UNDERSTANDING ORGANIZATIONAL STUDIES TOWARD KNOWLEDGE CYBERNETICS

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Abstract
This paper purposes to emphasize on a phenomena cybernetic meta-framework. It is used to coherently connect so far loosely related micro-niche areas of organization theory in a general platform. Because of the rising of global capitalism produced a self-referential political class. It has been more concerned with establishing links with wealthy business interests. Moreover, nowadays, an organizational change is the act of moving the company from where it is now to where it wants to be due to external and internal environment influences. Hence, organization theory is in crisis, due to its incapacity to create coherent platforms for the cacophony of narratives being delivered by often incommensurable, niche and micro-niche schema. This has the potential to embrace a variety of independent micro niche schema. There is an illustration which is provided by through two major variations: corporate personality and bridging the gap between cross cultural and organizational studies.

Keywords: Organizational theory, cybernetics, cross cultural studies, organizational change,

1. INTRODUCTION

Clegg et al., (2006) mentioned that in organizational studies there have been calls for a return to an intellectual orthodoxy, on the other hand, failure in the operative intelligence of existing paradigms and the rise of meta-paradigms suggests the need for new thinking. Following the notions of Hatch and Cunliffe (2006), organization theory as a discipline can be identified through three theoretical and practical components. These are organizational structure and environment, management, purposive behavior and organizational change and dynamics, which are unique and complexities. There are few attempts, however, to connect each of these aspects together to enable organization theory to develop in a holistic rather than a piecemeal way.

While behavior may change over time, new forms of behavior can also arise, and these are dependent on context. Specific forms of behavior can be learned and value priorities may be adjusted, when the rationale of the type of behavior in a given context is taught and explained in a process of socialization (Huy, 2001). The rationale also may be provided by professional associations but needs to be effectively communicated to the corporate personality (Greenwood et al. 2002). Conformity to institutional norms increases the symbolic performance of organizations and 'conformity to institutional ordinances simultaneously improves the substantive performance of organizations. When they adopt structures and strategies that are widely seen as rational and appropriate, organizations get access to more attractive resources

under more favorable conditions, etc.' (Heugens and Lander, 2009). We perceive socialization as 'a nuanced ... recursive process in which texts and discourse create and sustain institutional positions' as (Boje et al., 2004) write in their assessment of Phillips et al. (2004) who found 'features of actions that lead to the production of texts, features of texts that lead them to become embedded in discourse, and features of discourse that lead to the production of institutions' (Phillips et al., 2004: 646).

