial ecology and environmental strategy. To understand this evolution, we must connect the cultural framing of environmental protection to the specific interests presented by each field-level source. As the pressures on the organization emerge from each institutional constituency, it becomes redefined and transformed. Each field level constituent employs a different set of institutions and cultural artifacts in articulating what environmental protection means.

For example, insurance company under-writing practices act as consulting recommendations, influencing how companies handle their environmental affairs. If companies choose not to adopt insurance recommended practices, they will find their business costs raised through higher premiums. And indirectly, insurance companies possess large amounts of investment capital from premiums, which can be used to sway financial markets (Schmidheiny, 1996). So, when environmental pressures are imposed on the corporation from insurance companies, environmentalism becomes translated into an issue of risk management and capital acquisition, two issues of central importance to corporate practice.

Similarly, when buyers and suppliers impose environmental pressures on the firm, they become framed as an issue of operational efficiency through resource acquisition, processing and sale. When imposed by banks, shareholders and investors, they become framed as an issue of capital acquisition. When consumers begin to consider environmental concerns in their purchasing decisions, the issue becomes framed as an issue of market demand. When competitors begin to use the environment as a strategic issue or challenge how others use it, the issue becomes translated into one of competitive strategy. When trade associations see opportunities in presenting a unified front on environmental affairs, the issue becomes one of industry reputation or external and government relations. And when academic and religious

institutions begin to impose environmental concerns, the issue becomes framed as one of human resource management regarding personal values and corporate culture.

By tying environmental concerns to the institutional constituents driving it, environmental protection becomes less an environmental issue, framed instead in terms that reflect the cultural interests, beliefs and perspectives of its occupational community source. Moving beyond regulatory compliance and social responsibility, these forms can be collapsed into six basic frames employed by business groups to justify corporate environmental practice (Aspen Institute, 1998; GEMI, 1999) as shown in figure 3.

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**Environmental Protection as Operational Efficiency.** In this cultural frame, environmental protection is redefined as a tool for finding new ways to optimize operations. The central tenets are eco-efficiency, waste-minimization and pollution prevention. By reducing the input of total or hazardous materials or by minimizing the output of wastes, some argue that it is possible to lower the costs of production (Porter & van der Linde, 1995). First, through process optimization, material yield and resource utilization rates may be increased thereby reducing costs per unit of product produced. Second, minimizing wastes, emissions and discharges can lower regulatory compliance, engineering, control management and disposal costs. Further, it can reduce liability costs from potential spills and health and safety exposures which can translate into lower insurance premiums and lower threat of worker injury lawsuits. And finally, integrating concerns for pollution prevention into engineering design criteria can often expose previously unseen opportunities for streamlining or eliminating process components and

maintenance procedures. Through this framing, environmental practices are argued to result in strategic improvements by reassessing taken-for-granted practices, rules of thumb and protocols.

**Environmental Protection as Risk Management.** In this cultural frame, environmental protection is redefined as an opportunity to reduce costs associated with environmental risks. First, limiting environmental exposures to employees, contractors, and customers can directly lower corporate insurance premiums. Second, environmental risk management strategies may reduce the need and associated costs of contingent emergency procedures in both the short and the long term. In the short-term, portions of emergency preparedness programs may be rendered obsolete after hazards are eliminated. For the long-term, pro-active measures and effective plans may reduce the costs of emergency response and clean-up, as well as the associated regulatory penalties and legal expenses. And finally, as product stewardship concerns become more pervasive, incorporating environmental considerations into initial product design programs may reduce the potential for ongoing liabilities associated with product use, misuse, and disposal. Through this framing, environmental protection programs are argued to result in strategic improvements by reducing liability exposure and waste disposal liability risks.

**Environmental Protection as Capital Acquisition.** In this configuration, environmental protection is framed as an opportunity to reduce costs of capital investments in new sites, facility construction, and the start-up or redesign of manufacturing lines and new products. First, integrating environmental considerations into the capital acquisition and change processes may reduce the uncertainty of corporate transactions. Environmental due diligence activities may uncover hidden environmental liabilities in property acquisitions and divestitures. Brownfield redevelopment, for example, may bring strategic business and tax advantages if one translates the environmental hazards into strategic opportunities. Second, intervening in capital projects

early to secure permits, address regulatory requirements and foresee environmental problems may streamline new product development or facility expansion. Attention to environmental protection and community relations, for example, can play a key role in overcoming community opposition to new plant construction or facility expansion. And third, companies may reduce the overall operating expenses of new facilities by incorporating environmental considerations into the initial design. Since plant upgrades in response to increasing environmental pressures cost more than at initial process design, overall operating costs will be reduced. Through this framing, environmental protection programs are argued to result in strategic improvements through lowered the cost of capital, reduced utility and maintenance costs, and improved working productivity.

**Environmental Protection as Market Demand.** As market demand, environmental protection is framed as an opportunity to enhance the market share for products and services by appealing to both end-use customers or buyers and up-front suppliers or vendors. First, companies may appeal to environmentally conscious consumers by increasing recycled or recyclable material use, reducing virgin material use, eliminating hazardous product constituents, and decreasing the environmental impact of their products. Such green marketing efforts may enhance the company's public image and the marketability of its brand name. In many industries, environmental performance has become a lightning rod for public inquiry and consumer decision-making. Reputational effects from environmental problems circulate through the press and other channels, influencing consumer preferences, spurring boycotts, and in some cases affecting bottom line sales (such as the Boycotts imposed upon Shell during the Brent Spar disposal debate). Second, high environmental performance standards may also appeal to suppliers and buyers who may be seeking strategic advantage through their own environmental

initiatives. Through this framing, environmental programs are argued to enhance public perceptions of a company and improve the marketability of its products and services. They are also argued to help secure beneficial supplier relationships and win supply contracts with new companies. Environmental considerations become one aspect of the value offered by a company.

