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# Environmental Metaphor for a Structuration Theory Perspective

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## Abstract

There is a growing recognition for the need of social theories to supplement the dominant pragmatic perspective. The social accounting project has experienced frustrations with creating and implementing a more complete accounting for organizations that recognize and report on their rights and responsibilities to various constituencies. I propose structuration theory as a social theory useful in framing and facilitating the socio-political and organizational context of the social accounting project. First, I discuss the legitimating grounds for the social accounting project by considering the rights and responsibilities of the active parties. Next, I present a brief description of structuration theory followed by the presentation of an alternative environmental framing using structuration theory constructs. The discussion concludes that there must be a revision of the norms and values held by the actors. The dominant economic criteria must be supplemented, sustained, or replaced, by more inclusive and enlightened criteria that directly connect to sustaining dimensions of social and natural systems. Resources must be redirected by the new norms and values and the more inclusive representation structures. The social accounting project must recognize its responsibility in providing complete, transparent, and understandable information for all affected members of the society.

## 1 – Introduction

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Gray (2002) argues that the social accounting project<sup>1</sup> has by its very nature been pragmatic and as such has fostered engagement for the purpose of changing practice. However, imagining and implementing the necessary expanded new accountings have not come easy. One perspective is that this difficulty has been accentuated because of the limited theoretical grounding. Such a trajectory is logical given the extensive pressure for change in light of growing environmental and social challenges. For example, the rapid deterioration of the natural systems demands new and expanded accountings that reflect the effects of organizational actions on these systems. To address this task, a clear sense of the rights and responsibilities of all participants must accompany an expanded user set and new reporting paradigms. As part of the enabling accounting project (Gallhofer and Haslam, 1997), it may be time to begin to more seriously consider the theoretical constructs that could provide the basis for practices directed toward greater understand and transparency with respect to the relevant set of events or transactions.

As I noted earlier (Dillard, forthcoming), there appears to be a growing acknowledgement for the need of social theories to supplement the dominant pragmatic perspective. The social accounting project has experienced frustrations with creating and implementing a more complete accounting for organizations that recognize and report on their rights and responsibilities to various constituencies. With this in mind, I wish to propose structuration theory as a social theory useful in framing and facilitating the socio-political and organizational context of the social accounting project.<sup>2</sup> The next major section provides the legitimating grounds for the social accounting project by considering the rights and responsibilities of the active parties. The following section presents a brief description of structuration theory. The fourth section presents an alternative environmental framing using structuration theory constructs. Concluding comments comprise the closing section.

## **2 – Legitimizing Grounds for Social Responsibility**

Ultimately, the purpose of the social accounting project<sup>3</sup> is to articulate and accentuate organizational management and the accounting profession's responsibility for acting in the public

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<sup>1</sup> Following Gray and Bebbington (2001), I include sustainability, accounting, and accountability as part of the social accounting project. Further the project entails an extensive literature Deegan, 2002; Gray, 2002; Mathews, 1997.

<sup>2</sup> Buhr (2002) has applied structuration theory in investigating environmental reporting. Other applications in the accounting literature can be found in Dillard, et al. (2004), Burns and Scapens (2000), Macintosh (1994, 1995), Macintosh and Scapens (1990, 1991), Roberts and Scapens (1985).

<sup>3</sup> Social accounting project entails an extensive literature. See, for example, Bebbington (1997), Bebbington and Gray (2001), Bebbington, et al. (1999), Everett (2004), Everett and Neu (2000), Gray (1992, 2002), Gray and Bebbington (2001), Gray, et al. (1997), Gray and Milne (2004), Lehman (1995, 1996, 1999, 2001, 2003), Owen, et al., 2000, 2001, Power (1991, 1994), Tinker and Gray (2003), and Tinker, et al. (1991). Also, for a review see Deegan, 2002; Gray, 2002; Mathews, 1997

interest, where the public interest is inclusively conceived. The objective of the project is to encourage and sustain inclusive, enlightened, and ongoing discourse among all effected parties concerning what constitutes organizational management and the accounting profession's responsibility for acting in the public interest. Acting in the public interest requires consideration of natural, social, and economic systems. Natural systems provide the context and sustenance for social systems and, therefore, must be respected, nurtured, and sustained. Social systems provide the context and objectives of economic systems.

