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FROM BUREAUPHOBIA TO BUREAUCOGNITIO

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ABSTRACT

Bureaucracy had been referred to as the usual suspect whose door was knocked with an attempt to address an organizational failure and had always been pointed at as the villain that rendered organizations incapable to adapt to the shifting paradigms in the global business environment. Notwithstanding the fact that it has survived throughout the last century there is an extensive literature in organizational studies that is dedicated to reveal its imperfections especially after the incorporation of such concepts as fluidity and complexity into management studies. This conceptual paper proposes that bureaucracy and complexity are not mutually exclusive concepts. They both can co-exist on the way to create knowledge-based organizations in which novel ideas emerge and innovative outcomes are cultivated.

Keywords: Bureaucracy, complexity thinking, knowledge in organizations, big data, adaptability, innovation.

JEL Codes: M10, M19.

1. INTRODUCTION

Denouncement of an organizational model designed to ensure efficiency as being ponderous is an enduring paradox. In a typical undergraduate management textbook Weber's name is usually referred along with the management thinkers of the scientific management school and in most professional books, which ramble on and on with seemingly sophisticated management related bells and whistles, the components of bureaucracy model is usually mentioned with disdain. Clegg and Lounsbury (2009) proclaim how inappropriate it would be to situate Weber's corpus within the narrative of formal management theories, as they do not have much in common. They suggest that in most management and organization theory Weber is an exceedingly simplified caricature in which the nuance, depth and cultural embeddedness of his original texts had been lost. Majority of the management literature seems to have been haunted by the *bureauphobia* (fear of the bureaucracy).

Bureaucracy is the usual suspect denigrated as lagging behind the needs of contemporary organization. It is stigmatized for being the reason for inefficiency, slow decision-making, profusion and red tape. There are many fashionable organizational change programs presented by business writers as an integral part of their anti-bureaucratic agenda (Thompson and Alvesson, 2005). Leavitt (2005) indicates that a cursory scan of many contemporary professional books and papers on organizational design, leadership and general management shows that, if they mention hierarchies at all, they tend to present them as relics of the past. If any who intends to write an essay to reveal its imperfections shall enjoy the copious literature on the subject.

However, bureaucracies are pervasive and entrenched in majority of the organizations. The concepts that lie in the kernel of bureaucratic rationality are timeless in spite of the prolonged efforts of the business academia to reveal how incapable the model is to meet the necessary conditions in an age of liquidity. The worldwide interconnectedness suggests a growing magnitude and intensity of global flows such that states and societies have become enmeshed in networks of interaction (Held and McGrew, 2003). Rapid growth in information and communication technologies, intensified competitive forces, the vicissitudes and volatility of global markets have reshaped the organizational landscape to such an extent that continuous change has become a permanent phenomenon with organizations having to constantly reinvent themselves (Kamoche, et.al., 2002). Organizations should become increasingly adroit at work process innovation and embrace complexity in business environment. Under the circumstances of intensive competition in global markets, dealing with the concept of innovation entails adopting a profound coverage than generally ascribed.

Given the need for organic and fluid organizational structures, which are able to keep pace with increasingly turbulent environment, a neo-bureaucratic formation seems to be a sound approach (Yüksel, 2014). *Bureaucognitio* is a term coined in this paper with an attempt to address a neo-bureaucratic structure that embraces complexity thinking. Complexly interacting agents are already at play in every organization. However, the point is, the already existing complex social processes in bureaucratic organizations fail to produce innovative outcomes (novel ideas) that will render the companies capable to sense-and-respond in an unpredictable business ecology. These ongoing complex social processes of everyday human interaction beg for an 'appropriate context'; a one that instills symbiosis in a world where 'big data' matters. Garvey and Williamson (2002) assert that when complexity is not accepted or tolerated as normal both an employee's learning and generation of knowledge in the corporate curriculum and mental health suffer and employees may resort to three sorts of response. First of these is running faster in the belief doing more of the seemingly 'real' work will resolve the situation. Secondly, employees may divert from the core of their responsibility and might show the disposition to get what they want from others thorough manipulation and playing political games. Thirdly, they may retreat from complexity in a major way and become cynical, alienated, tired, stressed, burnt out or ill. This conceptual paper intends to provide a framework about how to cultivate a cognitively-able and evolution-oriented context in bureaucracies.

