

## **WE ARE THE BORG - RESISTANCE IS FUTILE! STARTREK'S BORG AS A METAPHORICAL CRITIQUE OF ORGANIZATIONAL SYSTEMS THEORY**

Astrid Kersten and Mohammed Sidky

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### **Abstract**

This paper provides a critical examination of organizational systems theory and its proposed applications to organizational practice. The paper uses the “Borg”, an alien species featured in the popular “Star Trek Voyager” TV series as a metaphorical image to analyze internal and external perspectives on organizational systems theory. The paper addresses 4 key issues: 1) the validity of literal rather than metaphorical applications of concepts and ideas from the natural sciences to the analysis of modern organization; 2) the conceptualization of the “system” as a reified and overly organismic conscious entity, having a unified structure, purpose, and sense of identity that transcends concern for the individuality of its human component other than in the advancement of system goals and objective; 3) the limitations of organizational systems theory in dealing with issues of ethics, power, conflict, participation and choice; and 4) organizational systems theory’s tendency to ignore the role of modern capitalism as the ideological, political, economic, and socio-cultural context of organizations. These 4 issues combined, it is argued, result in a view of the internal dynamics of organization that is conceptually neutralized, homogenized and sterilized, and a view of the external organizational context that becomes a similarly flattened landscape. The paper concludes by suggesting that the development of organizational systems theory will benefit greatly from addressing these 4 issues and that doing so, will result in the establishment of a more effective holistic understanding of organizations consistent with the ancient roots of systems theory.

### **Introduction**

Teaching students different perspectives on organizations is always an interesting and challenging enterprise that is fraught with the same difficulties as theoretical discourse itself: differences in jargon, images, assumptions, perspectives, norms and values (Burrell & Morgan, 1978; Morgan, 1997; 1996; Gioia & Pitre, 1991). Metaphors are a useful tool in this work because, as Morgan suggests, “all theories of organization are based on implicit images or metaphors that lead us to see, understand and manage organizations in distinctive yet partial ways” (Morgan, 1997, p. 4). Analyzing these embedded metaphors can help us to better understand the ontological assumptions of the different theories (Morgan, 1980, 1986). It can also help us to understand the foundations of key organizational concepts and generate new ideas and insights about organizations and organizational theories (Alvesson, 1993; Buzzanell & Goldzwig, 1991; Stutman & Putnam, 1994; Putnam, Phillips, & Chapman, 1996). Metaphors are best understood as a way of seeing something in terms of something else (Lakoff & Johnson, 1980): “a system of beliefs about figure and ground relationships which serve to highlight certain features while suppressing others” (Putnam, Phillips & Chapman, 1996, p. 377). Thus, organizational metaphors provide us with specific images of organizations that allow certain perspectives, yet disallow or blind us to others. Some may highlight organizational structure and ignore human processes. Others may emphasize harmony and neglect oppression. Some focus on

the individual and do not see the collective while others only see the collective and never the individual. Metaphors also have constitutive and behavioral implications in that they legitimate our actions, set our goals and guide our behavior (Lakoff & Johnson, 1980). In this sense, organizational metaphors not only create specific mental pictures of organizations. They also problematize certain features and ignore others, stimulate research on some questions while totally neglecting other issues, make some organizational actions appear normal, attractive and plausible while others options are seen as inconceivable.

Organizational systems theory is frequently associated with biological metaphors such as the organism and the brain (Morgan, 1997; Burrell & Morgan, 1978; Gioia & Pitre, 1991). These images are attractive and appealing to theoreticians and practitioners alike, in their portrayal of organizations as purposive and organically unified entities. At the same time, however, they are inherently limited in their ability to address organizational conflict, power and control. In this paper, we argue that systems theory's difficulties in dealing with issues of conflict, power and control are inherent in the metaphorical models it uses, models that by definition problematize and externalize power and conflict.

This is, of course, not a new argument. Critical theorists have often questioned organizational systems theory's claims of neutrality, impartiality, and humanism, suggesting that it is permeated by a consistent ideological basis that favors managerial control, instrumental rationality, exploitation and oppression (see e.g. Lilienfeld, 1978; Hoos, 1972; Horkheimer, 1972; Deetz, 1992; Marcuse, 1964; Habermas, 1984, Fischer & Sirianni, 1984). Contemporary organizational systems theory has been of particular concern to a number of critical theorists who argue that the "humanistic" strategies proposed by such theories are merely new versions of the "velvet glove" that clothes the iron fist of power (Jermier, 1998; Nord, 1974; Zimbalist, 1975; Friedman, 1977; Salaman, 1979; Clegg, 1979; Alvesson & Wilmott, 1996). Such strategies do not lessen control relationships, it is argued, but rather shift the mechanisms from purely structural forms of control to the use of "advanced technology and ... the inculcation of emotions, values, and worldviews congruent with the interests of the more powerful constituents" (Jermier, 1998, p. 246; Barker, 1993 ). Such an assertion strikes many as strange, given the seemingly open, democratic, flexible , and cooperative structures advocated by these theories. We suggest that it may be possible to see *both* perspectives on contemporary organizational systems theory using a popular culture-based metaphor, namely the Borg, an alien species featured in the well-known television science fiction series Star Trek Voyager.

We chose this somewhat unusual metaphor, first, because we have found that it demonstrates the extent to which one's view of a system and systems theory can vary drastically, depending on where the viewer "sits". Second, the Borg metaphor effectively demonstrates the submerged nature of conflict, power and control in contemporary organizations, highlighting an otherwise underexposed area in systems theory. Finally, we suggest that the metaphor offers the foundation for the development of a systems theoretical approach that enhances our ability to deal with conflict, control and change.