There are some models try to move beyond the theoretical niche (like organization theory, conflict theory, human resource theory and personality theory) and the micro-niche areas that populate organizational and other theories, and try to capture at least something of the total picture of the different dimensions of organizations, especially following the ideas of Hatch and Cunliffe (2006), adapted in Figure 1 from a representation by Haimes (2006). This deals with the structural capacity of traditional approaches to reconcile the different facets of the organization. While Haimes was interested in performance, for us this might be better considered to be a technical consequence of behavior (as a pattern of actions). This type of structural approach, while useful in some types of relational contexts, does not unfortunately entail theory that is capable of exploring organizational dynamics. It also rarely provides any connection with the needs of viability within complexity. Cybernetic approaches can provide geometric insights to such dynamics, and in due course we shall return to this task.
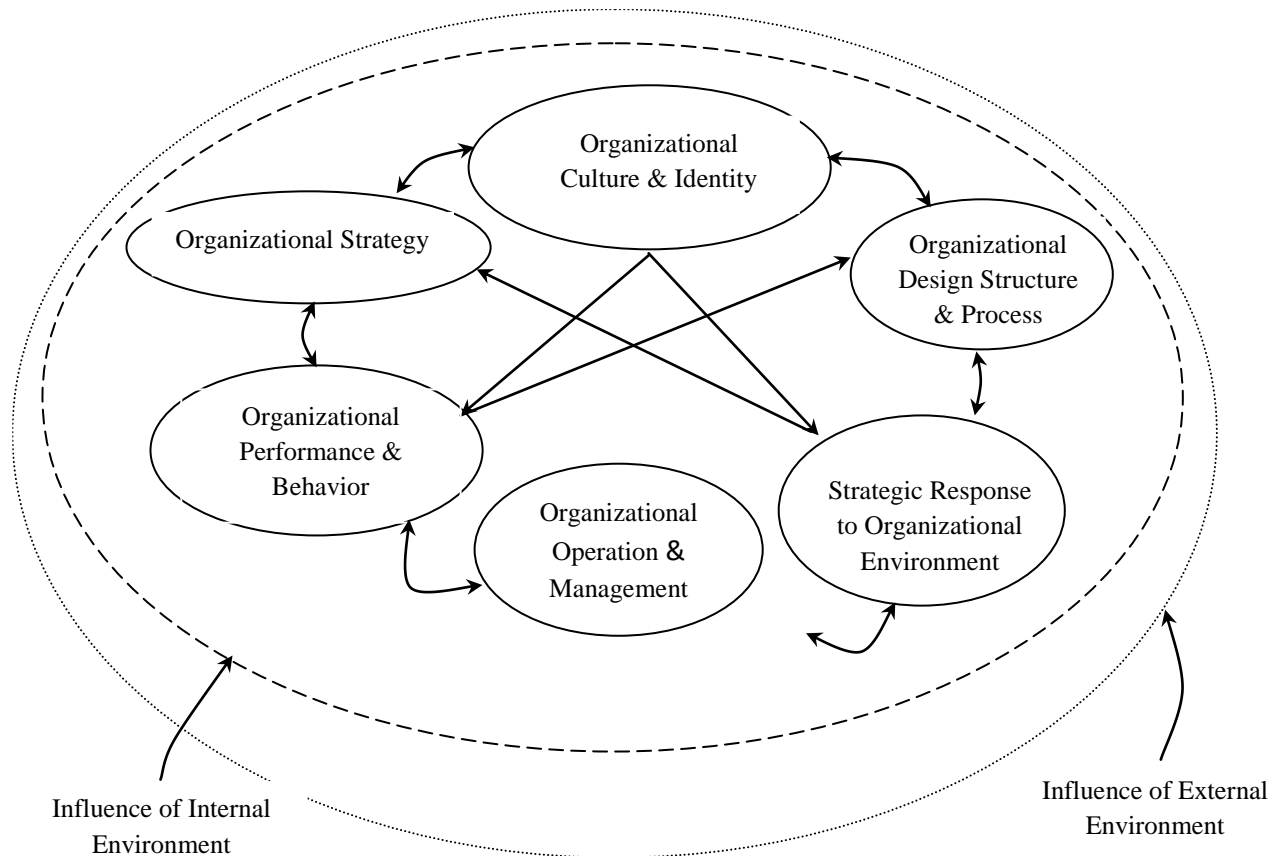
Figure 1: Model of Organizational Culture, Identity and Behavior/Performance (Source: adapted from Haimes (2006) and relating to Hatch and Cunliffe (2006))

In this paper, cybernetic theory should be used to develop a theoretical platform that is able to capture aspects of the Hatch and Cunliffe conceptualization in more than a piecemeal way, thereby illustrating how it is possible to create new dynamic models from a synergy of ideas that arise from other streams of thought. This involves a conceptual migration process that allows theoretical in commensurabilities (Yolles, 1999). It should be identified and where possible eliminated. As a result, even if the theoretical platform is catalysed from a selection of micro-niche models, they will have been migrated onto the platform that enables the elimination of inappropriate splicing. We shall illustrate applications of the approach by looking firstly at a strategic organizational model, and then one that enables corporate personality and cross cultural dynamics to be coupled. In addition, we shall model and examine the consequences of organizational pathologies, as might be associated with the infamous case of Enron.

1. UNDERSTANDING A CYBERNETIC FRAME FOR ORGANIZATION THEORY

The rise of the complexity view has more recently made the work of cyberneticians attractive. Yolles (2006) developed a theory which intends to explain how Viable Systems adapt and change in complex situations for human interactive situations through an approach. It is called Knowledge Cybernetics (KC). It likely provides one of the few approaches that enable a detailed explanation of complex modes of being. KC adopts a core model, called Social Viable Systems (SVS) that is an adaptation and elaboration of Schwarz's work (1997) in general of Viable Systems, and KC has been developed for social knowledge based contexts by Yolles in the year 2006. It is integrating theory from Habermas (1970) and Paiget (1950).

