

# Relatonics as a Key Concept for Networked Organizations

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## INTRODUCTION

Learning in organizations, and the competence the organization thereby obtains for performing its core tasks, has come into ever sharper focus when attempts have been made to explain the degree of competitiveness of companies. Much learning takes place when people interact, converse, or co-act. In their research, the current authors have found themselves in need of a new concept, *relatonic*, that can be applied to the study of interaction and relations at organizational level. To focus interactions and relations is important for all organizations, and extra important for networked and virtual organizations, where persons not as often meet naturally just by working close to each other. The authors have defined and used the concept on the basis of their respective theoretical platforms. These concern recent thinking within the theories of workplace learning (WPL) and organization pedagogics (Döös, 2004, 2007) and theories of complex adaptive systems (CAS) (Backström, 2004).

The possibility of a joint definition of the concept of *relatonics* has been explored (Backström & Döös, 2005), thereby initiating integration of parts of the theories of WPL and CAS. Next, in the *Background*, follows the joint definition of *relatonics* and the concept *relatonic* is expounded from a CAS perspective. Thereafter, follows a description of practical implications of *relatonics*. The aim is to describe the importance of *relatonics* for networked and virtual organizations. The main underlying problem concerns which opportunities for everyday learning and competence development are offered in working life, both at an individual and organizational level, but also the problem of stabilizing and integrating organizations composed of relatively autonomous parts.

## BACKGROUND: DEFINING AND EXPOUNDING RELATONICS

It is through interactions that the ongoing construction and reconstruction of a *relatonic* takes place, by means of either confirmation or change. The experiences of interactions that develop in an organization in the course of the performance of core tasks are of key importance to the *relatonic* in that they possess facilitating opportunities for future interaction of weight for operational tasks. Also, the opposite can apply; experiences of interaction within an organization may hinder future interactions.

*Relatonics* have process attributes as well as structural qualities. They are created and recreated in interaction, in interplay and action, and through conversation and co-acting. All this can be regarded as a process, since a *relatonic* is continuously created and recreated. At the same time, a *relatonic* can be regarded as a structure, since it is fairly stable, and exists as a multi-reciprocal experience pointing to future possibilities, even when it is not actively utilized. It may be said that the *relatonic* proceeds in more or less close interactive work processes, via which it both comes into being and is changed. The *relatonic* exists as a memory and a common experience, even when interaction temporarily comes to an end, and also as a potential for resumption of the interaction. In this way, the *relatonic* is durable, as a shared experience that intrinsically bears the possibility of future interaction. It is charged with competence of significance for the core task, and thereby carries a capacity for action.

## Definition

Relatronics is here defined as *the composite existence of relations in a workplace that are of importance in and for the performance of the core operational task* (Backström & Döös 2005, p. 3). A relatonic and its component relations bear the competence of the organization. The relatonic of a specific workplace can be said to take on a particular form, as constituted by the pattern shaped by workplace relations as a whole. In the case of networked organizations, for example, in new product development work within the telecom sector, this form/pattern does not stop at the traditional organizational boarder. It continues out to the end of the furthest work task interaction (Döös & Wilhelmson, 2005).

## Complex Adaptive System Perspective

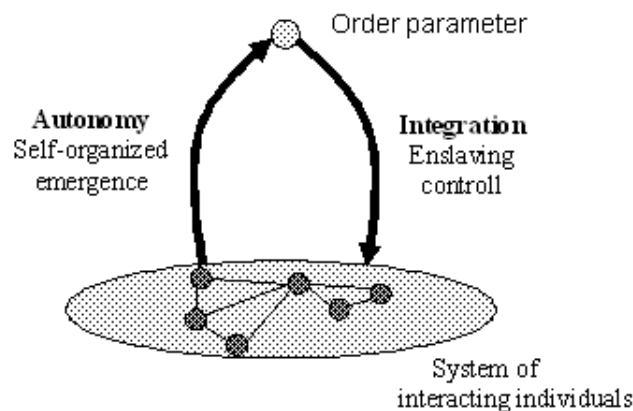
Theories of complex adaptive systems (CAS) understand the world as built of hierarchies of systems within systems, where each system is a stable agent that at the same time is an independent wholeness in relation to its subordinate agents in a wholeness and a dependent part, both in relation to its superior level of the hierarchy.

Complex systems may self-order because of energy or information transfer so that new dynamic states of matter originate. There are a limited number of order parameters (Haken, 1983) that stabilize and integrate the system into a state of matter. An order parameter is

changing slowly relative the behavior it is connected to, except in moments of phase transition. Relatonic is an example of an order parameter of social systems. An order parameter is formed by self-organized emergence occurring when autonomous individuals interact. And, at the same time, the order parameter is enslaving the individuals and by that integrating them to a system (Haken, 1983). It is a circular causality, where the order parameter is both formed by behavior of individuals and forming behavior of individuals (see Figure 1). The order parameter is in the center of a life-giving dynamic between autonomy and integration. The order parameter is a regime at aggregated level which is not random, but characterized by regularities and integration. It is emerging from multiple autonomous choices of individual agents which are correlated with each other.

Prigogine and Stengers (1994) write about the importance of the autonomous choices of the individual: "A system far from equilibrium may be described as organized not because it realizes a plan alien to elementary activities, but, on the contrary, because the amplification of a microscopic fluctuation occurring at the "right moment" resulted in favoring one reaction path over a number of other equal possible paths. Under certain circumstances, therefore, the role played by individual behavior can be decisive. More generally, the "overall" behavior cannot in general be taken as dominating in any way the elementary processes constituting it. Self-organization processes in far-from-equilibrium conditions correspond to a delicate interplay between chance and necessity, between fluctuations and deterministic laws." (p. 176).

Figure 1. The order parameter stabilizes and integrates the system of interacting individuals



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