**Environmental Protection as Strategic Direction.** In this cultural frame, environmental protection is argued to expose important information and insights for guiding new strategic directions. This can manifest itself in a number of ways. First, by measuring environmental costs and risks associated with product or process lines, companies can identify strategic opportunities in redirecting attention and resources towards less risky and more attractive alternatives. Second, by remaining alert to changes in consumer preference, media attention, community concerns and regulatory program trends, companies can exit increasingly risky business areas in favor of more secure options. Third, by attending to these trends, companies can also exert greater control over their image, reputation and ultimately, financial performance by shifting organizational resources when needed. And finally, as markets and industries rapidly change, corporate environmental attributes and performance may help secure new markets and protect existing ones from external criticism, protest and attack. For example, a management team which is alert to environmental issues and publishes their results through corporate environmental reports may find that investors or insurance companies will be more steadfast in times of tension or crisis. Through this framing, environmental protection programs are argued to create strategic opportunities through enhanced innovation and capitalization on both existing and emerging market demand.

**Environmental Protection as Human Resource Management.** Finally, improved environmental performance is framed as an opportunity to increase workplace productivity. First, a strong environmental reputation as well as environmentally safe working conditions can



help companies attract higher caliber applicants. This is particularly valuable as labor markets shrink. Second, leading environmental performer may improve their ability to retain such workers. This reduces the costs of recruiting and training for new employees. Third, improved working conditions can increase worker productivity and process output. For example, improved indoor air quality, reduced noise levels and energy-efficient lighting upgrades have been argued to reduce absenteeism and improve staff morale and productivity. Through this frame, environmental protection programs are argued to increase competitiveness through improvements in staff commitment to the company and to the task.

In sum, the issue of environmental protection is actually a composite of many cultural frames. The issue has traditionally been framed as regulatory compliance and social responsibility, but is now being framed in a variety of ways. Each of these frames is the product of the filtering of the issue through specific occupational communities that interact with business constituents. It is this level of framing that connects field level dynamics with organization level culture, structure and practice.

### **Organizational Responses to Field-Level Pressures**

Organizationally, the scientific validity of certain environmental issues is of less importance than the channels through which those issues are received. Powerful constituents within the institutional field translate environmental practice through the business channels of their occupational community. Organizations then enact a cultural and structural response that reflects their institutional source. Evolving institutional pressures for environmental protection make demands for concurrent and supporting shifts in organizational culture, structure, reward

systems, and job responsibilities. Organizations interpret these pressures and develop an organizational response that is consistent with the interests of these institutional constituencies.

At times, the field level pressures for this organizational consistency are coercive and clear. In 1993, for example, the Environmental Protection Agency (EPA) mandated organizational changes as part of an enforcement action against the United Technologies Corporation (UTC). The EPA fined UTC \$5,301,910 for violations of federal and state hazardous waste and water pollution control laws. As part of the settlement, UTC was required to: (1) implement an extensive multi-media environmental audit of all 26 of its New England facilities and (2) hire a management consultant to make management improvement recommendations for achieving compliance with every major environmental law at all of its facilities. According to an EPA press release, “this is one of the most extensive environmental audits ever agreed to in an enforcement action ... by this settlement we have not only corrected past problems, but have also acted to assure future violations will be deterred” (Hoffman, 1997: 9).

But, where such pressures are not so clear, greater understanding of the linkages between the field and the firm lies in understanding that external constituencies redefine the environmental protection issue into terms that reflect their own interests - terms with which the corporation may already be familiar. In the case of each constituency, the firm has pre-existing models and language within its individual functions and competencies with which to conceptualize and formulate a response. By realizing this “fit,” firms frame environmental issues as related to core business concerns. An efficient organizational response to institutional pressures involves the direction of environmental pressures to the functional levels best equipped to handle them given their culturally framed form, as shown in figure 4. Through the channels of

the firm's occupational communities, environmental issues diffuse from the periphery of specialized environmental health and safety departments to the core of the organization's functional competencies. Through this process, it transforms the work roles and functions of the various departments within the organization.

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Insert figure 4 about here

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### **Organizational Resistance to Field Level Change**

By incorporating organizations into field-level analysis, we can begin to identify new sources of resistance to change. Where fields are traditionally regarded as embodying stability and inertia, this model allows for the possibility that resistance to change can originate at the organizational level. Through structural inertia and cultural barriers, organizations can resist enacting new cultural frames of environmental protection as directed by the institutional field. Change requires that organizations break down traditional structures and beliefs that have become institutionalized over decades. For example, since the establishment of environmental regulations in 1970, most corporations have adopted a government-centered approach to handling environmental issues through a segmented division of responsibilities within the organization. Environmental affairs departments were developed as organizationally specialized functions whose objectives were to ensure that the corporation remained in compliance with environmental demands so that the operating core could remain focused on maximizing profits, buffered from external interference. But, such structural arrangements create communication breakdowns throughout the organization.

A survey by Arthur D. Little identified a lack of integration among departments as one of the major roadblocks to the effective management of corporate environmental issues (Shelton & Shopley, 1995). Departments within the same organization often could not communicate their interests or opportunities to one another. Beyond structural limitations to free flows of information, the language, rhetoric, objectives and external constituency of the various departments limit the identification of strategically important environmental actions. For example, the environmental management staff often takes for granted that the value of their strategic environmental programs is apparent. So, they fail to adopt the business metrics and lexicon that are employed by other parts of the organization in communicating that value, such as return on investment (ROI) and earnings per share (EPS). Instead, environmental managers often use non-business acronyms such as pounds of toxics, biological oxygen demand (BOD), notice of deficiency (NOD), environmental impact statement (EIS), and life cycle assessment (LCA), which may be familiar to their external constituency but serve to distance other business managers from environmental matters (Shelton & Shopley, 1995).

