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## **DynEmics: Meta-theory and Research Protocol**

Research protocol for a Meta-Theoretical Perspective of Organizational Learning and Change in Complex Business and Environmental Systems

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### **Introduction**

The DynEmics Research Program is a collaborative effort by four University research groups to study the changes taking place in environmental management in Dutch businesses. The goal of the research program is to contribute to our understanding of the dynamic aspect of corporate environmental management.

An emerging body of knowledge on business environmental management has developed in the past ten years. To a large extent this knowledge has been focused on the development of tools that enable companies to understand their environmental impacts and to implement environmental management procedures (including new techniques, methods, manuals and systems). There is also an emerging literature found in the work of the Greening of Industry Network and in journals such as Business Strategy and the Environment and increasingly in management and organizational studies journals. This has a more academic orientation. In a ten point critique of the fledgling field of research Gladwin (1993: 43) observed that 'Researchers have not explicitly incorporated dynamics into their study designs, relying overwhelmingly on static, cross sectional methodology--no programmatic, long-term, longitudinal research efforts on greening appear to exist'; 'Researchers have not been very enthusiastic about casual directionality--very little research has been conducted to determine antecedents or consequences of greening in organizations'; and 'Researchers have not worked very hard at building and validating general models, instead being content to operate at the level of historical particulars'.

Despite the six years since these statements there are still few studies, which have taken a

longitudinal perspective on organizational dynamics or sought to build generalizable models. In contrast the aim of the DynEmics is to contribute to the integration of theory and practice in environmental management in business; to deepen the theoretical foundation on which environmental management is based. The research aims to understand the way environmental issues (either generic or specific) unfold, are translated into organizational responses, and generate organizational change.

A meta-theoretical framework provides an overarching analytical frame that connects the four projects contributing to the DynEmics program, while at the same time not dominating the content and research integrity of these projects. The initial research proposal accepted by the Dutch Social Science Research Council (NWO) highlights key ontological assumption that underpins the meta-theory--the concept of organizational learning in complex systems. In a paper, presented at the 1998 Greening of Industry Conference, Roome & Dieleman (1998) explore the methodological basis for the meta-theory.

The meta-theory described in the original research proposal and the paper by Roome & Dieleman, draws on three key concepts: learning and change, in complex systems as understood through the examination of events, and the relationships between events. The three-fold aim of this paper is to deepen understanding of the methodological framework of the meta-theory; to locate the meta-theory in relation the three key concepts; and to develop a research protocol to be used by all of the participating research groups in the DynEmics program.

The paper outlines the overall organization of the DynEmics program and its four constituent projects. This includes an outline of the way the four research groups work together. It discusses a number of the "research protocol-requirements" that are needed to conduct the research program. Last, these ideas are translated into concrete fields for the acquisition of empirical data.