### **Meet the Borg**

The Borg is portrayed from the outside as an oppressive, bio-cybernetic, mechanistic, imperialistic and appropriately cube-shaped entity in which all individuals are subsumed into a gray, uniform, collective, biotechnically enhanced existence. Using "a highly invasive form of biotechnology to transform sentient beings into mindless drones that have no free will, no sense of personal identity, and no choice but to obey the will of the Borg's collective consciousness" (Bormanis, 1999, p. 9), the Borg's hive mind" is engaged in a ceaseless and frightening search

for perfection through the assimilation of all knowledge and all species. The forcefulness and effectiveness of this search is captured in the infamous Borg identity statement “You WILL be assimilated... Resistance is futile”. Feared through many a galaxy, the Borg’s strength and ceaseless adaptive capacity are shown in many episodes where the Borg succeed in capturing and assimilating endless scores of humanoid and other alien species. In the Star Trek series, the Borg appear not only as an alien species, set apart from other species by its technological assimilation of those they encounter; they also appear as the fundamental, ideological anti-thesis of Star Trek Federation life, a life devoted to freedom, exploration, non-interference and moral correctness.

However, viewed through the eyes of one of the main characters -Seven of Nine- the Borg appear very differently. Born human, Seven was assimilated into the Borg collective when she was a child. After an accident Seven of Nine (her name reflecting her functional designation in one of the Borg uni-matrices) is left deserted on a planet and rescued by the Star Trek Federation’s Voyager star ship. The crew’s attempt to reinstate Seven’s individualistic humanity provides the viewer with an uneasy insider’s glimpse into the persuasive seduction of the Borg mindset. Instead of the grateful, highly appreciative response liberators often expect from their subjects, the crew encounters a great deal of resistance from Seven of Nine who sees the Borg as her true identity. She describes her Borg existence as approximating organismic, social and intellectual perfection: a state in which one can always “hear” all the others in a unified voice and a shared direction, without the noise of individuality and conflict. To Seven, the Borg’s multiple redundancies, the ability to regenerate damaged parts and functions, a vast shared data pool, and an unending quest for efficiency and perfection define it as the most highly developed and constantly evolving humanoid based life form in the universe. In contemporary terms, the Borg appear to Seven as a highly connected and unified team with a shared vision, an extremely sophisticated communication system, and highly developed learning capacities, capacities so evolved that they can adapt to any changes and challenges at a moment’s notice.

This uncomfortable juxtaposition of perspectives , one portraying the Borg as an extremely oppressive, mechanistic and exploitative entity , and the other viewing the Borg as an ideal, highly evolved, interconnected learning organization, provides an interesting metaphorical context for exploring the theoretical and ideological issues that emerge in the examination of contemporary organizational systems theory. It also captures the uneasiness often experienced in the critique of systems theory, for we can see contemporary systems theory through a similarly disjointed and contradictory set of perspectives, one positive and glowing and the other dim and critical , leaving the theoretical “viewer” uncomfortable at best. It is this contrast and discomfort that can be very useful, both in the context of teaching and theory development, for it enables one to see and critique issues that often remain uncovered in our exploration of organizations and organization theory.

Following a brief history of systems theory, this paper applies both Borg perspectives to a critical examination of systems theory, addressing the following three critical issues:

1. The conceptualization of the “system” as a reified, conscious entity with a unified structure, purpose, and sense of direction has always raised questions about systems theory’s ability to effectively conceptualize issues of power, domination, participation and choice. Much like the Borg drones and their connection to the collective consciousness, the reified system represents an entity that drowns out and makes invisible different voices and choice possibilities and the reality of power and domination that underlies the organizational structure.
2. The role and place of human beings in a system focused on efficiency and other system-defined goals becomes similarly obscured, under the assumption that the human collective,

like the Borg collective, represents, accounts and allows for the existence of individual human beings in their varied personal, emotional or political states.

3. Just as the internal dynamics of the organization are conceptually neutralized, homogenized, and sterilized in the organismic image of organizational systems, the external context becomes a similarly flattened landscape that denies the role of modern capitalism as the economic, political, and socio-cultural context of organizations. Like the Borg, it does not question the moral correctness of its assimilation goals or the implications of this for human or other life forms.

All three issues, it is argued, are partially a result of our tendency to use concepts and ideas from the natural sciences in a literal rather than a metaphoric fashion, resulting in this particular instance in an overly organismic view of organizational systems that denies the political and individual reality of organizations. By viewing people as organismic parts without a personal and political presence of their own, systems theory much like the Borg, externalizes human emotion, individuality and the need for one's own identity. In the case of the Borg, such externalization has repeatedly caused them to be defeated in their struggles and quests. In our conclusion we suggest that unless organizational systems theory can find a way to seriously address and incorporate these issues it will fail in its "mission" to establish a theoretically sound and holistic understanding of organizational reality.

### **The Roots of Systems Thinking**

Systems thinking is not unique to modern western science. Rather, it is rooted in a multi-dimensional and multi-disciplinary tradition going back to ancient philosophical systems and beliefs regarding the underlying totality and interdependency of all living and non-living parts of the universe. These roots range from Taoist and Zen traditions which present a dynamic and non-equilibrium view of system dynamics with constant change and transformation as their central themes, to the philosophies of ancient Greece and the Middle East (see Heider, 1985; Capra, 1988 for discussions). The classic 13th century Persian poet Sa'di for example depicts systems concepts of interdependency, interconnectivity, and inter-relatedness when he writes:

The Children of Adam are parts of one another  
United in a common creation  
And when misfortune befalls a single part  
The pain is felt by all the others.<sup>1</sup>

Other traditions provide similar articulations of interrelatedness and interdependency and in this sense, the conceptualization of the universe in terms of a holistic, dynamic, and interdependent point of view has been an integral part of human philosophical and religious thinking throughout known history.