### **3 – Organizational Management**

Organizational management and the accounting profession have a central role in the long-term viability of a democratically governed society grounded in justice, equality, and trust and supported by a sustainable economic system. While all members of society have a moral responsibility to act in the public interest, organizational management is specifically granted fiduciary responsibility over society's economic resources, which consist of natural, human, financial, and technological resources. By accepting the right to control society's economic resources, organizational management accepts the responsibility for being held accountable for the use of the resources.

### **4 – The Accounting Profession**

The accounting profession facilitates and monitors organizational management in carrying out their fiduciary responsibility. Thus, the profession is concerned with the integrity and accountability of financial and administrative systems and those who design, implement, and utilize them. Thus, the accounting profession must maintain high standards of integrity, responsibility, and accountability in order to fulfill its charge.

### **5 – The Academic Accounting Community**

The academic accounting community has a responsibility to facilitate, and engage in, dialogue among stakeholders regarding accounting's (the profession, the professionals, the systems) and organizational management's public interest responsibilities. The dialogue with the business community, the profession, the government, NGOs, and civil society and the members of the academy is facilitated through scholarly investigation, educational innovation, and community interaction.

The primary focus of the academy is to bring together the expertise of faculty, students, and the community to identify and consider the critical public interest issues facing the business sector. For example, social accounting concerns the scholarly investigation of accounting, the accounting profession, accounting professionals, and accounting systems within their economic, political, social, ecological, and organizational context. In order adequately fulfill this charge, a wide range of research topics, methods, and styles must be recognized.

Key research concerns within financial accounting include non-GAAP disclosures within the social and environmental areas and the effects of such reporting practices on market fluctuations. In managerial accounting, important research topics include the interplay between autonomy and internal control devices, the impact of corporate governance issues, the evaluation of environmental risk, and the roles of budgeting and accountability in a transparent business environment. In auditing, questions of corporate governance, the effects of legislation (e.g., the Sarbanes-Oxley Act), and providing assurance for a variety of stakeholders represent current areas needing attention. Noteworthy research issues in the accounting information systems area include the social consequences of information access, relating creativity and business knowledge to system characteristics, and the interrelationship between system capabilities and the moral implications of accounting technologies.

The results of these research initiatives must be translated into educational innovations that provide students and faculty with the appropriate tools for constructively addressing critical public interest issues facing accounting and organizational management. Appropriate means include both an appreciation for the historical and current role of organizational management, accounting, and the accounting profession as well as an ability to envision opportunities for socially and environmentally responsible, and responsive, development, especially in the area of accountability. Educational initiatives needed include various forms of pedagogy, program development, curricular development, course development, development of course materials such as publishable case studies, and educational research.

Questions concerning the accounting profession inevitably require a related critique of the role of academic accounting programs. Through the design of curricula and choice of research topics, most programs have inadequately addressed the need for students and faculty to understand the depth and complexities of the profession, especially as they relate to social and environmental responsibilities, professional integrity, responsibility, and accountability. The curricula, at least in the United States, opt instead for a broad range of technical material, geared to knowledge of rules and conventions of practice, often directed to passing professional exams. However, the public expects universities to transcend the production of accounting technicians by exploring the societal role of accounting. This approach joins technical competence with a deep

understanding of the complex responsibilities of accounting to organizations, society, and the environment.

Salient curricular issues include the responsibilities of the profession, the philosophical grounding of accounting, and the ethical and social dilemmas graduates face in the profession. The development of the profession, its relationship to the public—past, present, and future—and its role in society should be an integral part of accounting education at all levels. Innovative programs should provide students with an understanding of: the situated roles of the profession; their own responsibilities as accounting professionals; the responsibilities of organizational management as well as other stakeholders; and the interrelationship between social and natural systems.