Institutionalized routines can also inhibit change. In accounting balance sheets, for example, environmental protection costs are generally listed as a liability and not an asset, even if expenditures result in decreased compliance and disposal costs, savings in other areas such as improved public relations, or liability and regulatory reduction. Thus, departmental managers are often shielded from incentives to seek more efficient solutions to environmental problems as environmental costs are billed, not to the department, but to corporate overhead (*Treasury Managers Report*, 1996). For example, most corporations pay for energy costs out of overhead expenses. So, while small incremental reductions can yield large company wide paybacks, most

firms overlook them as individual departments remain unaware of their economic impacts and focus instead on investments that increase output or market share (Brown & Levine, 1997).

A collaborative case study between Dow Chemical and the Natural Resources Defense Council found that organizational breakdowns were the primary inhibitor of the adoption of pollution prevention initiatives at one Dow facility, despite the projection that the company could possibly save more than \$1 million a year by eliminating 500,000 pounds of waste. Since the program was not required for the purposes of environmental compliance, it was not of central interest to production engineers whose main priorities were capacity building. And since it did not appeal to business line personnel with profit-and-loss authority, the project was not implemented. These staff personnel were more interested in maximizing profit for their business through yield improvements rather than waste minimization (Greer & Van Loben Sels, 1997).

Organizational change will involve the unlearning of what has been ingrained over the organization's history. And this will often invite resistance. Basic assumptions about organizational procedures and the realities of the external environment can become rigidly set and are difficult to reset. At times, this rigidity can be positive, allowing the organization to react rapidly to changes in the environment that fall within the range of issues previously encountered. But it can also operate as a pattern of thought and action, which can limit possibilities for creative action. While the institutional field can evolve and allow greater flexibility in the repertoire of legitimate organizational action, the inability of the organization to respond may be the source of inertia and resistance to change. Isomorphism may then be the result of organizational inertia that holds to the historic responses to environmental pressures.

### **Discussion:**

## **Implications for Institutional Analyses**

The model presented in this paper draws important insights for the study of institutions and their influence on corporate environmental behavior. It addresses two critical weaknesses in the existing literature. First, much of institutional analyses treat the institutional field and its influence on organizational action as monolithic. For example, Fligstein (1990) attributed the changing power-base within American firms (from manufacturing to sales to finance) to power shifts created by institutional pressures from government regulation. Similarly, DiMaggio (1991) observed the institutionalization of the form of American Art Museums as the product of institutional pressures from trade associations and funding agencies. In each of these cases, the dominant constituency of the field, the form of institutional pressure and the repertoire of organizational response was principally monolithic, originating from one or two organizations and yielding one organizational form. Hoffman (1999) introduced a more complex notion of a field moving through stages in which the constituency grew in number and interaction patterns. Yet, this study still presented the form of institutional pressure as monolithic, leading the subsequent industry response towards isomorphism, a homogenous field wide response.

This paper suggests that fields cannot be conceived in such singularly clean and orderly terms. The field must be seen as, in fact, a highly complex collective of constituents whose composite influence on corporate behavior is varied and diverse. More than arguing that the firm exists within multiple organizational fields (Lounsbury, 1996), this paper argues that this multiplicity is part of the same field. Thus, the institutions that define legitimate corporate practice, while centered on common beliefs, are equally diverse and complex. It presents a notion of the field as a highly diverse collective of actors whose composite influence on corporate behavior is varied and complex. Thus, the institutions that define legitimate corporate

practice are equally varied and complex. Differential effects occur at the organizational level and the institutional channels through which field level influences impact organizational behavior.

Second, few institutional analyses fully connect the influence of institutional fields to culture and practice on the organizational level. Most research analyzes the phenomena in terms of field level change, not individual response. This leaves the theory disembodied and over-socialized. It describes the recipients of field influence as an homogenous collection of organizational actors, each behaving according to a social script designed by the social environment (Granovetter, 1985). This paper argues that the influence of the institutional field is varied within each organizational context. To understand firm heterogeneity within an institutional context, field level analysis is only half of the equation. Organization level analysis must be included. Some have attempted to bridge this gap, arguing that firms can respond strategically to institutional pressures (Oliver, 1991) or that individual actors may strategically influence the process of institutional change becoming what might be called “institutional entrepreneurs” (Fligstein, 1997; Lawrence, 1999). But, in these cases, the organization and the field are treated as separate and distinct. The firm "responds" to institutional pressures rather than acting within the bounds they create.

This paper presents institutional pressures as a collective of cultural repertoires that bound possibilities for organizational structure, culture and action. Yet, the individual organization is still capable of choosing among this repertoire. This paper connects the influence of institutions at the field level to the resultant culture and practice at the organizational level. Institutional pressures are viewed as a collective of cultural repertoires that bound organizational structure, culture and action. Through cultural influences, action becomes a choice among a bounded set of legitimately available options and not a choice among an unlimited array of

possibilities. Linking figures 2, 3 and 4, we can model the interconnections among the field level constituency driving environmental issues, the cultural frames employed by each and the organizational response that is triggered by these varying constituencies.

By connecting institutional and organizational level analyses, new and more complex models of change can explain the genesis and alteration of legitimate corporate practice. One important point that emerges is the notion of institutions as a source for change while organizational inertia can be seen as a source of resistance to that change. This is a dramatic shift from traditional views. The institutional literature has often been criticized for its failure to adequately address the concept of change (DiMaggio, 1988; Brint & Karabel, 1991; Hirsch & Lounsbury, 1997; Hirsch, 1997). Traditionally, institutions are seen as powerful pressures for organizations to seek legitimacy and strive for social conformity (Orru, Biggart & Hamilton, 1991) thereby resulting in an increasing homogeneity of organizations (Kraatz & Zajac, 1996).

The objectives of future work are to construct a field based view of the drivers of corporate organizational thought and action; elaborate the linkages between organizational and institutional phenomena, and; seek to explain under what circumstances change occurs at the level of the organization in defiance of institutional pressures (Oliver, 1991). Conversely, future work should also assess under what circumstances change occurs at the level of the institutional field while resistance lies at the level of the organization. Such models must include considerations for both institutional and cultural dynamics.