In the West, however, the dominant conceptualization of the universe has been one of a machine-like structure built according to the principles of mathematics and logic and rooted in ancient Greek atomistic philosophies and the later rise of rationalist philosophy and logical positivism. Here, reality is defined in terms of objectivity, measurement and mechanics, the foundations of Newtonian science and worldview (see Morgan 1997, p. 381). This perspective of how the universe works has shaped both natural and social scientific attempts at explaining and understanding phenomena, and has led to great scientific discoveries and accomplishments especially in areas involving so-called well structured problems and phenomena.

More recently, with a growing awareness of the "ill-structuredness" or messy nature of natural phenomena, the usefulness of Newtonian thinking has been questioned. In the natural

<sup>1</sup> <http://www.persianpoema.com/poets/classical/sadi/baniadam.ipg>

sciences, this has led to the development of alternative, interdisciplinary explanation systems (see e.g. Wheatley, 1999, pp. 3-13; Prigogine & Nicholis, 1977; Prigogine & Stengers, 1984). One example of this is what Wheatley calls the “New Science” (Wheatley, 1999). Encompassing an impressive variety of concepts, theories and ideas, it attempts to integrate recent developments in quantum physics, biology, chemistry and other natural sciences into a new understanding of the universe, employing new theories and models to incorporate non-linearity, chaos, complexity and uneven development in our understanding of the world around us.

The social sciences have followed the natural sciences quite closely in their view of systemic connections. In organizational studies, early mechanistic conceptualizations introduced a perspective on organizations as contained, independent and instrumental entities, subject to engineering and control, exemplified most clearly in Taylorism, scientific management and early decision-making theories. This reached its peak with the development of “systems analysis”. In the United States, this approach gained great popularity in military applications and the U.S. space program. Claimed success in these general areas provoked much enthusiasm and hope among politicians and ordinary citizens about social applications of systems analysis. “If we can put a man on the moon” the saying went, then we can solve the social and economic problems facing our modern society (Hoos, 1974).

A major intellectual question at this time (late sixties and early seventies), involved the transferability of systems analysis techniques and methods to social issues and problems. In one of the best critiques of systems analysis in public policy, Hoos presents the mindset of the times:

In the perennial dialectic between strife and harmony, poverty and prosperity, chaos and order, simple logic is always on the positive side, and the positivist persuasion promulgates the proposition that scientific, technological methods are ipso facto better than any that can be put in antithetical relation to them. Is it conceivable that anyone would logically opt for anachronistic inefficiency through horse and buggy means when, instead, he can invoke an arsenal of sophisticated tools, which will bring efficiency? The answer to this almost rhetorical question draws strength from and strengthens, the already existent ethos of efficiency, automatically accredits efficiency as a social good, and practically assures easement into the next step of the syllogism, viz., that city riot and race problems, urban decay, and the other helter-skelter ingredients of the potpourri constituting “a major issue of our time” need better management. It is through this logic that systems analysis has been transplanted from the realm of the military and the moon-bound to the social scene. ( pp. 90-91).

Alternative approaches to the mechanistic orientations of systems analysis and closed systems approaches in general were introduced through discussions of organizations as open systems. Here, social systems came to be seen as collections of interconnected and interdependent parts, united in a common purpose and coming together in dynamic interaction with their environment, thus introducing the image of the organization as organism. The works of Von Bertalanffy (1950, 1968), Miller (1978), and Boulding (1956) were all highly influential in introducing the open systems concept to the social sciences. In practice, organizational systems theory became the application of systems thinking to the field of organizations for the purpose of improving efficiency and productivity.

In organizational studies, the works of Katz and Kahn (1978), Beer (1980), and Emery (1969) represent early attempts to apply open system concepts and ideas to the study of organizations (see de Rosney, 1979 for a history of systems thinking). Later organismic models focused on organization-environment interactions, issues of structure and technology or issues of

culture. Contemporary organizational systems theory, according to Morgan and others, proposes a different organismic image, namely that of the brain: an organism that is capable of thinking, reflecting, learning, adjusting and organizing itself (Morgan 1997, pp. 74-119). Reflected in a number of specific organization theories and models, including the learning organization, holographic theory, autopoiesis, various new versions of cybernetic systems theory and so on (see e.g. Argyris, 1993; Argyris & Schon, 1978; Kelly, 1994; Morgan, 1997; Goldstein, 1994; Senge, 1990; Hurst, 1995) the brain image presents a model of organizations that, like the New Science, attempts to come to terms with issues of system chaos, complexity and uneven change.

Central in both views is the essential nature of relationship: the idea that social and natural systems are determined not so much by their component parts as by the holistic, organic, fluid, dynamic and changeable relationships between the parts. In the New Science, this relational notion of systems is further shaped by what is presented as a differently conceptualized relationship between order and chaos, “now understood as mirror images, two states that contain the other”, the partnering of which is necessary if any change or progress is to be possible.” (Wheatley, 1999, p. 13). In organizational theory versions, we find a similar emphasis on the importance of creative and critical thinking, reflectiveness, double-loop learning and systems change. Hailed as new, improved, more humane and radically different, they nonetheless share the same conceptual assumptions as the earlier models, i.e. assumptions of organic unity and interconnectedness.