2. BUREAUCOGNITIO: BUREAUCRACIES EMBRACING COMPLEXITY IN AN AGE OF LIQUIDITY

Organization theories of the modernist era regarded actions as sequenced and presupposed mechanistic behavior in the efforts to accomplish rationally declared ends (Pettigrew, 1990). Reductionism, determinism and equilibrium were core principles dominated organizational and managerial studies (Dooley, 1997). Wagner (2012) portrays the principles suggested by modernist stream of thought and their obvious influence on the development of theories through emphasizing that these principles were seen as universal because they contained normative claims to which every human being would subscribe. They were deemed to permit the creation of functionally superior arrangements for industrial production and the rational government of collective matters through law-based and hierarchically organized administration. Thus, as indicated by Wagner (2012), they were seen as globalizing in their application because of the interpretative and practical power of normativity and functionality.

Bauman (2000/2012), in his seminal work 'Liquid Times', defines our current presence in time as an 'interregnum' – "when the old ways of doing things no longer work, the old learned or inherited modes of life are no longer suitable for the current *conditio humana*, but when the new ways of tackling the challenges and new modes of life better suited to the new conditions have not as yet been invented, put in place and set in operation..." He proposes that there actually is not any clear image of where we are headed towards and positioned the term liquidity against solids with clear spatial dimensions but resist the impact and downgrade the significance of time. However, liquids, one variety of fluids, cannot easily hold their shape and are constantly prone to change it; "so for them it is the flow of time that counts more than the space, after all, they fill but for a moment". This calls for organic structures and fluid strategies with the capability of dealing with the intricacies of the extremely turbulent global market conditions. The global business environment has become like a cobweb of interactions driven by interconnectedness at an unprecedented level that the portraits of markets are only glanced through just for a moment. In an age of fluidity, traditional organizational

theories haunted by the ghost of modernist assumptions succumb to the emerging qualities imposed by the new way of doing business. Embracing fluidity helps managers develop savvy in favor of complex mental models. Changes in small places are capable of affecting the entire global system because every small system participates in an unbroken wholeness and it is barely known how small activities will trigger others through utilization of existing connections. Knowledge is the core commodity and, thus, knowledge creation is the core quality for organizational fitness.

The nature of organizational solutions entails to implement real-time adaptation to business environment especially given the fact that these changes are substantial and continuous that the system has not recovered from one before being exposed to another (Johannessen et.al., 1999). Anderson (1999) explains that adaptation emerges from local interactions among agents (the parts that constitute the organization as a whole) and the managers in charge of determining the strategic direction of the company are not supposed to anticipate the future or implement enterprise-wide adaptation programs because nonlinear systems react to direction in ways that are difficult to predict or control. Instead, they should satisfy appropriate intra-organizational conditions in which effective, improvised, self-organized solutions evolve. Organizations should become evolving products of evolution in terms of conceptualizing, designing, developing, and applying new learning interventions to business needs, while simultaneously modeling strong values and openness to change (Rothwell, et.al., 2004). Organizations are supposed to continuously build unique capabilities in order to be able sense and respond to the shifting needs of their target markets in a hyper-competitive global environment where any attempt to grasp the very nature of the emergent phenomena turns out to be futile. It is almost impossible to identify the number of variables involved and keep track of the interactions between them. This condition evokes the infamous butterfly effect, which is the notion that a butterfly fluttering its wings in South America can cause a tornado in Far East, that is to say, small perturbations in the initial condition of a system might result in unexpectedly major changes afterwards. Over the last two decades, there has been a significant surge in the number of studies in management field regarding the applicability of complexity principles to organizational settings. This makes sense given the tremendous level of interconnectedness and interdependence in an integrated global economy. The high volatility of global markets entails coping with the dynamics of continuous change. The 'machine metaphor' seems to have already fallen short given the current landscape of global business in which enormous amount of data and information are being generated everyday. Every interaction and transaction in the business environment adds up new data onto the existing base and increases logarithmically.