The notion of KC is like other general theories, such as Complexity Theory by Hemaspaandra & Ogihara (2002) and Managerial Cybernetics by Beer (1981) which can be identified as a *meta-framework* (Oakley, 2004). It should be capable of reflecting "a theory of meaning" through its meta-theory that can respond to both theory-doctrine and problem based issues. This meta-theory provides the capacity to connect knowledge related models that might normally not be associated with one another. On the other hand, there are interests in cybernetics which are unlike most other fields from a *meta-framework* can arise, it should be interdisciplinary and concerned with the control, management and contact features of coherently controlled (systemic) structures and their regulation that are essential to all social contexts. It is in particular concerned with "circular causality", illustrated by the action of a system in an environment that causes change.

It should be said that KC is *a meta-framework* that can respond to the limitations of organization theory. Its SVS model is cybernetic and entertains properties like self-regulation, self-reflection, self-organization and their connections to adaptation. The model operates through three domains. These are *Phenomenal*, *Noumenal* and *Existential*. These are worlds that define three *lateral* cognitive interests of the human being within its social environment. The model has been extended *transitively*, developing two other cognitive dimensions: purposes and influences. The transitive streams now define properties of the organization relating to the *kinematics*, *direction* and *potential* of a corporate body.

Organizations, through their paradigms, have cognitive, figurative and pragmatic bases that together and interactively contribute to the directional nature of the organization. It is virtually self-explanatory, with an existential domain in which resides a cognitive base composed of both cultural and epistemic components, a noumenal domain that has a figurative base of elaborating knowledge manifested as ideological and ethical components, and a phenomenal domain that has within it both the operative aspect of the organization including its pragmatic base what involves practical know-how. This "operative system" is connected as a lateral "structural coupling" (Maturana and Varela, 1987, Sawagvudcharee and Yolles, 2020) with an environment in which it maintains performance. The transitive coupling between the distinct domains is cybernetic in nature, with feed-forward and feedback *loops* are most simply described in terms of Piaget's terms of operative and figurative intelligence: these are networks of processes (or meta-processes) that "migrate" epistemic content between domains, and which we shall reconsider again in due course.

There is the *directional* model which has the capacity to explore situations in which control processes break down and create organizational pathologies. The development of such *illnesses* can then be analyzed in more depth using an appropriate methodology, like that of Beer (1979), or a recursive exploration using KC. For instance a pathology between organizational structure and one of the multiple environments in which it operates can occur so that either the organization is not sensitive to environmental influences that can impact significantly on its ability to maintain its viability, or it has an inability to behave legitimately even where it recognizes the nature of what constitutes legitimate behavior. Where operative intelligence pathologies exist, cognitive purposes cannot be manifested practically either because of a problem with the organization's capacity to externalize its processes.

2. THE STRATEGIC ORGANIZATION

The Hatch and Cunliffe (2006) conceptualization involved management and purposive behavior. It is often seen in terms of strategy and planning. The strategic organization is a common interest in the organizational literature, but strategic theory suffers from a rather limited development (Yolles, 2009). More dynamic and integrative approaches are possible, as illustrated in Figure 1. Here, action is expressed in terms of structural coupling (Maturana & Varela, 1987: 75) and refers to a shared past and future history for the organization in its interaction with the environment.
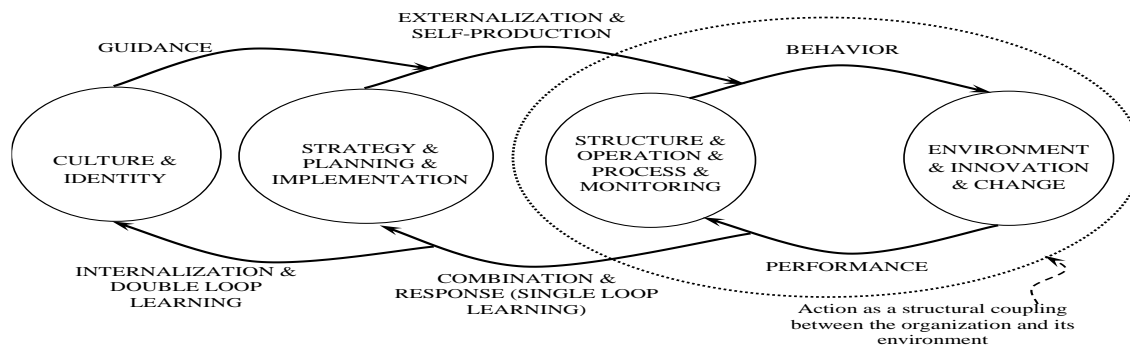

Figure 2 Re-expression of the Strategic Organization

Figure 2 shows the "loop" terms that also relate to figurative/operative intelligence which are defined as follows:

(1) Guidance and self-creation: It is about how culture (the system of values, beliefs and knowledge) guides the processes which lead to (the self-creative) strategy formulation, thus facilitating the conversion of strategy into action.