### **Implications for Environmental Analyses**

This paper elevates environmental analysis to the level of the field and its relation to organizational practice. It depicts how individual strategic action is only possible within the



range of available options defined by the organizational field. As the field evolves, so does that range of options. It treats institutions and organizations as the relevant level of analysis for these types of issues. For, while technological and economic activity may be proximate factors in environmentally destructive behavior, this paper focuses on the sources and structure of collective rationality, framing processes, and social and political institutions that embed those technical and economic factors (Bazerman & Hoffman, 1999; Dacin, Beal, & Ventresca; 1999; Hirsch, 1986). Further analytical study and public policy recommendations can benefit from an adjusted level of analysis that considers social and cultural sources of habitual action and social change.

The linkage between institutional constituencies and cultural perceptions of the environment is not entirely new. Rannikko (1996) examined the change in environmental consciousness in Finland by examining the structural and attitudinal background of environmental conflicts, in particular the struggle over construction of tourist facilities and conservation of the wilderness on the mountain of Koli. By analyzing the varying cultural bases and motives of various populations, he concluded that it is important to study those social actors who participate in the defining of environmental problems. Similarly, in developing criteria for evaluating an organization's environmental performance, Lober (1996) identified the importance of relationships with external groups such as communities, shareholders, suppliers and consumers, the media, environmental groups and the government. However, rather than viewing these relationships as sources of pressure from the external environment, he analyzed them as stakeholders who are affected by corporate action.

A focus on the field, institutions and collective rationality yields insights about how social perception and enactment of environmental issues takes place and, therefore, highlights

the fundamental sources of organizational action as a response. This can allow us to go beyond assessments of strict individual action to understanding how conceptions of environmental issues are created and how those conceptions result in individual and organizational action which may conflict with environmental interests (Bazerman and Hoffman 1999; Clark and Jennings 1997). In particular, institutional and organizational analysis seeks to understand how ideas and beliefs about organizational strategies and practice become standard and spread in highly structured fields of activity (Edelman, 1990). Further, it focuses on the dynamics by which these structures shift, create new realities for organizations and redefine the basic resource context. Collective notions of what is appropriate corporate behavior emerge and evolve through field-level debate.

### **Research Directions**

In its most simple and basic terms, future research should analyze and measure the presence, scale and meaning of the individual wedges in figures 2, 3 and 4 and then analyze the connections among them. More specifically, the empirical task of testing institutional and organizational linkages will be to measure the diversity of both the institutions driving environmental pressures within a collective of companies and the corresponding organizational responses developed within each company. Unfortunately, deep level analysis on each level typically employs different and, to some degree, mutually exclusive methodologies. Deep analysis of organizational culture typically requires in-depth ethnography of a single case study (Van Maanen, 1988; Schein, 1992). Deep analysis on the institutional level typically seeks to identify patterns among a large sample of organizations (Fligstein, 1990). A hybrid research strategy that straddles both domains must include a large sample inherent in institutional analyses, but include in-depth organization level perspectives inherent in cultural analyses. One

component of such a study could involve a survey analysis of a large size sample for generalization across large populations of the field.

Data collection could focus on a sample of firms that are facing similar institutional pressures. A survey could ask questions of managers among multiple departments to determine what drives environmental protection concerns and in what form they are framed, conceived and acted upon. In all survey analyses, however, answers must be tempered by the concern that the core measures of cultural and institutional influence are in the level of the taken-for-granted. They are generally more implicit than the actors know or wish to acknowledge. Therefore, managerial perceptions may or may not be able to pick up the full scope of institutional pressures. For example, the influence of banks, insurance companies or investors may be less obvious to managerial action than the pressures of regulators or activists. Further, survey analyses based on managers interpretations of external pressure will naturally tend to uncover discrete network ties or resource connections and will be less likely to uncover sources of normative and cognitive influence that may emerge from religious institutions, academia or the press. Uncovering this level of influence has traditionally been a difficulty within institutional analyses and has led many to identify network analyses as the most reliable way to empirically measure institutional phenomena.

To some extent, empirical limitations will require that a study of institutional influences on organizational action include considerations for direct network influences beyond sources of normative and cognitive influence (Scott, 1991). In effect, studies will, by nature, rely more on the regulative and normative influences of the institutional field and the artifactual responses that are manifested within the organization. To compensate for this deficiency, in-depth case studies of individual organizations could be useful in identifying deeper meanings in these variables.

## Conclusion

The context of environmental protection is an excellent domain for studying the shifting form of institutional and cultural forms. The definition of corporate environmental practice has been highly contested over the past four decades and represents a high degree of field level conflict and change. For example, in 1970, Friedman (1970) wrote that “expenditures on reducing pollution beyond the amount that is in the best interests of the corporation or that is required by law in order to contribute to the social objective of improving the environment ... [is] pure and unadulterated socialism ... There is one and only one social responsibility of business; to use its resources and engage in activities designed to increase its profits so long as it stays within the rules of the game, which is to say, engages in open and free competition without deception or fraud.” This article examines how the "rules of the game" have changed. It presents an institutional and cultural model for understanding how the meaning of "increased profits" and the actions which managers take for the benefit of their investors have become redefined. Managers acting in the best interests of their investors now consider environmental protection in cultural terms that merge with institutionally legitimate business concerns: capital acquisition, operational efficiency, market demand and others. Institutional definitions of environmental protection have moved out of the realm of “socially responsible management” or "regulatory compliance" and have entered the realm of strategic business management.

This conclusion emerges from an institutional and cultural analysis. But, as yet few institutional studies have been able to capture the full complexity of the interface between field and organization. This paper has presented the beginnings of a model that will consider this linkage in more richness. It proposes the co-evolution of linked systems: the institutional field,

the cultural frames employed to describe environmental issues and the cultural and structural organizational response. Our task as researchers is to develop models that capture the source of these cultural influences and understand how they impact organizational structure, culture and practice.