There is no question that organizations are swimming in an expanding sea of data that is either too voluminous or too unstructured to be managed and analyzed through traditional means. Among its burgeoning sources are the clickstream data from the Web, social media content (tweets, blogs, Facebook wall postings, etc.) and video data from retail and other settings and from video entertainment. But big data also encompasses everything from call center voice data to genomic and proteomic data from biological research and medicine. Every day, Google alone processes about 24 petabytes (or 24,000 terabytes) of data. Yet very little of the information is formatted in the traditional rows and columns of conventional databases (Davenport, 2015).

The portrait of the big data era provided above unveils the need for becoming a data-savvy organization having the capability to deal with the tremendous rise in the volume of data flowing across systems. Big Data is about using the huge amount of data available to create novel outcomes that can take organizations forward as well as about asking the right questions so that the proper analysis of both structured and unstructured data produces the 'relevant' answer. Manyika, et.al. (2011) indicate that the amount of data in our world has been exploding as companies capture trillions of bytes of information about their customers, suppliers, and operations, and millions of networked sensors are being embedded in the physical world in devices such as mobile phones and automobiles, sensing, creating, and communicating data. They also point out that big data—large pools of data that can be captured, communicated, aggregated, stored, and analyzed—is now part of every sector and function of the global economy. Big Data analytics has started to impact all types of organizations, as it carries the potential power to extract embedded knowledge from big amounts of data and react according to it in real time (NESSI White Paper, 2012). The problem lies with managing these data meaningfully rather than storing them.

Therefore, bureaucracies should be transformed into cognitively-able structures equipped with the capability to employ relevant strategic and managerial contexts to make sense of the data inflow, create meaning and inimitable competitive advantage from this unprecedented magnitude of data stream. Huff and Huff (2000) propose that inclusion of a cognitive theory of the firm would be useful to economic and behavioral theories and present four distinctive features. First, organization as a social system is a unique social setting for sense making, learning and problem solving. Second, managers, as well as the other members of the organization, are motivated to understand their own situation (local context) and the situation of the collectives (network of social interaction) that are important to them. Sense-making efforts shape the human behavior. Thirdly, they emphasize that the articulation of a shared goal is influenced by the interpretation, knowledge, and problem-solving abilities of individuals and by understandings shared with others. And the fourth feature is that an organization's environments generate varying stimuli that tend to structure, but be structured by, cognition and action. Efforts to make sense of the data to attain useful knowledge require building relevant context that will enable the correct interpretation of the outcomes of this process. Huff and Huff (2000) propose that top management of organizations must be epistemic communities of some strength in order to be viable and contend, "while individuals have beliefs and interpretations that are unique to themselves, they also share many beliefs and understandings with others. To the extent that beliefs are shared by key actors, the resulting shared cognitive framework then provides basis for coordinated activity." Haas (1992; as cited by Choo, 2006) suggest that epistemic communities share "(a) norms and principled beliefs that provide a value based rationale for social action, (b) causal beliefs derived from their analysis of policy actions and outcomes, (c) notions of validity that define criteria for evaluating information, (d) a common set of practices that direct their professional competence to a set of problems." Emergence occurs as an outcome of such social interaction among the members of the organization. As individuals interact the shared beliefs and experiences inevitably carve each other's behavior, hence, the qualitatively distinct pattern that comes out of this communicative process is unpredictable.