(2) Externalization and self-production: How externalized strategy influences (through processes of self-production) the choice of behavior from a given or possible set of patterns of behavior, which are embedded into the structure of the organization, and make the organization visible.

(3) Behavior: How actual behavior is chosen from a given set of available patterns and how action is taken in an environmental context.

(4) Performance: The directed contextual behavior of an agent with respect to its efficiency and effectiveness as permitted by the environment and evaluated under expectation and in relation to the intentions of the individuals and the group or organization.

(5) Combination and self-production learning: How reflection on behavior and performance is transposed into a response in the light of the strategy pursued. Adapted patterns of behavior are combined with available knowledge (i.e. strategy and/or structure are adapted).

(6) Internalization and self-creation learning: How the importance of values is amended after evaluative processes and new tacit knowledge (identification knowledge) is generated that guides new strategies.

From Figure 2, it can be also identified channels of thought that are derived from a certain set of assumptions. We can start from the environment and assume that organizations are embedded into an environment that exerts strong influences on the organization. In that case, the organization has to satisfy various stakeholders. Influences of the environment on the organization are exercised through performance assessment, combination, and internalization. By contrast, we may assume that the environment can largely be neglected and the sole interest of the capital owners can prevail. In that case, guidance, externalization and action are at the core of a theory of the organization; response and combination are solely directed towards shareholder value and related manager income maximization. Internalization of possible consequences from action (e.g. consideration of environmental or social concerns) and double loop learning (Argyris & Schön, 1978) does not take place in this context: environmental and social concerns are rather labeled as claims of 'paradox' on organizations.

4. ORGANIZATIONAL PERSONALITY WITH FIGURATIVE AND OPERATIVE INTELLIGENCE

Through the principles of Knowledge Cybernetic (KC), it is possible to create recursive contexts that enable us to develop conceptual fractals, enabling us to explore the cognitive base of the paradigm in more depth. Their definition requires a plurality of cultural beliefs, attitudes and values, which are in interaction and create a plural figurative base that has some level of cultural conflict within it. However, in the case where there is no such conflict, then operative cultural

intelligence simply reduces to "the manifestation of the figurative base as patterns of cultural knowledge". When talking of figurative cultural intelligence, the capacity should be meant to represent the cultural belief system (of values, attitudes and beliefs) as a coalescence of normative ideological and ethical standards of the culture that ultimately defines what it is that constitutes legitimate modes and means of pragmatic behavior.

Another illustration of this model is that there are interactions between the patterns of cultural knowledge and those of analytic executor knowledge. While cultural knowledge is concerned with the way in which the group that carries the paradigm conduct themselves together, analytic knowledge is concerned with the scientific propositions that lie at the basis of a paradigm. Hence, now, the cognitive base is the result of cybernetic interaction between the patterns of cultural and analytic knowledge, and these affect each other through their history of mutual influence. Where pathologies occur in this interaction, the cognitive base is impoverished.