Community interaction should include such activities as providing “experts” to the press, hosting accounting related business forums such as general briefings, facilitating continuing education and executive education, and most importantly enabling an ongoing dialogue among the relevant stakeholder groups such as students, faculty, the accounting profession, organizational management, and the local community. The results of scholarly investigation should serve as a focal point for inclusive, enlightened, and sustained discourse in the community about the community. Generally, the discourse should explore the accounting profession and organizational management’s public interest role consistent with their rights and responsibilities discussed above. Specifically, the discourse should envision opportunities for socially responsible, and responsive, action, especially in the areas of professional integrity, responsibility, and accountability. Concomitantly, the accounting profession, the business community, members of the academy, and representatives of the community have a responsibility to engage in and sustain the discourse.

Community interaction should include such activities as providing “experts” to the press, hosting related business forums, facilitating continuing education and executive education, and most importantly enabling an ongoing dialogue among the relevant stakeholder groups such as students, faculty, the accounting profession, organizational management, and the local community.

## **6 – An Opportunity for Change**

In light of the dramatic and continuing failures of integrity and accountability within the economic sector, society is seriously questioning organizational management’s motives and the accounting profession’s ability to safeguard the public interest. In the United States, the Sarbanes-Oxley Act, NYSE Corporate Governance Rules, and the follow-on legislation and regulations, begin to codify society’s expectations but cannot serve as a substitute for

professional commitment to uphold the public interest. One way the profession could enhance its reputation as well as indicate a renewed and extended commitment to the public interest is to embrace and champion the social accounting project. As members of the academy, we have a responsibility to facilitate this process as active participants in the social accounting project.

Accounting professionals employed as external auditors have a clear responsibility to the public and their audit clients for providing relevant, reliable, and transparent information to external and internal stakeholders. I would propose that the same criteria can be applied to social accounting as have been proposed for traditional accounting and auditing.

While less clearly delineated, accounting professionals employed in other capacities also have a responsibility to serve the public interest.

The accounting function prepares communications used by creditors, owners, sponsors, contributors, employees, unions, managers, politicians, regulators, and society. These stakeholders have a right to expect objective, independent, honest reporting on all dimensions that impinge on the economic, social, and environmental implications of the organization's actions.

Internal auditors and managerial accountants protect the reputation of their organizations, partially by recognizing and addressing organizational risks—whether legal, financial, social, environmental, etc.—resulting from activities of the organization. As collectors and conveyors of organizational information, accountants have a unique opportunity, and responsibility, to identify and communicate activities and behaviors that jeopardize or enhance the organization's ability to carry out its responsibilities in not only the economic systems, but also with respect to the social and environmental ones.

Accountants must use their controllership roles to ensure that the organization does not violate its implicit license to operate. This license is clearly broader than a legal privilege granted by a corporate charter with the recent scandals showing that corporate misconduct can have profound financial and social implications. Processes designed to safeguard the public interest did not adequately address the integrity and accountability of the financial and administrative systems and those who designed, implemented, and utilized them, leading to questions regarding the foundational purpose of accounting as a profession. As part of this responsibility, accountants must be aware that they are part of both natural and social systems. Any accounting system not cognizant of the entities' operation environment cannot adequately incorporate the risks, opportunities, and responsibilities faced by individuals, organizations, and society.

The question arises as to how the social accounting project can begin to conceptualize the integration of these values within the social systems and organizations that provide the context within which action is taken. I propose that Giddens' (1984) structuration theory can be used as a



sensitizing device that allows for the conceptualization of how values are integrated with representational schemes and power relationships. A brief discussion of Giddens' ideas follows.