In this sense, the difference between ancient, holistic conceptions and all of the later scientific systems approaches is significant because the latter radically altered our conception of what a system is. Unlike the ancient models that encompassed “messy” relationships, uncontrollable flow, constant change and internal conflict, the later models presented a view of systems as orderly, contained/able, and subject to management and control. Alternatively portrayed as machines, organisms, or brains (Morgan, 1997), these very conceptions externalize and symptomize conflict and changes as system deficiencies or malfunctions. While these images may or may not be appropriate for the natural sciences, their application to social systems is inherently problematic.

Unlike component body parts or elements of an eco- system, people have an existence, thought processes, interests, desires and minds of their own. To the extent that we assume that organizational systems are naturally unified organisms, conflict between people becomes disease-like and a “to-be-managed” process. Likewise, seeing organizations as unified organisms obscures relationships of power, domination, and exploitation. When people become viewed as organically connected components of a larger entity, any interests that are independent of or even contrary to the interests of the whole are difficult to even conceive of, let alone find expression. The same problematic is evident when we assume harmonious or harmonizable relationships between order and chaos, stability and change, and structure and disorder, reflected in the theories’ emphasis on organizational unity and organizational growth. Mechanistic models assume such unity and growth to occur through proper structure and design. Organismic and brain models suggest that they occur through interaction, shared learning, empowerment, critical thinking, teamwork, openness, communication, and enhanced internal and context connections – differences in strategy and process, but not in end states. Finally, while organismic or brain models may conceptually allow for some change, the change is typically “growth” like, i.e. becoming more or less of what the system is already, limiting our ability to conceive of radical, “species” change and de-politicizing the range of human choices in and about organizations.

While viewing organizations as naturally unified, internally connected, and independent entities is central to all contemporary organizational systems theory, this view has been criticized

heavily by Marxist and other critical scholars on a number of accounts (see e.g. Lilienfeld, 1978; Jermier, 1998, p. 246; Barker, 1993; Nord, 1974; Zimbalist, 1975; Friedman, 1977; Salaman, 1979; Clegg, 1979; Alvesson & Wilmott, 1996), most importantly on the way and the extent to which it obscures issues of power, control, conflict and domination. This obscuring, we would argue, occurs even more prominently and problematically in the newer versions of organization theory, for it is here that we use images of the organization as open, interconnected, brain-like, learning entities while continuing to promote and justify the basic assumptions of organic unity and structural inequality. As Morgan (1997) notes:

The organismic metaphor has had a subtle yet important impact on our general thinking by encouraging us to believe that the unity and harmony characteristic of organisms can be achieved in organizational life. We often tend to equate organizational well being with a state of unity where everyone is "pulling together". This style of thought usually leads us to see political and other self-interested activity as abnormal or dysfunctional features that should be absent in healthy organizations. (p. 70)

Through the use of the Borg metaphor we aim to further illustrate these issues, showing first the internal appeal and then the external concerns. We will conclude with a discussion on the future prospects for systems theory.

### **The Internal Borg Perspective on Organizational Systems Theory Inside the Borg Collective: The Organization as Shared Consciousness**

The Borg's power and near invincibility is attributed to their shared identity and consciousness, embodied in the Borg collective. Connected by a sophisticated subspace communications network, the Borg collective is capable of immediate adaptation, instantaneous communication and constant internal re-organization to meet any external challenges. While a Borg queen does appear in later episodes as a personification of the Borg mind, the Borg collective appears surprisingly hierarchy free with an internal order that is fiercely defended by all Borg drones as the "superior" life form. Indeed, when StarTrek captain Picard is captured by the Borg, and assumes the Locutus of Borg identity, he explains that the Borg purpose is "to improve the quality of life in the galaxy by providing other lifeforms the benefit of being part of the Borg collective." ([http://www.theborghive.co.uk/the\\_borg.htm](http://www.theborghive.co.uk/the_borg.htm)) Technological superiority, efficiency, adaptability, internal order, freedom from conflict, doubt and confusion, and the constant companionship of "all the others" are some of the major features mentioned by Seven when she attempts to explain to the "messy" humans why she prefers and needs her Borg identity.

The internal Borg perspective on organizations is mirrored clearly in modern organizational systems theory which stresses the importance of interdependency, adaptability, and internal connectedness. In fact, the very image of organizations as living organisms clearly implies the notion of the organization as a living, connected entity that unites all parts in an organic and unified fashion. It is particularly in the newer, learning organization-based theories, however, that we see this connectedness extended to human relationships and collective thinking. Wheatley for instance notes that the application of so-called New Science ideas to organization theory has introduced a new focus on the relational aspects of organizations: "Leadership, an amorphous phenomenon that had intrigued us since people began organizing, is being examined now for its relational aspects. Few if any theorists ignore the complexity of relationships that contribute to a leader's effectiveness. Instead, there are more and more studies

on partnership, followership, empowerment, teams, networks and the role of context ." (1999, pp.13-14) She also emphasizes the role and importance of ethics and moral questions as no longer being "fuzzy religious concepts but key elements in the relationship any organization has with colleagues, stakeholders, and communities", based in "interior" relationships "with our spirit, soul, and life's purpose" ( p.14). Senge (1990) also discusses the importance of systemic relations:

Many now recognize the need for organization-wide learning capabilities not possessed by traditional authoritarian, hierarchical organizations. Only by changing how we think can we change deeply imbedded policies and practices.

Only by changing how we interact can shared visions, shared understandings, and new capacities for coordinated actions be established (p. xiv).

Such exhortations are typical and present a highly hopeful, optimistic, and positive image of current trends and emerging futures. The view "from inside the Borg cube" sees openness, participation, interdependency, flexibility, empowerment, cooperation, consensus, creativity, continuous learning, and self-organization as the key features enabled by the modern learning organization, shifting our thinking about organizations to images like hives, termite colonies, spider plants and mobots (Morgan, 1997, p. 396). The effective application of systems theory, it is argued, will bring optimal effectiveness and efficiency as well as positive transformation, organizational enhancement and growth for the collective, and by implication, for its members.