## References

- Andrews, C. (1998) "Environmental business strategy: Corporate leader's perceptions," *Society & Natural Resources*, 11: 531-540.
- Anwar, H. (1999) "Emerging environmental, health and safety issues in China: Practical impacts on international investors," *International Journal of Environment and Pollution*, 12 (1): 1-9.
- Aspen Institute (1998) *Uncovering Value: Integrating Environmental and Financial Performance*, (Washington DC: The Aspen Institute).
- Associated Press (1991) "Presbyterians ratify teaching on sex, ecology," *The Boston Globe*, June 9, 1991: 4.
- Bailey, S. & S. Syre, (1998) "Do-good investing fund does well, beats S&P again," *Boston Globe*, March 5: C1.
- Bazerman, M. & A. Hoffman (1999) "Sources of environmentally destructive behavior: Individual, organizational and institutional perspectives," *Research in Organizational Behavior*, 21: 39-79.
- Berman, S., A. Wicks, S. Kotha & T. Jones (1999) "Does stakeholder orientation matter? The relationship between stakeholder management models and firm financial performance," *Academy of Management Journal*, 42: 488-506.
- Brint, S., & J. Karabel (1991) "Institutional origins and transformations: The case of American community colleges," In W. Powell & P. DiMaggio (Eds.), *The New Institutionalism in Organizational Analysis*, (Chicago, IL: University of Chicago Press): 337-360.
- Brown, M. & M. Levine (eds.) (1997) *Scenarios of US Carbon Reductions: Potential Impacts of Energy Technologies by 2010 and Beyond*, Interlaboratory Working Group on Energy-Efficient and Low-Carbon Technologies, LBNL-40533, (Washington DC: Office of Energy Efficiency & Renewable Energy, USDOE).
- Clark, V. & P. D. Jennings (1997) "Talking about the natural environment: A means for deinstitutionalization," *American Behavioral Scientist* 40(4): 454-464.
- Clarke, S. & N. Roome (1999) "Sustainable business: Learning action networks as organizational assets," *Business Strategy & the Environment*, 8(5): 296-310.
- Clarkson M. (1995) "A stakeholder framework for analyzing and evaluating corporate social performance," *Academy of Management Review*, 20: 92-117.
- Clemens, B. & T. Douglas (2001) "Uncertainty, personality and political strategy," *Journal of Management Systems*, forthcoming.
- Covaleski, M. & M. Dirsmith (1988) "An institutional perspective on the rise, social transformation and fall of a university budget category," *Administrative Science Quarterly*, 33: 562-587.

- Cropper, M. & W. Oates (1992) "Environmental economics: A survey", *Journal of Economic Literature*, 30: 675-740.
- Dacin, T., M. Ventresca & B. Beal (1999) "The embeddedness of organizations: Research dialogue and directions." *Journal of Management*, 25(3): 317-356.
- Dembner, A. (1994) "Movement is strong on campus," *The Boston Globe*, November 12: 28.
- Descano, L. & B. Gentry (1998) "How to communicate environmental performance to the capital markets," *CMA News*, April: 33-37.
- Deutsch, C. (1998) "For Wall Street, increasing evidence that green begets green," *The New York Times*, July 19: 7.
- DiMaggio, P. (1988) "Interest and agency in institutional theory," In L. Zucker (Ed.), *Institutional Patterns and Organizations*, (Cambridge, MA: Ballinger): 3-21.
- DiMaggio, P. (1991) "Constructing an organizational field as a professional project: US art museums, 1920-1940," In W. Powell & P. DiMaggio (Eds.). *The New Institutionalism in Organizational Analysis*, (Chicago, IL: University of Chicago Press): 267-292.
- DiMaggio, P. (1995) "Comments on 'What theory is not.'" *Administrative Science Quarterly*, 40: 391-397.
- DiMaggio, P., & W. Powell (1983) "The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields," *American Sociological Review*, 48: 147-160.
- DiMaggio, P., & W. Powell (1991) "Introduction," In W. Powell & P. DiMaggio (Eds.), *The New Institutionalism in Organizational Analysis*, (Chicago, IL: University of Chicago Press): 1-38.
- Dupuy, D. (1997) "Technological change and environmental policy: The diffusion of environmental technology," *Growth and Change*, 28 (1): 49-66.
- EBRD (1991) *The Basic Documents of the European Bank for Reconstruction and Development*, Paris, May 19, 1990 (entered into force on March 28, 1991).
- Edelman, L. (1990) "Legal environments and organizational governance: The expansion of due process in the American workplace," *American Journal of Sociology* 95:1401-1440.
- Feldman, S., P. Soyka & P. Ameer (1996) *Does Improving a Firm's Environmental Management System and Environmental Performance Result in a Higher Stock Price?* (Fairfax, VA: ICF Kaiser International Inc.).
- Finlay, J., R. Bunch & B. Neubert (1998) *Grey Pinstripes with Green Ties: MBA Programs Where the Environment Matters*, (Washington DC: World Resources Institute).
- Fligstein, N. (1990) *The Transformation of Corporate Control*. (Cambridge: Harvard University Press).