## **7 – Structuration Theory as a Sensitizing Framework**

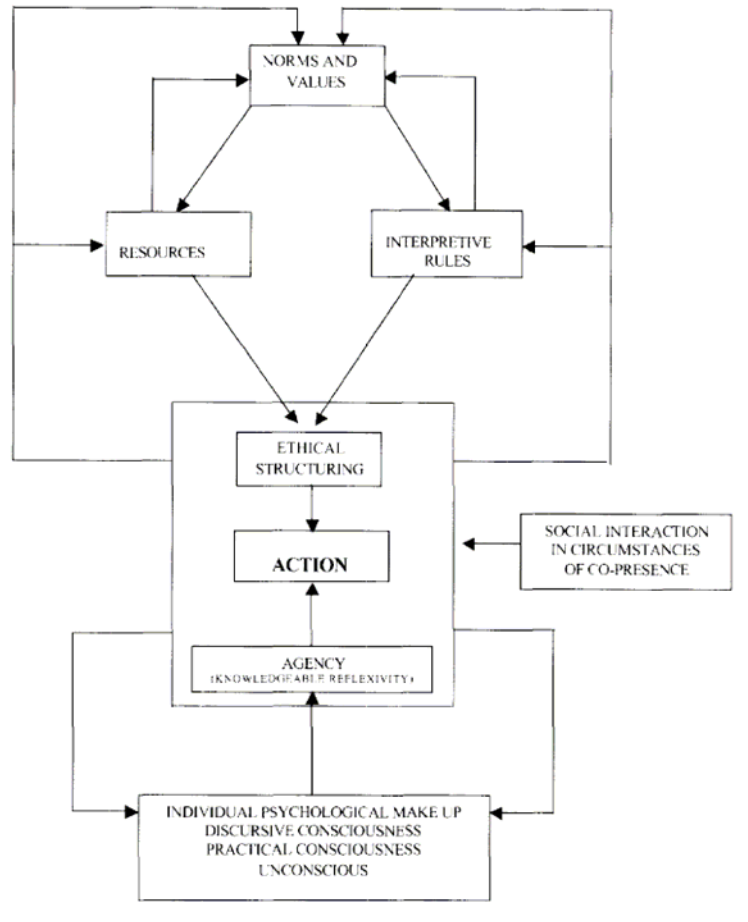
As formulated by Anthony Giddens (1976, 1979, 1984), structuration theory contains a value dimension useful in understanding how norms and values are constituted and reconstituted by reflexive human agents as they act within, and as a result create and recreate, ongoing social/organizational systems. Value based acts are not solely dependent on the actions of the agent or the specific dilemma addressed. Rather, such acts emerge from an interrelated set of structures and human agency and cannot be adequately understood or influenced without addressing the context within which the acts are formulated and carried out. The requisite and ongoing interaction between human agency and social structuring represents the central dynamic of structuration theory.

As illustrated in Figure 1, structuration theory incorporates structure and agency, postulating a dynamic interrelationship between structure and agency whereby changes in social structures and systems take place as a result of human action, which is both enabled and constrained by the structures. Giddens refers to this dynamic interrelationship as the “duality of structure.” The theory postulates three different but interrelated structural types: signification, legitimation, and domination. Signification structures have to do with symbolic representations that provide meaning and facilitate communication. Legitimation structures relate to norms and values. Domination structures relate to power as it concerns the ability to control and mobilize resources. Knowledgeable, reflexive human agents instantiate these structures in action. As a result, the structures are reinforced and/or modified. The premise is that structuration theory provides a theoretical representation of the primary dynamics of action that not only describes the primary context dimension but also the related dynamics for change.

Giddens (1984) defines structure as rules and resources recursively implicated in the reproduction of social systems. The rules and resources exist only as memory traces, representing the organic basis of human knowledgeability, and are instantiated in action.<sup>4</sup> Structuration is the structuring of social relations across time and space, in virtue of the duality of structure. The duality of structure recognizes structure as the medium and outcome of the agent's actions that the structure recursively organizes. Structural properties are the structured features of social systems, especially features stretching across time and space. Social systems refer to the patterning of social relations across time and space, understood as reproduced practices. The

structural properties of the social systems do not exist outside of action but are chronically implicated in its production and reproduction.

