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Dynamic Organizations and Organizational Dynamics

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ORGANIZATIONS AS DYNAMIC SYSTEMS

The world's first building that will rotate, move, and change shape, will be built in Dubai in 2010. The 420-metre building's apartments will spin a full 360 degrees, at voice command, around a central column by means of 79 giant power-generating wind turbines located between each floor. The Dynamic Tower will be the first 100% self-powered green building with the ability to generate electricity for itself through the use of horizontal wind turbines and solar panels. Being the first skyscraper to be built entirely from pre-fabricated parts custom-made in a factory, the assembly process of the Dynamic Tower will vastly reduce construction time, offer substantial cost savings, provide an environmental construction site and increase safety for workers on site.

The Florentine architect of the building, Dr. David Fisher, states:

> Modern life is dynamic, so the space we are living in should be dynamic as well, adjustable to our needs that change continuously, to our concept of design and to our moods. Dynamic buildings will follow the rhythms of nature, changing their direction and shape, minute by minute, from sunrise to sunset, season to season, adjusting themselves to the environment. From now on, buildings will be *alive*, creating a fourth dimension of Time, to become part of New Architecture, and transforming the shape of the skylines of the world. (Fisher, 2008)

In a world where dynamic buildings belong to the present, the term 'organizational dynamics' should be a pleonasm. The dynamic component of organizations is captured in their very definition as open systems: entities that take resources from the environment, process them, and give back to the environment an output. Still, it is in the very same definition that the trap lies hidden. Such a portrayal of organizations includes the reductionist perspective that these processes take place in a linear manner (with some feedback loops included), in a clear structure that postulates the very function of each component. Taking this reasoning a step further, this clear structure and linear processes allow for clear laws by which this system can function, laws that are analogical to the ones of mechanics. These clear laws imply that, if we specify all the particular conditions for a subsystem (which should be an easy task in a very clear structure), we should be able to make clear predictions for the behaviour of that particular subsystem. Had that been the case, organizational theory would have never moved beyond Taylor and scientific management.

Organizations cannot be pictured in such a simple, linear manner. They are characterized by the simultaneous presence of contradictory, even mutually exclusive elements (e.g., centralization and decentralization, innovation and routine), by inconsistencies and tensions. In other words, organizations are fertile grounds for paradox to be enacted. It was only after a long period of domination by such notions as rationality and systematization, that organization studies became a rich seam for the exploration of paradox (Pina e Cunha, 2007).

In order to tackle these dynamics, organizational scholars and practitioners had to move from orthodox theories and a conservative view of the world, such as the one posited by Frederick Winslow Taylor in scientific management (Bailey, 1994).

Systems thinking accepted the challenge and shifted the emphasis from parts (e.g., the functioning of a department) to the organization of parts; from the 'static and constant' depiction of interactions of the parts to 'dynamic' processes. From a paradigmatic perspective, the shift was from absolute and universal authoritative principles (such as the ones proposed in scientific management) and knowledge to relative and general conceptual and perceptual knowledge (Bailey, 1994).

As a particular application of systems theory, in organizational dynamics, we take a system dynamics approach in looking at organizations. Part and parcel of systems theory, system dynamics is a method for understanding the dynamic behaviour of complex systems. The basic assumption is again that the structure of any system – the many circular, interlocking, sometimes time-delayed relationships among its components – is just as important in determining its behaviour as the individual components themselves (Bailey, 1994; von Bertalanffy, 1950). Furthermore, since the properties of the whole cannot be reduced to the properties of its elements, sometimes the behaviour of the whole cannot be explained in terms of the behaviour of the parts. System dynamics portrays organizations as non-additive, non-linear systems, whose behaviour cannot be explained in simple equations and sometimes not even in systems of equations. In fact, this behaviour can sometimes seem quite chaotic and non-predictable (for instance, the various types of organizational paradoxes described above).