- Fligstein, N. (1991) "The structural transformation of American industry: An institutional account of the causes of diversification in the largest firms: 1919-1979," In W. Powell & P. DiMaggio (Eds.), *The New Institutionalism In Organizational Analysis*, (Chicago, IL: University of Chicago Press): 311-336.
- Fligstein, N. (1992) "Bank control, owner control or organizational dynamics: Who controls the large modern corporation?" *American Journal of Sociology*, 98(2): 280-307.
- Fligstein, N. (1997) "Social skill and institutional theory." *American Behavioral Scientist* 40(4): 397-405.
- Frankel, C. (1996) "Putting a premium on the environment," *Tomorrow*, 6(3): 18.
- Friedman, M. (1970) "The social responsibility of business is to increase its profits," *The New York Times Magazine*, September 13: 32-33, 122, 124, 126.
- Friedman, S. (1996) "Teaching the beat: rising interest in e-journalism reflected in academic option," *SEJournal*, 6(1): 1, 7.
- GEMI (1999) *Environment: Value to Business*, (Washington DC: Global Environmental Management Initiative).
- Giddens, A. (1979) *Central Problems of Social Theory: Action, Structure, and Contradiction in Social Analysis*, (Berkeley: University of California Press).
- Goodman, A. (1998) "Chain reaction: You're not there until your suppliers are there," *Tomorrow*, 8(4): 26-28.
- Granovetter, M. (1985) "Economic action and social structure: The problem of embeddedness", *American Journal of Sociology*, 91: 481-510.
- Greenwood, R., & C. Hinings (1996) "Understanding radical organizational change: Bringing together the old and the new institutionalism," *Academy of Management Review*, 21(4): 1022-1054.
- Greer, L. & C. Van Loben Sels (1997) "When pollution prevention meets the bottom line: Cost savings are not always enough to convince industry to adopt prevention actions," *Environmental Science & Technology*, September: 418A-422A.
- Hart, S. (1995) "A natural-resource based view of the firm." *Academy of Management Review*, 20(4): 986-1014.
- Hirsch, P. (1986) "From ambushes to golden parachutes: Corporate takeovers as an instance of cultural framing and institutional integration," *American Journal of Sociology*, 91 (4): 800-837.
- Hirsch, P. (1997) "Sociology without social structure: Neo-institutional theory meets brave new world," *American Journal of Sociology*, 102(6): 1702-1723.
- Hirsch, P., & M. Lounsbury (1997) "Ending the family quarrel: Toward a reconciliation of 'old' and 'new' institutionalism," *American Behavioral Scientist*, 40(4): 406-418.



- Hoffman, A. (1997) *From Heresy to Dogma: An Institutional History of Corporate Environmentalism*. (San Francisco, CA: The New Lexington Press).
- Hoffman, A. (1999) "Institutional evolution and change: Environmentalism and the US chemical industry," *Academy of Management Journal*, 42(4): 351-371.
- Hoffman, A. (2000) *Competitive Environmental Strategy: A Guide to the Changing Landscape* (Washington DC: Island Press).
- Hoffman, A. & M. Ventresca (1999) "The institutional framing of policy debates: Economics versus the environment," *American Behavioral Scientist*, 42(8): 1368-1392.
- Hoffman, A. & M. Ventresca (eds.) (2001) *Organizations, Policy and the Natural Environment: Institutional and Strategic Perspectives* (Stanford, CA: Stanford University Press) forthcoming.
- Holm, P. (1995) "The dynamics of institutionalization: Transformation processes in Norwegian fisheries," *Administrative Science Quarterly*, 40: 398-422.
- Jablonski, J. (1994) *Prospering Through Environmental Leadership*, (Albuquerque, NM: Technical Publishing Consortium, Inc.).
- Jackall, R. (1988) *Moral Mazes: the World of Corporate Managers*, (New York: Oxford University Press).
- Jennings, P. & P. Zandbergen (1995) "Ecologically sustainable organizations: An institutional approach," *Academy of Management Review*, 20(4): 1015-1052.
- Jepperson, R. (1991) "Institutions, institutional effects, and institutionalism," In W. Powell & P. DiMaggio (Eds.), *The New Institutionalism in Organizational Analysis*, (Chicago, IL: University of Chicago Press): 143-163.
- Katz, J. & L. Sharp (1994) *Levi Strauss & Co: Global Sourcing*, Harvard Business School Case No. 9-385-127 (Cambridge, MA: Harvard Business School).
- Kraatz, M., & E. Zajac (1996) "Exploring the limits of the new institutionalism: The causes and consequences of illegitimate organizational change," *American Sociological Review*, 61: 812-836.
- Lawrence, A. & D. Morell (1995) "Leading-edge environmental management: Motivation, opportunity, resources and processes," *Research in Corporate Social Performance and Policy*, (Stamford, CT: JAI Press), Supplement 1: 99-126.
- Lawrence, T. (1999) "Institutional strategy," *Journal of Management*, 25 (2): 161-188.
- Leggett, J. (ed.) (1996) *Climate Change and the Financial Sector*, (Munich: Gerling Akademie Verlag).
- Liverman, D., R. Varady, O. Chavez & R. Sanchez (1999) "Environmental issues along the United States-Mexico border: Drivers of change and responses of citizens and institutions," *Annual Review of Energy and Environment*, 24: 607-635.