Figure 1. Structuration Theory



Giddens postulates two general structural types: rules and resources. Rules are associated with legitimation and signification structures and provide meaning and legitimacy upon which organizational actions are undertaken and evaluated. Norms and values and symbolic representations are associated with legitimation and signification structures respectively and provide legitimacy and meaning for initiating and evaluating action. Resources, both material and human, are associated with domination structures. The allocation of resources facilitates or impedes action and supports or retards development of signification and legitimation structures.

Giddens (1984) stipulates that these actions are the result of the knowledgeable, reflexive intentions of the agent, and postulates that the motivations for these actions emanate from the conscious and unconscious make up of the individual. At the level of discursive consciousness,

<sup>4</sup> The definitions presented in this paragraph follow from those provided by Giddens (1984, pp. 374-377).

the agent can give reasons for her actions, calling on and pointing to the legitimating norms and values. It is at this level that moral reasoning can take place. Alternative value sets can be specified and used to evaluate action alternatives. More specifically, if the economic system is unquestionably accepted and valorized, the morality of that system will dominate the resulting representations, providing the uncontested context for action. Thus, the legitimating arguments would center on the applications techniques and the associated evaluation criteria. If the morality of the socio-economic order represents the only value set considered, then the process becomes a positive reinforcing system that will ultimately collapse.

The second level of consciousness associated with structuration theory is tacit consciousness where the close-at-hand knowledge resides. This knowledge is close to the surface yet the actor is not cognizant of the implicit rules and values that guide behavior. For agents to act in a reflexive and knowledgeable manner, the possibility must exist to bring the elements of tacit knowledge into conscious awareness. This is important because if the tenets of, for example, market capitalism go unquestioned, they come to be embedded in the tacit consciousness of the agent, who then loses the ability to discern among alternative moralities.

The question then becomes how we develop social accounting systems by which these critical dimensions can be represented and understood by those who design and implement these systems as well as those who audit them. Next, we theorize about an alternative framing following from the ecology literature that might be useful in designing, implementing, and auditing for social accounting systems. I propose that this discussion illustrates a theoretical structure for framing way we might conceptualize and communicate developing the social accounting project. This alternative framing uses the life cycles of natural systems as its metaphorical base.

## **8 - An Alternative Environmental Based Framing**

I propose that a general conceptualization of the relationship between social systems and the natural system can provide a basis for enhancing the visibility and comprehensibility of organizational actions with respect to their social and environmental implications.<sup>5</sup> Drawing on the work of Hollings and Gunderson (2002), I consider the theoretical relationship between natural systems and social systems. Social systems have come to dominate and exploit natural systems. A reframing of these relationships and their integration into representational systems (i.e., social accounting systems) leading to a restoration of the current depletion of both the social and natural systems is required. Following the discussion above (see Figure 1), in order for this

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<sup>5</sup> This section follows closely the discussion in Dillard, et al. (2005) though the focus is decidedly different.

to take place, social accounting must play a central role in framing and reframing organizational action space. The following Westley, et al. (2002), I employ structuration theory in attempting to frame the content and recognize the interaction of structure and agency necessary to understand and bring about change within social organizations.

First, I discuss the legitimation and signification structures associated with two legitimate but alternative perspectives. Westley et al. (2002) note that social scientists and ecologists have different orientations toward natural systems as they relate to social systems. Within the structuration theory lexicon, these represent signification structures. The ecologists frame systems of human beings and nature as ecosystems (i.e., people + nature = ecosystems) while the social scientists frames systems of human beings and nature as social systems (i.e., people + nature = social systems). The ecologists argue that both culture and nature fall on an inclusive continuum of natural processes. The social scientists conceive of nature as a component in the political discourse of human processes and as such it warrants no special consideration. In fact, to be recognized within the social system, the factor must be changed to a representation recognized within the language of the social system.