### **“You Will Be Assimilated! Resistance is Futile!”**

Systems theory assumes unified relations between the organization and its members as a natural state of the system, just as the Borg collective seamlessly combines the talents and characteristics of its members. As the last part of the Borg's assimilation announcement states: "your biological and technological distinctiveness will be added to our own." In organizations, however, assimilation is not nearly as seamless.

Inherent in systems thinking is the assumption that the interests of the whole are also the interests of the parts, naturally and organically. Unlike the Borg, however, and in spite of systems theory's assumption of organic unity, organizations do face an on-going struggle around the problem of assimilation, or in systems terms, the question of integration. The literature on strategic communication for instance argues that corporate identity is essential to effective functioning and that "a corporate identity program must be seen as a part of the process by which the corporation explains and differentiates itself " (Selame, 1997, pp.12-18). While essential for organizational functioning, corporate identity does not emerge automatically. Rather, corporate vision, mission and identity are developed as part of an elaborate management intervention program (see e.g. Senge, 1990; Senge, Ross, Smith, Roberts, & Kleiner, 1994; Emery & Purser, 1996; Weisbord, 1987; Schwartz, 1991; Porras, 1987; Watkins & Marsick, 1996).

Management attempts to forge organizational integration and identity often rest on psychological assumptions regarding people's need for membership in socio-cultural systems. Thus, Gharajedaghi (1999) states: "Effective membership in a multi-minded system requires a role, a sense of belonging, and a commitment to participate in creating the group's future so much that rolelessness is the major obstruction to integrating a social system." ( p. 66) In addition, the social organization must "persuade" members that the good of the organization corresponds to the good of the individual. This "exchange system" is coupled with a "threat" system through which behaviors antagonistic to the system are avoided (Gharajedaghi 1999, p.67). As with all systems conceptions, the needs and interests of the "collective" always come first.

Ideally, the "integration" process in a multi-minded system involves bringing together members who can effectively operate as individual units, while at the same time defining themselves as "responsible members of a coherent whole with a collective choice" (Gharajedaghi 1999, p. 67). How members are supposed to be 'persuaded' to find the congruencies between organizational needs and individual needs can be found in any standard organization behavior text. In a lengthy discussion of "soft systems" approaches to organizational problems, for instance, Cavaleri & Obloj (1993, pp. 129-155) discuss the "integration" problem in terms of the need for developing common world views, participation in interactive planning processes, and engaging in a "dialectical" process in which competing beliefs are exposed and challenged with alternative explanation systems (see also Worley, Hitchin, & Ross, 1996; Anderson, 2000). They admit that despite attempts for openness and participation, such methods for creating a common world view do not address "the political and social factors that may inhibit modeling and debate" (p.147). However, these factors are treated as nothing more than problematic afterthoughts, and they move on to praise the general usefulness of soft systems methods and the opportunities offered by models of organizational learning based on social psychology, such as organizational development (OD) (Cavaleri & Obloj, 1993, p.147).

Organizations can also employ cultural strategies as a means for constructing consensual interpretations of system values and needs (see Cavaleri & Obloj 1993, p. 264-283; Trice & Beyers, 1993). The cultural approach focuses on the symbolic, emotional and aesthetic meanings organizations hold for multiple constituencies (Schultz & Hatch, 1997), suggesting that collective action and common interpretation emerges out of a unified cultural construction of organizational identity. Morgan describes management's use of culture as a means for transforming organizational values and world views as a potentially dangerous trend, "developing the art of management into a process of ideological control or what is sometimes described as 'values engineering' ." (1997, p.150).

Rationality is a key element of this process. In StarTrek, the Borg collective is ruled by rational thought, leading Seven of Nine to repeatedly note that emotion, individual interest, conflict and doubt are "irrelevant"! In the discussion of system-individual relations, rationality plays a similar role. The task of finding organizational consensus is seen as a collective exercise in rational decision making. If members are taught the skills and techniques needed for making rational decisions, or, in the cultural version, if they are provided with the appropriate meaning constructs, they will then "rationally" discover that what is good for the system is also good for the individual members. The objective here is to establish the basis for a "functional unity" in which all parts are interdependent, working with and for each other, and attempting to maintain organizational homeostasis. Actions and behaviors that are considered to be dysfunctional" are treated as pathologies. Order, coordination and control are dominant themes.

### **The Fragility of Membership**

To the Borg collective, not only are emotions irrelevant, so is individuality. The Borg assimilation process takes all useful knowledge, energy, and technology from the conquered species, and merges it into the "collective". Once assimilated, all recollection of life as an individual/species is erased and replaced with the Borg culture and ideology. The individual's goal is to add to the collective's quest for effectiveness, efficiency, and expansion. If drones are damaged beyond repair, they are discarded so as not to drain the energy from the system.

Systems theory is obviously not blatantly expansionist or dominating like the Borg. However, we do find parallels in its conception of system/individual membership relationships. Organizational members usually identify themselves as human beings with individual feelings,

hopes, and dreams, who happen to be working in this or that organization in order to make a living. But for the organization, labor is seen as a “resource”, a factor of production to be manipulated and mixed with other factors (land, capital, technology, information, etc.), in order to obtain the best chances for productivity, and ultimately profit maximization.