The particular trait of system dynamics lies in the fact that it focuses on this random-looking behaviour as being the rule (or at least a core characteristic) of non-linear dynamic systems. This seemingly unpredictable behaviour has been called 'chaos'. Chaos theory (Poincaré, 1890) is a branch of mathematics that deals with the long-term qualitative behaviour of dynamical systems. Here, the focus is not on finding precise solutions to the equations defining the dynamical system (which is often hopeless), but rather to answer questions like "Will the system settle down to a steady state in the long term, and if so, what are the possible attractors?" or "Does the long-term behaviour of the system depend on its initial condition?".

Such insights coming from systems thinking, dynamic systems of chaos theory, shifted scholars' perception and understanding of organizations and their dynamics. Organizations ceased to be closed and predictable systems. They had to be depicted as open systems, interacting with their environment and adapting to it. They had to be depicted as complex and dynamic systems, in which paradox and chaotic behaviour (in mathematical terms) were a possibility. Therefore, borrowing from biology, physics, applied mathematics and the philosophy of science, a new perspective in organizational sciences was born.

DEVELOPMENTS OF SYSTEM DYNAMICS IN ORGANIZATIONAL THEORY

The systems framework is fundamental to organizational theory, as organizations are complex dynamic goal-oriented processes. Kurt Lewin was by and large the first scholar to focus on developing the systems perspective within organizational theory. Lewin's experience taught him that changing human systems often involved variables that could not be controlled by traditional research methods developed in the physical sciences. These insights led to the development of action research and the powerful notion that human systems could only be understood and changed if one involved the members of the system in the inquiry process itself. One of the first action research projects Lewin conducted

was the IOWA project: an intervention project required by the US government during the war to change the meat-eating habits of the population by educating the housewives on the benefits of non-traditional types of meat (Coghlan & Brannick, 2003). It was through the IOWA research that Lewin developed his theory of quasi-stationary equilibrium, gatekeepers and change. The results of these experiments led to Lewin's conceptualisation that people change when they experience the need for change (unfreezing), move to a new standard of behaviour and values (moving) and stabilise the change in normative behaviour (refreezing) (Lewin, 1951). These studies also lead to the development of force field analysis. This framework classifies the forces that influence a situation in helping forces (forces that drive movement toward a goal) and hindering forces (forces that block movement toward a goal). Lewin posited that in order to change a system, it is not enough to increase the helping forces: it is even more important to act in the direction of reducing the hindering forces (Coghlan & Brannick, 2003). Some of Lewin's contribution to organizational theory, such as action research, the theory of change and force field analysis, make him one of the founders of Organizational Dynamics (Coghlan & Brannick, 2003).

One of Lewin's biggest admirers, ever since he was a student, and afterwards lifetime friend, was the British scientist Eric Trist. Trist first met Lewin in 1933, when Lewin visited Cambridge in his flight from Hitler to America. They continued to communicate and had occasional collaborations throughout Lewin's life: the Tavistock journal, *Human Relations*, founded by Trist and Wilson, opened with two early papers by Lewin entitled 'Frontiers in Group Dynamics'. Trist built on Lewin's ideas in creating the revolutionary socio-technical systems approach. So close was this initial theoretical link, that the Tavistock Institute defines action research as their trademark, some authors (Mumford, 2006) even positing that it was the Tavistocks who first coined the term.

While it was Trist who set the basis for socio-technical systems design, and sketched the first lines of this perspective, Emery, his lifetime collaborator, was the one who introduced the open systems perspective in this equation, hence completing the approach (Weisbord, 2004)

Socio-technical system is a term destined to underscore that the interaction of people (a social system) with tools and techniques (the technical system) should be the cornerstone in designing a work system. Socio-technical system design was a revolutionary perspective in work design. First, it started from an open systems perspective, by positing that every socio-technical system is embedded in an environment that affects the way it behaves, and that in order to understand a system, one needs to understand its interaction with the environment. Second, it considered technical structures and work roles two systems that are both part of one inclusive system, hence they must be apprehended together either in design or in research. In an era where machines were the rulers of organizations, and people mere executants with no empowerment whatsoever, socio-technical systems design aimed at humanizing work through the redesign of jobs and creating conditions for democracy at work. Furthermore, socio-technical systems design was always implemented by means of action research. Hence, the results of socio-technical design were "always closely monitored and recorded to establish if it had led to both the efficient use of the technology and an improvement in the quality of working life of affected employees. This, in turn, led to the careful formulation and testing of theoretical concepts that could provide a better understanding of the meaning of the term quality of working life" (Mumford, 2006: 318).