Next, I argue that the right to allocate resources (domination structures) is legitimized by the neoclassical economic ideology. Given the dominance of the economic system within western industrial society, only as the natural system components are commodified can they be incorporated into the neoclassical economic calculus and thus recognized.<sup>6</sup> While the natural system and social systems are separate, they are inextricably interrelated and the symbiotic relationships between the elements of these two self organizing systems must be acknowledged and represented in social accounting systems.

The question arises as to the dimensions of organization and behavior along which the representations (signification structures) are constructed. For ecosystems, temporal and spatial dimensions represent the fundamental constructs that have been used by ecologists to explain the self organizing dynamics of ecosystems (Levin, 1992). Holling and Gunderson (2002) argue that when studied over time and space, the reproductive/adaptive cycle of ecosystems can be represented through the dynamic interaction of the potential (stored up energy) contained in the system, the degree to which the elements in the system are connected, and the system's resilience to change.<sup>7</sup> The capability for acting purposefully is dependent upon the ability to accommodate higher levels of system complexity. Higher levels of system complexity requires higher levels of abstract representation, which in turn enhances the social system's flexibility. Natural systems

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<sup>6</sup> Commodification facilitates representation and representation facilitates commodification, illustrating the nonlinear, reinforcing nature of the structuration theory constructs.

<sup>7</sup> Holling and Gunderson's (2002) three dimensional model of the adaptive cycle of ecosystems incorporates social systems. A more complete discussion of this model can be found in Gunderson and Holling (2002).

do not possess the capability of symbolic representation and, therefore, of abstraction, reflexivity, projection, or technology. As a result, these systems cannot act knowledgeably and with intentionality.

While the reproduction of social systems includes similar parameters, the distinguishing feature between the two systems is human beings' facility for symbolic representation and manipulation (legitimation structures).

Social systems are the product of symbolic representation and manipulation in time and space. Language represents the prototypical example of this symbolic capacity represented as signification structures and how rules, relationships, values, and resources can be directed across time and space. Following from this capacity, the result of the actions and interactions of the participating agents construct complex social systems. Within structuration theory, these social systems constitute, and are constituted by the actions of human agents and reside at the various levels of consciousness.

The structures' enabling and constraining actions are represented by the signification structures which facilitate the ability to communicate, in the broadest sense. The legitimation structures are the commonly held norms and values which direct and justify an agent's actions. The domination structures facilitate the administration of, and sanctions based on, the shared norms and values and allow for the accomplishment of goals through control over both physical and human resources. Further, unlike natural systems, social systems must be produced and reproduced through the purposeful, reflexive actions of the populating agents. As such, purposeful actions of the agents constitute, and can change, social systems.

Generally, the perspective taken in the Hollings and Gunderson work privilege the signification structures. Westley, et al. (2002) discuss four characteristics or capabilities that follow from symbolic facility of human agents: abstraction, reflexivity, projectional models, and technological manifestations. Symbolic representation allows humans to attribute meaning and assign value to activities and anticipated activities and makes possible the abstract representation of the physical and social domains. Abstraction allows the agent to assign meaning to the local context. Thus, the action space is constructed through the application of the particularly configured symbolic hierarchies.

I contend that unless these abstractions are connected to, and/or grounded in, the natural systems along relevant dimensions, the controlling representations take a dangerously narrow or distorted view of the implications. For example, economic systems are a dominant construct of social systems and are not connected to natural systems, the decision making criteria will not include the potential ecosystem implications. If this is the case, then the actions taken based on such signification structures will not consider the implications for the natural system.

As noted earlier, reflexivity refers to the ability to monitor with purposeful intent action over time and space. Symbolic representation permits the manipulation of symbols (meaning) such that outcomes are evaluated relative to values, goals, and norms that may be contained within, and represented by, the symbolic hierarchies. Future actions are preceded by, and predicated on, an agent's reflexive evaluation. These evaluations and actions, in turn, influence the reproduction of the social systems and the action space wherein actions take place over time and space.