Membership in the organization is thus determined primarily according to the prevailing needs and interests of the larger system. Unless otherwise restricted, system needs will always override the needs and interests of the individual. Employment relations are temporary and contractually based, with limited rights on the part of the individual. And, as far as the “collective” is concerned, any factors not contributing directly to the effectiveness of the whole are “irrelevant”. In the OD literature, for instance, this is seen most clearly when consultants are faced with the need to demonstrate the contribution of quality of life interventions to the “bottom line”. In the strategic management literature, we clearly see the dominance of the whole over the parts when it comes to such strategic decisions as downsizing or relocation which more often than not result in the “disposal” of employees.

### **Conflict, Power, and Individuality inside the Collective**

In spite of their considerable power and adaptive capabilities, the Borg do have one weakness. When one of StarTrek Federation's ships found a deserted Borg, nursed him back to health, gave him an individual identity-“Hugh”-, and sent him back into the collective, the introduction of an individual, independent voice caused major disruptions in the Borg system, eventually resulting in Hugh’s expulsion from the system. While systems theory at some level does recognize the existence of individual voices, the system's assumed need for harmonious functioning has always generated a “management” perspective on conflict. In this perspective, conflict is seen as symptomatic of some system malfunctioning, structural, cultural or otherwise. Even in political systems theory, which acknowledges that conflict may be a permanent rather than a temporary feature of organizations, conflict is seen as a process that must be managed, directed and contained.

Much of the systems literature on conflict management focuses on the management of conflict interactions, and includes prescriptive approaches to contain, resolve or eliminate the conflict (for reviews, see Gharajedaghi, 1999; Rahim, 1997, 2000). Rationality continues to dominate much of this perspective, in that both the system and its members are expected to be capable of defining their interests and differences in terms of the rationally defined and determined “good” of the system.

How conflict is defined is of course highly important. In a systems perspective, labor-management problems tend to be defined as communication failures, social psychology issues, personality incompatibilities, problem solving deficiencies, etc., rather than as being based on non-compatible interests, power struggles, politics, inequality, or injustice. To choose the latter naturally would require a reconsideration of the organic unity of the system. Furthermore, it would require introducing the concept of power into the system, something that is and always has been rather alien to systems theory. Conceptualizing the system as a unified entity with a common purpose in fact eliminates the need to consider power relations, since the system is internally controlled by its own functions and structures.

Given interactional definitions of conflict, systems theory's emphasis on behavioral and psychological approaches to conflict management is understandable, as is its emphasis on processes of organizational integration. If conflict still becomes problematic, organizational systems theory suggests a redesign of the system and/or the elimination of problematic members (a common measure used by the Borg in cases of “damaged drones”), positions or processes.

Alternatively, the organization may choose a more favorable environment with different labor relationships and different legal and governmental measures. This raises the last factor of this portion of the discussion, namely the system and its context.

### **The Borg in the Galaxy**

As noted earlier, the Borg collective seeks to bring a higher form of life, order and efficiency to the galaxy. In doing so, they are rather oblivious of any factors outside of their own functioning and interests. In fact, on those rare occasions when outsiders "beam into" the Borg collective, they are not even so much as glanced at by Borg drones unless and until they cause a disruption in their functioning, appearing either as a threat to the system, or as an opportunity for further growth and development.

Systems theory does suggest greater attentiveness to the environment than the Borg does. Much is written for example on the need for organizations to consider their environments in order to determine threats and opportunities, meet their needs, and appropriately arrange their internal structure and technology to enhance productivity in different environments. Also we find extensive literature on ways that organizations can and should position themselves in different environments through selecting strategy, product, and culture in order to ensure survival. Finally, we find research on how they can develop relationships to negotiate environmental dependencies and avoid external control. In actual practice, however, the environmental gaze of organizational systems has little to do with a meaningful, constructive and accountable relationship with the environment. Like the Borg, the organization's relationship with the environment is often projective, instrumentalist, self-interested and egocentric.

### **Outside the Borg Cube: A "Federation" Perspective on Organizational Systems**

In the previous section, we discussed the "internal" systems view on organizations, stressing both the assumption and actual construction of organizational systems as unified collective entities. In discussing the external view on systems theory, we will draw on critical theory for our basic perspective. Critical theory of course spans a wide range of theoretical positions and traditions. While varied in focus, interest and methods, they hold in common a commitment to critique, specifically the idea that "(t)he function of criticism ... is to help us understand how reified social and organizational processes often place arbitrary limits and constraints on human freedom and to enable us to consciously reshape our lives" (Prasad & Cavanaugh, 1997, p. 310; see also Hoy & McCarthy, 1994, Deetz, 1992).

Central in our discussion will be the development of a critical understanding of organizational identity production. While systems theory views organizational identity as a given, legitimate(d) construct, critical analysis problematizes this construction by examining the contexts and conditions of its production. It explores the parties, interests and discourses that are included and excluded in the production of organizational identity, the ideological processes by which this construction is created and maintained, and the role of values and ethics in this process. An additional concern will be the identification of alternative discourses or organizational images and the conditions under which alternative constructions can be expressed. This includes an exploration of internal as well as external organizational relations, economic interest formulations and political contexts, as well as an examination of the possibility of an alternative ethics.

### **The Borg Identity as Ideological Construction**

To members of the StarTrek Federation, the Borg appear as an oppressive, imperialistic

and mechanistic entity that subsumes all individual life and identity. Borg drones neither know nor desire any individuality, interests or choices beyond those of the collective. While contemporary organizations may not appear Borg-like to the casual viewer, they carry many of the same characteristics. From a critical perspective, organizations assimilate "independent units" into a dominant social, political and ideological context. And while the social construction of the organization may actively deny those relations of domination, and like the Borg, may present itself as a collective attempt at cooperation and enhancement of the galaxy, the reality of ideological domination still exists. In fact, many of the StarTrek episodes surrounding the "re-awakening" of Seven's human identity can be seen as ideological struggles, revolving around her ability to break through the "false consciousness" of Borg existence.