Emergence lies at the heart of complex (non-linear) systems (ecosystems, food chains, insect swarms, humans societies) and it is the kernel of innovation. It is referred to as complexity theory's anchor point phenomenon (Chiles, *et.al.*, 2004). It is a phenomenon of the process of adapting and transforming spontaneously to changes in circumstances (McMillan, 2008). Emergence enables the coming-into-being of superior level structures, patterns and processes and the way complexity arises out of the interactions among people (agents) that constitute the system (Goldstein, 1999). It paves the way to create organizational processes, structures and practices that will render the organization more adaptive (Goldstein, *et.al.*, 2010). According to Lichtenstein (2014) emergence is a totally different category from transformation and change and explains the root of this difference is the fact that every case of organizational change and transformation involves the modification of existing elements, an alteration of design structures or internal processes or activity routines in the organization." The foundation of this explanation has also been embodied in Follett's conceptualization of circular response (Follett, 1924/2013:62-63).

Through circular response we are creating each other all the time...The most fundamental thought about all this is that reaction is always reaction to a relating ... In human relations, as I have said, this is obvious: I never react to you but to you-plus-me; or to be more accurate, it is I-plus you reacting to you-plus-me. "I" can never influence "you" because you have already influenced me; that is, in the very process of meeting, by the very process of meeting, we both become something different. It begins even before we meet, in the anticipation of meeting.

The quotation above manifests the emergence of collective cognition paving the way to building the context that is conducive to create and preserve the appropriate organizational social context for continuous communication. Due to the richness of information flow (interaction resonance) and dynamic interaction between the members/groups within the organization, order is emergent, organic and unpredictable (Uhl-Bien, *et.al.*, 2007). Bureaucognitio embraces co-evolution of the agents that constitute the whole (organization) and allows for rigorous social interactions between individuals and groups in a way that will produce feedback networks, which will ensue conflict, tension and dialogue through uninterrupted conversation. Emergent bottom-up behaviors will be unveiled and through dynamic social interaction, interdependency and tension will be materialized into novel solutions and render the organization resilient. New meanings will be created out of the clash of differences and these new meanings will enrich the current knowledge base, which will eventually

lead to differentiation through creation of inimitable competitive advantage. Creation of knowledge appears as a vital quality achieved when organization as a whole gains new and unanticipated understandings through activities encompassing the acquisition of novel facts (Chakravarthy, et.al., 2005). Knowledge is the kernel of bureaucratic rationality and it inherently harbors domination through knowledge that eventually makes the system technically superior. Weber (1925) underscores the importance of knowledge in bureaucracies:

Bureaucratic administration means fundamentally domination through knowledge. This is the feature of it that makes it specifically rational. This consists on the one hand in technical knowledge which, by itself is sufficient to ensure it a position of extraordinary power. But, in addition to this, bureaucratic organizations, or the holders of power who make use of them, have the tendency to increase their power still further by the knowledge growing out of experience in the service. Manville (2003) argues that knowledge management is more than creating specific approaches and processes to improve an organization's learning and application, instead it entails to create the right kind of context and freedom to let all of the individual agents in the organization adapt dynamically to the business challenges. Stacey (2001) adopts an evolutionary perspective on knowledge in organizations and argues the implication of knowledge as meaning and indicates that it can only emerge in the network of social interaction where meaning is continuously reproduced and translated into action. This puts forward a description of knowledge as the thematic patterns of organizing the experience of being together. Nahapiet (2008) elucidates an understanding of social embeddedness in organizations and underscores the substantial body of research that emphasize human and social capital in knowledge processes demonstrating that we should actually view global economy as a relational economy. Knowledge builds on an accumulation of experience and along with information are the outcomes of human action that engage signs, signals and artifacts in social and physical settings (Choo, 2006).

3. CONCLUSION

The components of bureaucratic rationality such as drawing boundaries, writing the world, following a rule, predictability and without regard for persons still endure (Townley, 2008). Notwithstanding the fact that these components are functional in their own right there is a widely heralded need to instill a new context, which will render companies capable to make sense of the data on which the managerial decisions are built. Meaning must emerge from local bits and pieces and the enactment of new practices in complex and rapidly changing environments (Carroll, et.al., 2005). The concept of bureaucognition postulates that incorporation of complexity thinking into the way bureaucratic rationality is being exerted might pave the way to turn organizations into networks of social interaction where bureaus are transformed into data-savvy cognitive nodes instead of power junctions.

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