Nowadays, the assumptions of open systems and socio-technical systems design underlie many of the advancements in organizational theory and research. Concepts such as organizational adaptation (a process) and dynamic capabilities of organizations (an organizational characteristic) are the embodiment of the open systems perspective in organization studies. We will briefly look at the development of these two concepts to illustrate the current state of the field.

'Organizational adaptation' describes the changes in an organization (both environmentally and organizationally driven), that align it with environmental demands. Hence, the characteristics of organizations and their environments interact to create unique identities and ways in which organizations adapt over time. However, adaptation is neither a linear, nor an obvious process. Organizations go through periods of evolutionary or incremental change, interspersed with short, sharp, radical transitions. On the one hand, incremental change may have revolutionary consequences, on the other, rapid change creates momentum to overcome inertia that builds up over time. Greiner's (1972) evolution-revolution model of organizational growth showed how stages of stability are followed by revolutionary change that eventually crystallizes into a new equilibrium that contains the seeds of its own destruction. This perspective parallels the notions of steady states and transition states from the open systems perspective.

Another reflection of the dynamic perspective in organizations is the study of dynamic capabilities. The dynamic capabilities of organizations refer to the capacity of an organization to adapt its competencies to the requirements of its competitive environment. These capabilities are considered a fundamental factor in the development of sustainable competitive advantage, particularly in highly dynamic markets (Zollo & Lomi, 2007).

The term 'dynamic capabilities' has been coined rather recently, by Teece, Pisano, and Shuen (1997), who defined it as the firm's ability to integrate, build and reconfigure internal and external competencies to address rapidly changing environments. There is some debate whether these capabilities are more strategic (Zollo & Lomi, 2007) or rather unstructured, experiential, and improvisational in their nature (Eisenhardt & Martin, 2000). The theory on dynamic capabilities is at an early stage: basically there is no broad agreement yet in the definition of the term. There is agreement however on the role dynamic capabilities play in explaining organizational adaptation and, potentially, sustained success, and on the fact that their impact on organizational effectiveness is expected to grow with increasing levels of environmental dynamism (Zollo & Lomi, 2007).

These illustrations of how organization studies started to accommodate the dynamic systems perspective reflect the level of theoretical development in the field. Mathematics and physics have acknowledged for many decades the necessity of a different paradigm to study dynamic systems, and have already developed articulated theories that slowly build together towards a new understanding. Social sciences in general and organizational studies in particular are still taking small steps in this respect. While there already are some theoretical underpinnings (as the ones presented above), there is not yet a strong articulation and integration that can soon lead to quantum leaps in the study of organizational dynamics.

CAPTURING THE DYNAMICS: FROM TAKING SNAPSHOTS TO MAKING FILMS

Paraphrasing Weisbord (2004), studying organizational dynamics implies the shift from taking snapshots to making films. Research methodology in this field still bears the mark of a static view on organizations. The shift researchers need to make in order to turn these snapshots into films is both a paradigmatic and a competencies-related one. Paradigmatically, this shift implies moving from the positivistic perspective of the researcher as a neutral, external observer, to an actor that co-creates the research and the reality. The subject becomes the client, and scientific research becomes action research. Regarding the competencies they need, the shift is both knowledge- and judgment-based. Content-wise, organizational consultants and researchers need to be acquainted with the concepts and propositions of theories that

depict organizations in their dynamics (the knowledge-based shift). Examples of such theories are the open systems theory, socio-technical system design, the process consultancy perspective, and psychodynamic approaches in organizations. At the same time, they need to have the frame of mind to help them explore these dynamics (the judgment-based shift): the research and consultancy tools that are fit for the exploration of organizational dynamics share several aspects, such as flexibility, ability to work in the 'here-and-now' with the client, and reflective practice.