- Lober, D. (1996) "Evaluating the environmental performance of corporations," *Journal of Managerial Issues*, 8(2): 184-205
- Lounsbury, M. (1996) "Garbage can institutionalism: Symbolic conflict and the inter-field diffusion of contending models," paper presented at the Stanford Conference on Organizations (Pacific Grove, California) April 21-23, 1996.
- Makower, J. (1993) "Business schools get in line," *Tomorrow*, 3(3): 50-53.
- Mangan, K. (1994) "The greening of the MBA," *The Chronicle of Higher Education*, 41(10) (November 2): A19-A20.
- Miller, W. (1998) "The IW survey: Encouraging findings," *Industry Week*, 247(2): 62.
- Monroe, A. (1999) "The looming ecowar: Environmentalists' new tactics threaten to take a toll on Wall Street financings," *The Investment Dealers' Digest*, May 24: 20-25.
- National Science and Technology Council (1994) *Technology for a Sustainable Future*, (Washington DC: Office of Science and Technology Policy):
- Nieves, E. (1999) "Lumber company approves US deal to save redwoods," *The New York Times*, March 3: A1, A12.
- O'Leary, R. (1991) "Environmental administration: The courts and public policy, 1980-1989," *International Journal of Public Administration*, 14 (3): 303-314.
- Oliver, C. (1991) "Strategic responses to institutional processes," *Academy of Management Review*, 16: 145-179.
- Olson, M. (1965) *The Logic of Collective Action: Public Goods and the Theory of Groups*, (Cambridge, MA: Harvard University Press).
- Orru, M., N. Biggart, & G. Hamilton (1991) "Organizational isomorphism in East Asia," In W. Powell & P. DiMaggio (Eds.), *The New Institutionalism in Organizational Analysis*, (Chicago, IL: University of Chicago Press): 361-389.
- Perrow, C. (1985) "Overboard with myth and symbols," *American Journal of Sociology*, 91: 151-155.
- Pham, A. (1994) "Business schools see green," *The Boston Globe*, June 28: 35.
- Pizzolatto, A. & C. Zeringue (1993) "Facing society demands for environmental protection: Management in practice," *Journal of Business Ethics*, 12 (6): 441-447.
- Porter, M., & Van der Linde, C. (1995) "Green and competitive: Ending the stalemate," *Harvard Business Review*, 73(5) (September-October): 120-134.
- Powell, W. & P. DiMaggio (1991) *The New Institutionalism in Organizational Analysis*, (Chicago, IL: University of Chicago Press).

- Protest, D., F. Cook, T. Curtin, M. Gordon, D. Leff, M. McCombs & P. Miller (1987) "The impact of investigative reporting on public opinion and policy-making: Targeting toxic waste," *Public Opinion Quarterly*, 51(2): 166-185.
- Rannikko, P. (1996) "Local environmental conflicts and the change in environmental consciousness," *Acta Sociologica*, 39(1): 57-72.
- SC Johnson/Roper (1993) *The Environment: Public Attitudes and Individual Behavior, North America: Canada, Mexico, United States*, (Racine, Wis.: SC Johnson & Son, Inc.)
- Schein, E. (1990) "Organizational culture," *American Psychologist*, 45: 109-119.
- Schein, E. (1992) *Organizational Culture and Leadership*, (San Francisco: Jossey-Bass).
- Schein, E. (1996) "Three cultures of management: The key to organizational learning," *Sloan Management Review*, Fall: 9-20.
- Schmidheiny, S. (1996) *Financing Change*, (Cambridge, MA: MIT Press).
- Scott, W. R. (1991) "Unpacking institutional arguments," In W. Powell & P. DiMaggio (Eds.), *The New Institutionalism in Organizational Analysis*, (Chicago, IL: University of Chicago Press): 164-182.
- Scott, W. R. (1995) *Institutions and Organizations*, (London: Sage Publications).
- Shelton, R. & J. Shopley (1995) "Hitting the green wall," *Perspectives*, (Cambridge, MA: Arthur D Little).
- Shrivastava, P. (1995) "The role of corporations in achieving ecological sustainability," *Academy of Management Review*, 20(4): 936-960.
- Sorstrom, S. (1999) "Countermeasures against air pollution and greenhouse gas emissions in Shanxi Province," *International Journal of Environment and Pollution*, 12 (1): 42-50.
- Stammer, L. (1997) "Harming the environment is sinful, prelate says," *Los Angeles Times*, November 9: 1-A.
- Starik, M. & G. Rands (1995) "Weaving an integrated web: Multilevel and multisystem perspectives of ecologically sustainable organizations," *Academy of Management Review*, 20(4): 908-935.
- Stern, R. & S. Barley (1996) "Organizations and social systems: Organization theory's neglected mandate," *Administrative Science Quarterly*, 41(1): 146-162.
- Thomas, G., J. Meyer, F. Ramirez, & J. Boli (1987) *Institutional Structure: Constituting State, Society, and the Individual*. (Newbury Park, CA: Sage Publications.)
- Treasury Manager's Report* (1996) "Ignoring the environment can be a waste of money," *Treasury Manager's Report*, 4(3) (February 2): 1.

- US Environmental Protection Agency (1992) *1990 Toxic Release Inventory*. Report No. 700-S-92-002. (Washington DC: US Government Printing Office).
- Van Maanen, J. (1988) *Tales of the Field: On Writing Ethnography* (Chicago: University of Chicago Press).
- Wagner, B. (1994) "The greening of the engineer," *US News & World Report*, 116(11) (March 21): 90-91.
- Waldman, P. (1999) "A rainforest tribe brings its eco-battle to corporate America: U'wa chiefs and US activists stage a week of protest over Occidental oil plan," *The Wall Street Journal*, June 7: A1.
- Walley, N. & B. Whitehead (1994) "It's not easy being green," *Harvard Business Review*, 72(3) (May-June): 46-51.
- White, H. (1992) *Identity and Control: A Structural Theory of Social Interaction*. Princeton, NJ: Princeton University Press.
- Woodward, K. & R. Nordland (1992) "New rules for an old faith," *Newsweek*, 120(22) (November 30): 71.
- Zald, M. & J. McCarthy (1987) *Social Movements in an Organizational Society*, (Oxford: Transaction Books).
- Zucker, L. (1983) "Organizations as institutions," In S. Bacharach (Ed.), *Research In The Sociology of Organizations*, (Greenwich, CT: JAI Press): 1-47.