Representation and monitoring over time (learning) result in a clustering of symbols coalescing into classifications (stocks of knowledge) such that these representations can be employed in anticipating future actions.

Forward projections coupled with the reflexive monitoring of actions using the representational clusters allows for the development of frames<sup>8</sup> incorporating both the social and natural worlds as well as their interrelationships. These frames (symbolic representations and the rules for their manipulation) represent the action space. These are the organizing principles for social integration and therefore action. For example, the formal and informal environmental strategies that comprise the space within which managers consider, and act on, environmental issues constitute the frames for addressing environmental issues within a particular organization at a particular time.

Westley, et al. (2002) argue that one material consequence of human beings' symbolic capabilities is the ability to externalize this culminating logic or perceived understanding by embodying the logic in technology. The result is a material objectification of the abstract representation, which is the outcome of goal directed behavior.

Problems arise as the technology becomes objectified without proper reflexive self-regulation capabilities. More specifically, the controlling frames embodying the signification and legitimation structures do not recognize or meaningfully connect to the natural system. Thus, the technological applications are univariant interventions. Such interventions do not contain mechanisms for systematic self-monitoring and regulation and do not balance competing objectives. With respect to the natural systems, the technological application becomes unidirectional and exploitative.

We see the consequences of single variable interventions in such examples as global warming, holes in the ozone layer, and the use of DDT as a pesticide. The representations of the social system, by focusing on the objects of the technology (e.g., consumable energy from fossil fuels, refrigerant capabilities of CFCs, and greater monoculture crop yields) failed to consider the impacts on the related natural system. By relying restricted representations of social systems, the

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<sup>8</sup> See Lakoff and Johnson (1999)

impact on the natural system are omitted, leading to potentially devastating ecological catastrophes.

## 9 – Concluding Remarks

In the previous discussion, I have presented the legitimating grounds for social responsibility, proposed and briefly described structuration theory as a useful theoretical base for framing our dialogues of social accounting, and illustrated how the theory might be used in framing and reframing the context within which social accounting is being developed and practices. The discussion provides a basis upon which to continue this critical conversation.

Social accounting includes all other accountings, both manifest and imagined. The legitimacy of the social accounting project is grounded in the responsibility of all active agents to act in the public interest and recognizes the critical interrelationship among the natural, social, and economic systems. In light of the heightening awareness of the accelerating degradation of both social and natural systems, a larger segment of society recognizes the criticality of social and environmental sustainability. Organizations are situated within, and dependent upon, both natural and social systems. If those responsible are not keenly cognizant of both, they cannot adequately address the risks, opportunities, and responsibilities faced by individuals, organizations, and society.

Agents as members of social systems have the ability to alter the natural systems in ways that can reduce or eliminate the viability of the social system through purposeful actions. The abstract representations of purposeful intentions can be reified and mobilized in the form of scientific and/or administrative technology. Technology translates into power to transform and control, enhance and destroy. The signification structures and the legitimation structures enacted by the agents within social organizations determine how power is allocated and implemented. If the extant legitimation structures are oriented toward exploitative growth and wealth accumulation, and dominated by economic logic, then the technologies will be alien and exploitative with respect to natural systems and social systems components.

If structuration theory can provide insights into the exploitative propensities of social systems to destroy, it can also facilitate the understanding and sustaining of these systems. In order to do so, the actors must recognize the possibility and the need for change and understand the means for undertaking it. There must be a revision of the norms and values held by the actors such that they are consistent with those discussed herein. The economic criteria must be supplemented, sustained, or replaced, by more inclusive and enlightened criteria that directly connect to sustaining dimensions of social and natural systems. Resources must be redirected by the new norms and values and the more inclusive representation structures. The social accounting project



must recognize its responsibility in providing complete, transparent, and understandable information for all affected members of the society.

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