Figure 3 presents the highlight of the notion of a corporate personality. The two are consistent in that personality, especially in respect of individual differences, often uses strategy to increase an agent's personal power (Dunbar & Abra, 2008), though a model such as this would likely be more related to organizational potential because of its political nature. There are the directional models involved. Operative intelligence is related to the Figure 4 operative personality intelligence, though the context has now shifted and hence so will the meanings. By the latter is meant the capacity for beliefs, values attitudes and knowledge to be assembled in a coherent way to form personality. Attitudes are constituted as a set of values that are directed towards some object of attention and hence have an operative function. So operative personality intelligence is the manifestation of personality as structures that facilitate and condition behaviors, from which arise performance. Performance involves the evaluation of directed behavior, and relates to the interaction between the behaviors which are embedded in the personality structures and the environmental factors, with which the personality needs to deal efficiently and effectively. Figurative personality intelligence is the set of images and mind models that have solidified to form personality. The intelligence attribute would, in this way, relate to the effective manifestations of beliefs, values and knowledge in the personality pattern that govern how decision imperatives can be addressed and responded to, as well as the condensation of beliefs into patterns that are directed towards an "object of attention" that make attitudes.
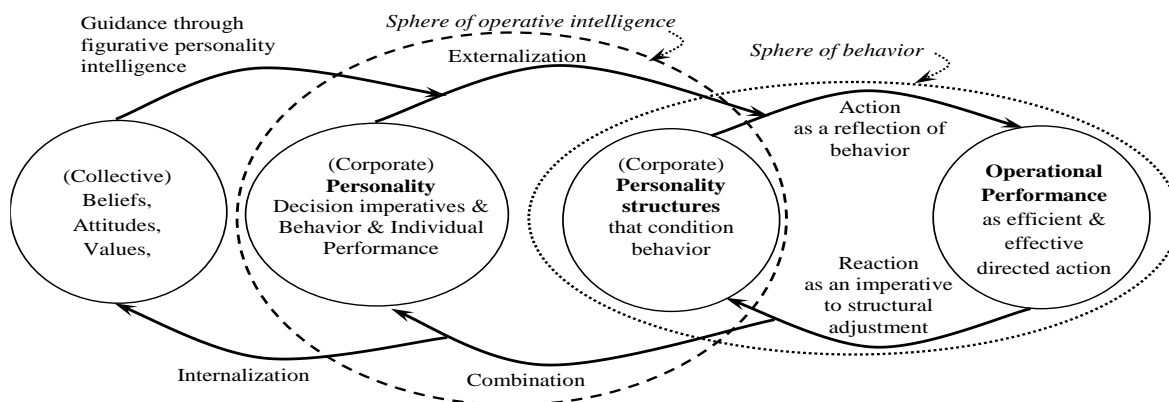
Figure 3 Organizational Personality with Figurative and Operative Intelligence

Figure 3 shows the Organizational Personality which is connected with Formulating and Operative Intelligence, even though some people may say that the notion of corporate personality is far from new, on the other hand, there is a consistent endeavor in social theory to relate as organization theory and personality theory, synergizing and harmonizing apparently distinct terms of reference. Bridges (1992) and Boje (2004) provided prime illustration of this. Perhaps better known is the work of Kets de Vries (1991) who, in his book "Organizations on the Couch" adopted a Freudian view about dysfunctional and neurotic organizations. Feelings of guilt should be developed and adopted collective psychological defenses. This should reduce pain through denial and cover-up, and operate through processes of power that might be unproductive. These conditions should be treated by a corporate (or socio-psycho) therapist. This is not only intrinsic behavior that is directed towards its own internal environment, but also its extrinsic behavior that is directed to its external social environment. Yolles (2008) referred to the collective psyche of a social agent, and in so doing comments on its collective mind. Such agents behave consistently and have a rationality that can be explained. However a social agent may behave independently from the individuals that compose it because the normative anchors for social behavior may be different from the anchors of individual behavior, as was shown by the literature on Strategic groups (Fiegenbaum & Thomas, 1995); Herding (Hirshleifer and Teoh 2003, Welch, 2000); Groupthink (Janis,1972); and the famous Abiline Paradox (Harvey, 1974).

The idea that there is a collective mind is still supported in the literature, because it explains a lot about corporate socials. Thus Weik and Roberts (1993) argue that organizations are not things but processes, and the social mind can be used to explain organizational performance in situations that require nearly continuous operational reliability. They conceptualize the collective mind as a pattern of "heedful" interrelations of actions in a social system, from which cultural biology emerges (Hofstede et al., 2002). Hence, the result of intention, coordination, integration, and coherence should be called Heedful processes. However, there is another exploration of the social mind which explained that some individuals who have substituted one and the same object for their 'ego-ideal'. The concept of this comes from an idea of some people who often decide on certain goals very early. Then their early development and the determinant for this should be called the ego-ideal, and that distracts one from the present – the so called here and now. Moreover, in terms of psychology of ego-ideal should be more or less of an conscious ideal of personal excellence and goals through which an individual strives, deriving from a combination image of the personal characteristics of the individual sees as an iconic personality. A result of the use of the ego-goal should be perhaps that people consequently identify themselves with one another in their ego.