## Figures

Figure 1  
A Composite Model Linking the Field, Institutions and the Organization

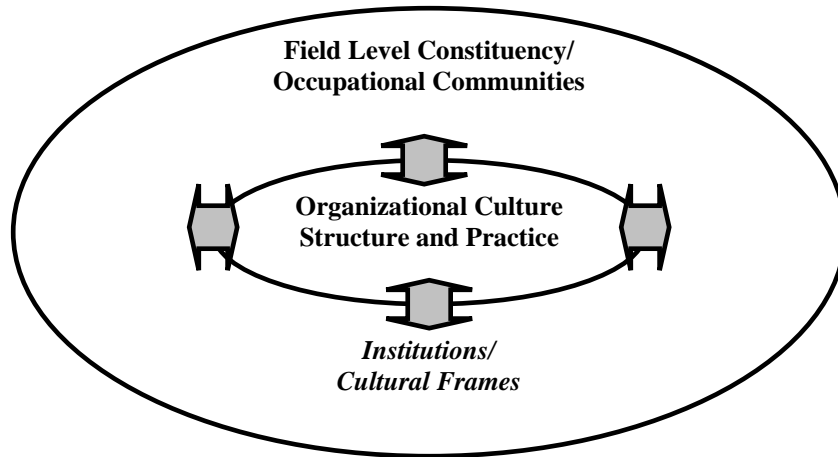


Figure 2  
Field Level Communities Defining Corporate Environmental Practice

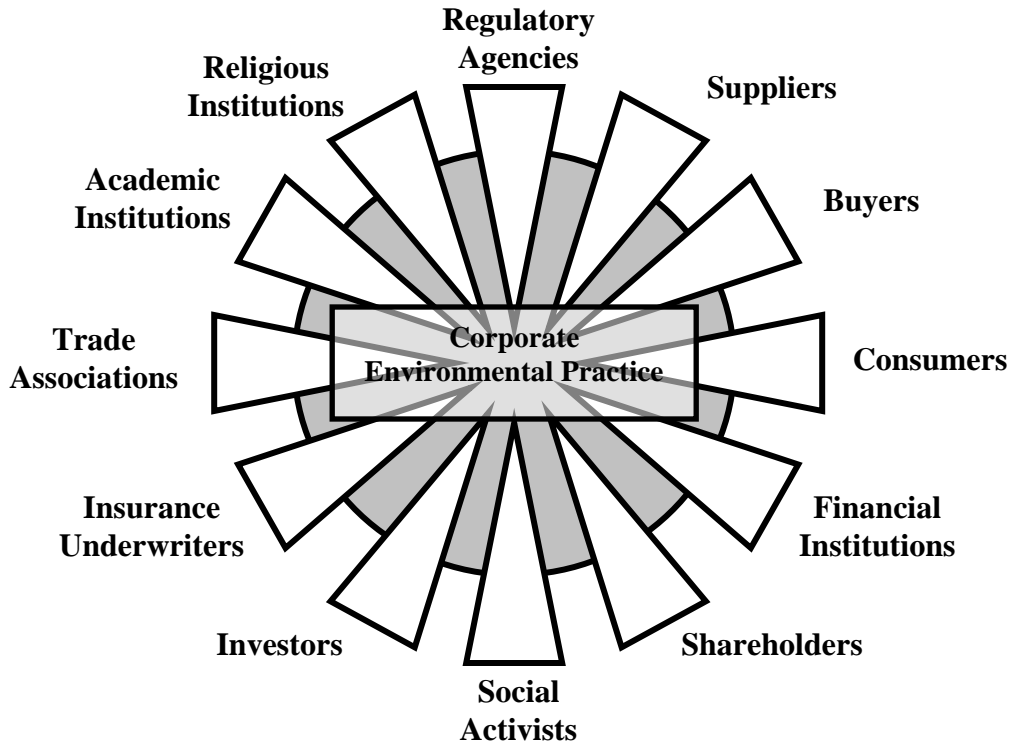


Figure 3  
Cultural Frames for Corporate Environmental Practice

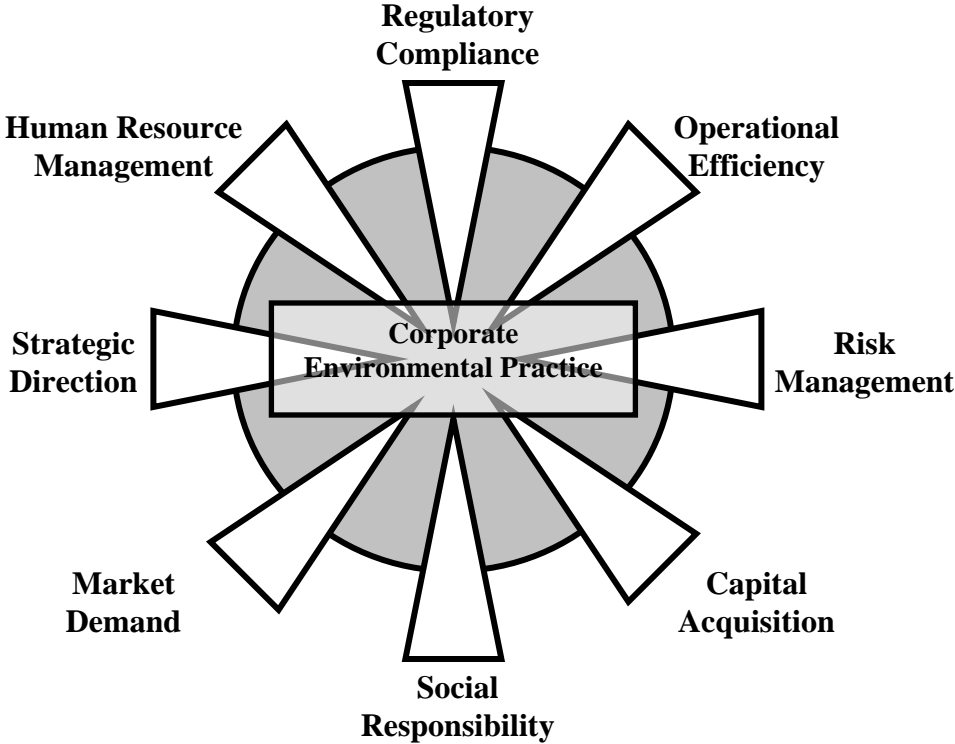


Figure 4  
Functional Responses to Field Level Environmental Pressures