Modern social and systems thinking about organizations rarely questions the notion of the organization as an independent entity, with its own, justified and taken-for-granted needs. A particular organization's identity does not need to address or explain issues of organizational ownership, profit distribution, organizational hierarchy, or arbitrary decision-making since all of these issues and more are already assumed in our common construction of organizations (cf. Kersten, 1994; Kersten & Sidky, 1997). In that sense, like the Borg collective, they are culturally and ideologically uncontested issues. In fact, when we ask students in our classes to re-conceptualize organizations in forms that do not include those basic assumptions, they are often at a loss to come up with any alternative images, demonstrating the extent to which the political-economic reality ideologically protects its continued existence and maintenance

From a critical perspective, the organizational identity fulfills an ideological control function by shaping our consciousness, our sense of reality, morality and possibility, thereby creating a particular version of the world and excluding others (Therborn, 1980; Hardy & Clegg, 1996). Like the Borg, it is through organizational identity constructions that organizational members learn "what is real" in the organization. Organizational identity specifies who we are as a collective entity, our purpose and mission, the reality "out there", our essential nature and contribution as employees, our collective and harmonious existence as an organization and the way in which we all depend on each other. The organizational identity also specifies in Borg terms, what is and is not "relevant". It provides a set of values and norms, including ethical prescriptions for behavior but also more implicit moral images about the importance of work, dedication, loyalty, and commitment. Finally the identity tells us what can and cannot be: what are realistic and non-realistic expectations of the collective and of the future. Pettigrew (1977) comments on this when he describes the management of meaning in organizations as a political activity, concerned with the creation of legitimacy, noting that it "refers to a process of symbol construction and value use designed both to create legitimacy for one's own demands and to 'de-legitimize the demands of others" (p. 85).

What makes such an identity construction ideological however is not that it provides a certain socially constructed reality. Rather, it is the way in which reality construction functions in relation to existing power structures that makes it ideological. While ideology operates as a subjective, consciousness shaping force, it is linked to objective social structures in two specific ways. First, it is based in material reality. In order for ideology to "work," it must be backed up by the material world through affirmations and sanctions. In Therborn's (1980) terms, ideological specifications must be evidenced in material practices. For the Borg, this means that assimilation attempts must be successful, if their ideological claim of superiority is to maintain itself. With regard to organizational identity, it means that employees must have a sense that the identity is real. Thus, a "service" identity must be *lived* by all or most of the organizational members, it must bring the organization the promised successes, and living up to the organizational identity

must bring rewards to the individual employee (see also Rosen, 1991).

Second, while ideology is based in and reflects material reality, it simultaneously and systematically distorts that reality, thereby supporting and sustaining existing social structures. Thompson (1984) suggests that this is accomplished through 3 related processes: 1) Legitimation, where systems of domination are maintained through cultivated beliefs in their legitimate right to exist; 2) Dissimulation, which acts to conceal, deny, neutralize or misrepresent existing power relations; and 3) Reification, through which existing conditions become perceived as natural, permanent, and independent of human action or participation.

The functioning of ideology is important for our understanding of organizational systems because in the very concept of the organizational system we find reflected three key constructs that accomplish the very legitimation, dissimulation, and reification effects described above, effects that collectively justify its construction and use in the organizational control process. In the case of the Borg, this effect is clear to the viewer who sees an oppressive, self-justifying and dominating system. In the case of organizations, there are more complex factors to consider.

First, the idea of an organizational system constructs the organization as an individual, independent entity with its own rights, processes and interests. This individuation, personification and reification of the organization effectively separates the organization from the political parties that own and control it, thereby obscuring actual relations of domination. In other words, the idea of the organization as a separate, non-political entity neutralizes and hides the political and economic reality of its existence, replacing it with a seemingly neutral construction.

Second, it allows for the construction and legitimization of organizational needs. If the organization is viewed as an independent actor, that actor is also granted the legitimacy of its needs. Thus, harmony, consensus, collective action, productivity, profit, and survival are presented as legitimate needs belonging to the organization as actor, rather than as the expression of the political and economic interests of its owners.

Third, the idea of an organizational identity allows for the ideological construction of shared interests. To the extent that we construct an independent organizational entity/identity, we can also construct that identity to be representing the interests of the whole. Thus, rather than viewing the organization as an expression of specific political and economic interests, the reified organizational actor is now an collectivist entity that expresses and represents the interests of all of its members, accomplishing the dissimulation function described above.

### **Constructing the Borg Drone**

Exploring the foundations and assumptions inherent in systems theory gives us an initial insight into the functioning of ideology in the organizational and theoretical context. But we must also examine the way in which such constructions impact the individual in the organization, as well as the organizational functioning as a whole. Much of the historical debate around the concept of ideology has dealt with a conception of ideology as "false" or "imaginary" as in false consciousness or false needs. The implicit idea was that there is a "true" consciousness and a right way of perceiving the world, and that people merely need to be educated around truth and justice issues. The concept of ideology is used here in a more fundamental sense, namely as the way in which both the individual and the social are produced and reproduced in terms of the existing power relations.