Therefore, it should be possible to offer a corporate personality view of the organization through the use of the Social Viable Systems (SVS) model. We distinguish four domains: the cultural system of beliefs, values and knowledge; 'social (normative) personality and collective decision-making processes; collective 'patterns of behavior', and 'environment and the outcomes of organizational action'. At the core of that model is the decision making processes which should be subject to not only explicit formalized processes that can occur in organizational situations,

but also the interactive influences of individuals that are capable of idiosyncratically impacting on decision outcomes. The decision making processes are influenced by both normative processes, and individuals' interests and their personal preferences for either collection of information or making quick decision based on beliefs and available knowledge. In that context, social personality traits try to capture differences in the dispositions of individuals in their modes of information collection, thinking, feeling, judging and acting. Because individuals chose from available repertoires of patterns of behavior or invent new forms of behavior when that seems appropriate for reaching their goals, 'there cannot be organizational learning without individual learning' (Pettigrew et al., 2000: 269).
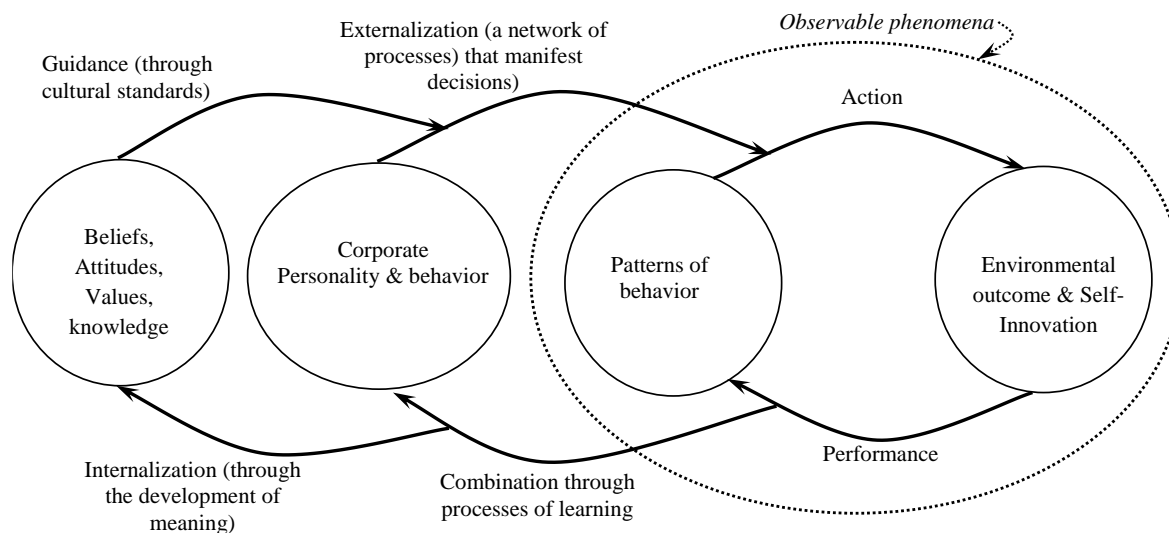

Figure 4: Corporate Personality in Focus of an Organization

Figure 4 shows the distinguished between six processes, in a way that is similar to that of the strategic organization. These can be defined as follows with adjustments in meaning due to a shift in conceptual context:

    a.   Guidance (self-generation): It is about how organizational culture (such as the system of beliefs, attitudes, values and knowledge) guides the processes that lead to problem or opportunity identification and conversion of corporate and personal strategies into action.

    b.   Externalization (self-production): It is about how thinking (i.e. the network of individual and collective decision making processes) can influence a choice and implementation of actual behavior from a given set of patterns of behavior and social culture, which are considered to be normal within the given context (i.e. group or organization).

    c.   Action: It is about how an action is finally taken either in correspondence with available patterns of behavior or in deviation from those patterns.

    d.   Performance: The directed contextual actions of an agent with respect to its efficiency and effectiveness evaluated under expectation and in relation to the intentions of the individuals and the group or organization.

    e.   Combination (self-production learning): It is about how experience from action is combined with existing previous execution and elaboration knowledge and either confirms

the usefulness of this knowledge or helps to create adapted execution and elaboration knowledge.

f. Internalization (self-creation learning): It is about how experience with action and assessment is converted in to new tacit knowledge, i.e. new identification knowledge, new beliefs and shortcuts for future efficient decision making. New knowledge with proven quality is finally adopted.