The 'here-and-now' refers to the space in which a social system is active at any given time, in its context and its time dimension (Vansina, 2008). Working in the 'here-and-now' implies both knowledge of the system, its context, history and expectations, awareness of the boundaries of interaction, and full presence in the current interaction and the reality that client and consultant/researcher build at that moment (Vansina, 2008). This way of working is impossible without reflective practice. Reflective practice involves making sense of events, situations, or actions and emphasizes the importance of a thoughtful approach to understanding experience, whether in real time or retrospectively (Reynolds & Vince, 2007). Engaging reflectively and thoughtfully with experience is more likely to involve relevance than learning that is based predominantly on abstract content. The continuous development of the researcher and consultant, the possibility of learning from the systems he/she operates with are based on the very notion of reflection on experience.

All these assumptions (paradigmatical, as well as knowledge-and judgment-related) are reflected in the ten principles of process consultancy proposed by Schein (1999). We will briefly present these principles, as an illustration of the shift required to exploring organizational dynamics. These principles state the following advice for consultants:

1. Always try to be careful: the intention of being helpful and hardworking at it is the precondition of a successful consulting relationship.
2. Always stay in touch with the current reality: be able to decipher what is going on in yourself, in the situation, and in the client.
3. Access your ignorance: the only way you can discover your own inner reality is to learn to distinguish what you know from what you assume you know, from what you truly do not know.
4. Everything you do is an intervention: own everything you do and assess the consequences, to be sure that they fit the goal of creating a helping relationship.
5. It is the client who owns the problem and the solution: it is not the consultant's job to take the client's problems onto his own shoulders or to offer advice and solutions in a situation that he/she does not live in.
6. Go with the flow: do not impose your own sense of flow on an unknown situation; flow should be a shared process between client and consultant.
7. Timing is crucial: place your remarks when you have the client's full attention, wait for the good moment without rushing into it.
8. Be constructively opportunistic with confronting interventions.
9. Everything is a source of data; errors are inevitable – learn from them.
10. When in doubt share the problem with the client: involve him in your efforts to be helpful. Do not act as if you are expected to know everything (Schein, 1999).

These principles are not to say that research frames of diagnosis models are not needed. They only stress the importance of the researcher/consultant to work in the 'here-and-now', to pay

attention to the dynamics between him and the client, to have awareness to what is going on in the system, and no to expect him or herself to be the ultimate holder of knowledge and understanding. These changes need to be added to a rigorous theoretical and methodological background for whoever embarks in the exploration of organizational dynamics.

OUTLINE OF THE BOOK

This book is intended as a helping hand for the reader who wants to make the theoretical and methodological shift needed to explore dynamics in organizations. Both its content and its format are destined to accomplish this aim. First, its content is focused on theoretical and methodological approaches that make possible the dynamic evaluation of organization and the evaluation of organizational dynamics. Second, the format of the book offers the possibility to work with central concepts of organizational dynamics in their complex inter-relations.

Content-wise, the book starts by introducing several theoretical notions and frameworks, and methodological approaches that portray organizations in a dynamic manner and permit the active investigation of organizational processes (Sections 1 and 2). It also overviews classical and alternative sources of data for these explorations (Section 3). Further, it unfolds by tackling various types of dynamics at group (Section 4) and organizational level (Sections 5 to 9), finishing with a brief overview of the organization in the broader context (Section 10). The issues brought up to discussion are related to group dynamics, authority and power, conflict and collaboration, organizational design and flexibility, change and resistance to chance, organizational identity and image.