Therefore, it should be said that the organizational view of the notion of Knowledge Cybernetics can illustrate some issues which Multinational Corporations have to master when the act across cultures, according to the discussion between Kostova et al. (2008 and 2009) and Phillips and Tracey (2009) The model is capable to 'correctly reflect the diversity of multinationals and different positions they have with regards to host countries' (Kostova et al., 2009: 173).

For illustration, in Figure 5, the social viable system to migration of management knowledge should be applied between a corporate headquarter (H) and its subsidiary (S), as for instance in the case of a new cross border acquisitions. It is possible to model the interactions in Knowledge Cybernetics that should develop between two such organizations. In this case, Gupta and Govindarajan's (2000) should be referred findings that successful knowledge transfer depends on the perceived value of knowledge, the motivation to share knowledge (externalization), the richness of transmission channels in communication, the motivation to learn and adopt new knowledge and the ability to recognize the value of new knowledge (ability of combination). With respect to transmission channels, some extensions of the Gupta and Govindarajan model are appropriate. Management knowledge is context and language dependent and, consequently, it changes its meaning when being simply transferred to other contexts and cultures (Holden & von Kortzfleisch, 2004). There is a tacit component linked to any explicit notion of management knowledge, and vice versa. Transfer of management knowledge, which is solely based on explicit knowledge transfer, is bound to fail. Thus, there is need of socialization (Nonaka and Takeuchi, 1995; Huy 2001). Cross cultural transfer of management knowledge is possible only when the atmosphere among all parties involved is favorable (Holden, 2002). Feedback loops from the subsidiary to the headquarter, enquiry into the origin and purpose of knowledge and reverse learning processes, i.e. learning of remote headquarter from a local subsidiary (Napier 2005) are necessary conditions to make the process of migration of management knowledge successful in terms of production of new institutions (Phillips et al. 2004: 646). In conclusion we note that a change of the cross cultural metaphor from 'distance' to 'friction' as proposed by Shenkar et al. (2008) does not address the management issues involved. It rather masks management failure than clarifies what good cross cultural management may mean - what is one concern expressed by Kostova et al. (2008).
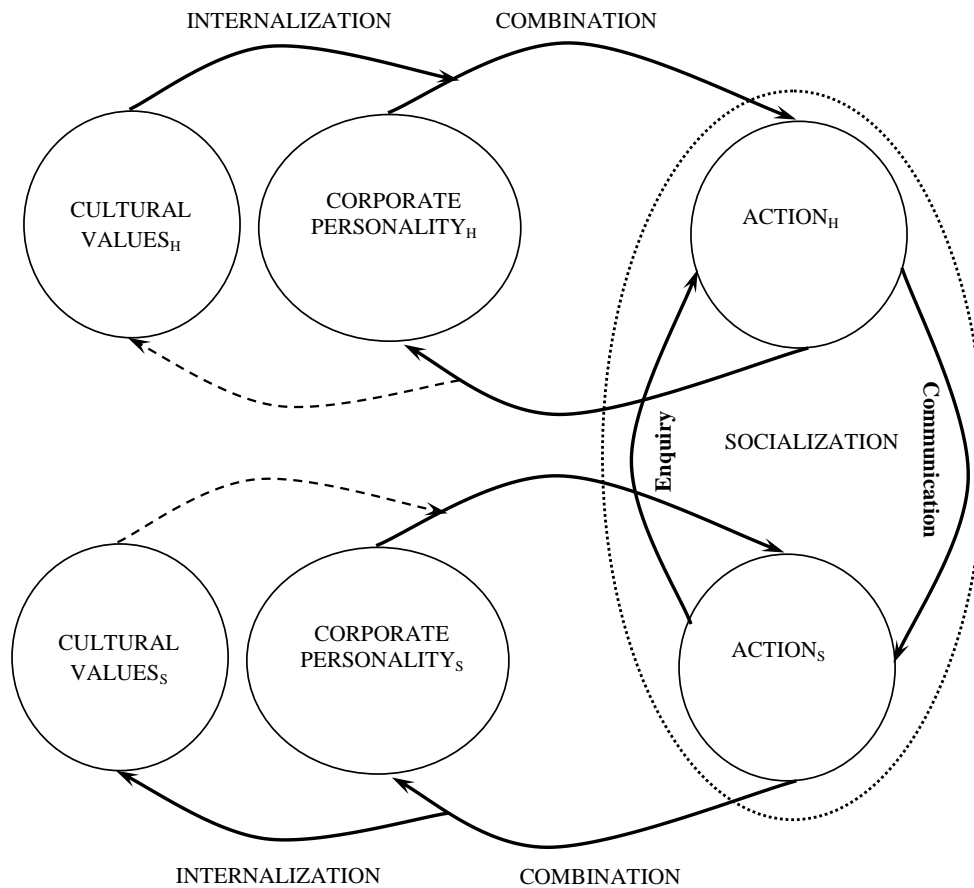
Figure 5 Migration of Management Knowledge between Organizations

Figure 5 is arisen from the principles embedded in KC that arise from joint alliance theory (Yolles, 2006) as supported for instance by Kelly & Parker (1997), with a tendency towards exploring their implication in the theoretical niche area of Human Resource Management (HRM). However, there are more complex representations of this theory have also been developed for quite different cultural dynamic contexts (Yolles et al., 2008).

CONCLUSION

This paper has started with the observation that organization theory as a discipline can be identified through three theoretical and practical components: organizational structure and environment, management and purposive behavior, and organizational change and dynamics. However, there are few attempts have occurred to connect each of these aspects together to enable organization theory to develop in a holistic rather than a piecemeal way. With respect to the expectation that new organization theory might emerge, the rise of the complexity view, the need of explicit examination of control and communication within organizational situations should be referred. The current economic crisis might have unforeseeable effects on the persistent societal dissatisfaction with respect to environmental and social concerns and unethical

management behavior, what ultimately makes clear that the current paradigms of various organization theories do not satisfy societal demands.

The model of general Viable Systems as created by Eric Schwartz has been and expanded and adapted to the needs of organization theory through the meta-framework of Knowledge Cybernetics (KC). This can help people to understand organizational complexities, nowadays. The domains culture, strategy, structure and environment are standard in almost any textbook. The modeling approach is adopted also can encourage the synergy of personality and organization theory and draws on the notion of the corporate personality. These models simply show the potential to drill down into the theory in order to pragmatically explore the relationship between ad hoc theory and practice in a more coherent way than currently seems to be possible. In particular, it should be possible to connect the idea of corporate personality within the context of cross cultural transfer of management knowledge as it has been shown. It can be bridged a gap between cross cultural studies and organization theory.

In addition to the notion of Social Viable Systems (SVS), it might be distinguished aspects of economic and existential viability. Economic viability would mean that an organization has to achieve a surplus or at least balance between revenues and expenses. Existential viability refers to the fact that some organizations, if they fail, may cause enormous damage to mankind, e.g. exploding nuclear power stations. Economic viability is subject of classical business administration, and safety has both, a technological and psychological aspect, e.g. in terms of safety culture. But this, in our mind, would constitute stories for a different set of papers.

NOTES

[1] Double loop learning is a popularised cybernetic notion seen as the ability to challenge and rethink the assumptions, routines, standards and decisions within an organization. Its more elementary companion, single loop learning, was also identified by Argyris and Schön as occurring when members of an organization respond to changes in the internal/external environment of the organization by detecting errors which they then correct so as to maintain the central features of theory-in-use. There is good reason to replace it with the more sophisticated and extended notions of autogeness and autpoiesis, also representatble by Piaget's notions of figurative and operative intelligence.

[2] We say conceptual fractals, because fractals as such have associated with them a particular mathematical formulation (Mandelbrot, 1982), but conceptual fractals represent a weaker form of fractal thinking that do not have that expectation. This does of course not mean that the mathematical formulations of conceptual fractals would not exist.

[3] This attribute is part of a large body of cybernetics that is beyond the boundary of this paper.

[4] This mutual interaction is actually referred to as structural coupling, the term for structure-determined/determining engagement in an interactive family of systems (either systems in mutual interaction or so with an environment) in what we shall refer to as a suprasystem. According to Maturana and Varela (1987: 75) the engagement creates a history of recurrent interactions that leads to the structural congruence between the systems, and it leads to a spatio-

temporal coincidence between the changes that occur in the family of system (Maturana, 1975: 321).

[5]We use the word corporate in two ways. In this partucular instance it refers to the characteristic of individuals acting together as a group or collective, and creating a *joint identity*, a *collective mind*, and a *corporate good* (wordnet.princeton.edu/perl/webwn). On occassions it will also be used in the legal sense of the "corporation". In some cases both meanings are intended simultaneously. It will be obvious from context which meaning is being taken.

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