Format-wise, each Section is organized in two parts: basic concepts and organizational dynamics unfolded. The aim of the first part is to help the reader build on general, basic knowledge, on core concepts in the field. Hence, each section starts with several excerpts from the *International Encyclopedia of Organization Studies*. This way, the basic notions the reader has to operate with are covered in the beginning, in a more didactical and easy-to-follow manner. Second, the main body of the chapter focuses on several particular issues related to the chapter's topic, issues which current research and practitioners deem to be relevant and up-to-date. The main body of the chapter generally consists of papers from journals addressed both to scholars and practitioners, mainly from 2000 onwards. Many of these papers come from the journal *Human relations*, whose beginnings are linked to names such as Kurt Lewin and Eric Trist; hence they reflect the system dynamics perspective in approaching organizational life. Some influential chapters from consultancy literature (Cawsey & Deszca, 2007) and action research (Eden & Huxham, 2006; Schein, 2001) have been included to give a balance between a scholarly and a practice-oriented perspective.

These choices or content and format make this book different from the typical handbook in which each concept is treated separately, in that these texts provide the reader with a more accurate perspective on organizational dynamics. They do in fact reflect the complex interactions and intertwining nets of organizational life. Furthermore, these papers represent different theoretical and methodological approaches to studying organizational dynamics. By not opting for a mono-theoretical approach, we give the reader the possibility to compare and experiment with different methods of viewing and dealing with research in organizations.

For the reader who just opened this book, we have one final word of advice, before taking up the journey: *Never regard your study as a duty, but as the enviable opportunity to learn to know the liberating influence of beauty in the realm of spirit for your own personal joy and to the profit of the community to which your later work belongs. (Albert Einstein)*

REFERENCES

Bailey, K. D. (1994). *Sociology and the New Systems Theory: Toward a Theoretical Synthesis*. New York: State of New York Press.

Coghlan, D., & Brannick, T. (2004). Kurt Lewin: The "Practical Theorist" for the 21st Century. *Irish Journal of Management*. Retrieved on 15 May 2009 from: http://www.redorbit.com/news/display/?id=64723

Fisher, D. (2008). *Dynamic architecture*. Retrieved March 30, 2009, from http://www.dynamicarchitecture.net/home.html

Greiner, L. E. (1972). Evolution and revolution as organizations grow. *Harvard Business Review*, *50*, 4, 37–46.

Lewin, K. (1951). Theory in Social Science: Selected Theoretical Papers, D. Cartwright (Ed.), (reprinted Washington, DC: *American Psychological Association*, 1997).

Mumford, E. (2006). The story of socio-technical design: reflections on its successes, failures and potential. *Information Systems Journal*, *16*, 317–342.

Pinae Cunha, M. (2007). Paradox. *International Encyclopedia of Organization Studies*. SAGE Publications. Retrieved 25 Mar. 2009 from http://www.sage-ereference.com/organization/Article_n417.html

Jules Henri Poincaré (1890). Sur le problème des trois corps et les équations de la dynamique. Divergence des séries de M. Lindstedt, *Acta Mathematica*, *13*, 1–270.

Reynolds, M., & Vince, R. (2007). Reflective Practice. *International Encyclopedia of Organization Studies*. SAGE Publications. Retrieved 25 March 2009. from http://www.sage-ereference.com/organization/Article_n466.html.

Schein, E. H. (1999) *Process Consultation Revisited: Building the Helping Relationship*. Reading, MA: Addison-Wesley.

Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, *18*, 8, 509–533.

Vansina, L. (2008) Being in and working with experiences in the 'here and now'. In. Vansina L. & Vansina-Cobbaert M. J. *Psychodynamics For Consultants And Managers: From Understanding To Leading Meaningful Change*, West Sussex:John Wiley And Sons.

Von Bertalanffy, L. (1950). An Outline of General System Theory, *1*, 139–164.

Weisbord, M. (2004). *Productive workplaces revisited. Dignity, meaning, and community in the 21st century*. Jossey-Bass/Wiley.

Zollo, M., & Lomi, A. (2007). Dynamic Capabilities. *International Encyclopedia of Organization Studies*. SAGE Publications. Retrieved 25 March 2009. http://www.sageereference.com/organization/Article_n141.html