The first step in understanding this view of ideological control is the recognition that the human subject is constructed. Our sense of who we are, our identity, our sense of purpose and value are not given. Rather, they are constituted in and through experience. Experience, in turn, does not exist in a vacuum nor is it neutral: "...experience itself ... (is) thoroughly social and

historical. The human subject is neither singular nor a manifestation of the essential, but a motion which finds its subjectivity already inscribed as it takes its place in the already socially, historically structured world." (Deetz, 1992, p. 18). To the extent that the constitutive experience takes place in a world that is already structured with certain meanings and relationships, certain power differences and advantages, this world is reproduced in the subject, in the experience, in the perception, in the very person him/herself. The politics of existing institutional practices thus "exist not in the competition of experiences but already in the experience at hand, the person and perception produced" (Deetz, 1992, p. 20).

The primary impact of ideology, therefore, is in the formation and transformation of human subjectivity (Therborn, 1980). It operates to create not merely a certain point of view, but a way of existing, a way of being-in-the-world. It creates the subject not as any possible subject but as a subject in that world with the ideas, skills and qualifications for that world, i.e. as a Borg drone or as an employee. Therborn's (1980) concept of "subject-qualification" is a particularly useful one here, in that it describes how individuals are "simultaneously subjected to a particular order that favors and allows certain drives and capacities" and "become qualified to take up and perform the repertoire of roles given in the society to which they are born" (p. 19).

Applying this to organizational systems and organizational identity, we begin to see a whole other set of ideological functions operating. First is the construction of the individual as an "organizational member," with "certain drives and capacities." Unlike Borg assimilation, essential components of this construction often occur prior to hiring, in that the hegemonic structure of society prepares the individual to take up his/her proper role as an "employee". The acceptance of hierarchy, rules and arbitrary authority, conforming the mind and the body to mechanized and routinized organizational structures and schedules, the ability to accept external control are all necessary requirements for being an "employee." Yet, it is usually prior experiences in the family, the educational system and the church that have already produced in the person the constructs necessary to subject-qualify him/her as an employee.

Second, upon entering the organization the individual becomes constructed in ways that are consistent with the particular organizational identity, beginning with the hiring process. Research on employee selection suggests that selection is not a fully rational process. People are often selected based on "fit": a perception that they are "our kind of people" rather than the particular skills or talents they may bring to the job. Once they are selected, becoming a part of the organizational identity further transforms the person's sense of who and what they are. Organizational culture and identity are key factors in this process because the successful employee must in fact integrate the organizational identity into his/her sense of self. Most U.S. organizations expect their employees to work, live, and breathe the company ethos, on and off the job and there is an increasingly diminishing boundary between work and home life, company and personal identity, work style and personality.

Using again the example of service and organizational identity, individual employees are expected to make service a part of their own identity, such that they perceive themselves as service providers, are always looking for different ways to offer service whether or not this is directly related to the job, and even look the part, both in terms of dress and demeanor. Van Maanen's (1991) article on Disneyland offers a wonderful account of the ways in which this organization commodifies behavior, appearance and emotion as a condition of organizational membership. Along the same lines, organizations like McDonalds prescribe speech, facial expression, clothing and interaction, right alongside job-related expectations. Similarly, many organizations in the U.S. will state that they expect their employees to be "team players," an interesting construct that usually combines expectations of conformity, group work, cheerfulness

and a willingness to go above and beyond the call of duty, again an interesting identity construction expectation (Jackall, 1988).

A third important element of individual identity construction has to do with the individual/ organization relationship, where constructing oneself as an organizational employee also means being able and willing to give up one's own interest, to construct the organization as having superior interests and/or to see the individual interests as coinciding with those of the organization. Rosen (1991) provides an interesting account of this in his discussion of a U.S. advertising agency, where all cultural forms indicated that as long as the employees were "good" and "loyal", "(t)he interests of all are realized in a situation of mutual benefit" (p. 85). Rosen also gives another interesting example of individual vs. organizational interests by discussing the common U.S. practice of centralized forced giving, where employees are directed, coerced or shamed into donating to institutionalized corporate charities to meet the "corporate" donation goal.

Rationality, or more specifically, what is constructed as organizational rationality becomes a key component of any such identity constructions in that it requires the organizational member to substitute individual interests for organizational interests, individual thought for company thought, and personal emotions and feelings for organizational constructions of objectivity and impartiality. The limits and implications of this have been explored in depth by critical theorists who point to rationality and non-emotionality as ideological constructs in and of themselves (see e.g. Alvesson, 1984; Shrivastava, Mittroff, & Alvesson, 1987; Fineman, 1993)

Finally, ideology and identity constructions also have consequences for the structures and relations of power. Inside the Borg collective, power structures are invisible, embedded as they are in the collective embracing of Borg identity and consciousness. Even the "hive queen" when she appears is presented as an "assembled in the moment", temporary personification of the collective, rather than as the embodiment of power. In contemporary organizations, power has become similarly invisible. Organizational rules and structures have become embedded in the collective, seemingly consensual corporate and individual identity and compliance appears as a voluntarily chosen activity. It is in this move that we see the ultimate force of ideology, operating in the simultaneous obscuring and enhancing of systems of power and control:

The pervasiveness of power relations makes them difficult to resist. Prevailing discourses are experienced as fact, which makes alternatives difficult to conceive of, let alone enact. Indeed, resistance often serves only to reinforce the existing systems of power. In addition, the production of identity confers a positive experience on the individual, which leads to the reproduction of the power relations, not their transformation. Finally, while all actors are, to some extent, captured in the prevailing web of power relations, those advantaged by it are, usually, in the best position to develop strategies (such as outflanking, managing meaning, manipulating culture, choosing technology, etc.) that will protect their position" (Hardy & Clegg, p. 635).

### **WE are the Borg – Choosing Identity?**

The true power of ideology lies in its hidden operation. If ideologies make people construct the world and themselves in a certain way, that process is not one that is open to easy examination, especially not if that construction is reified, treated as autonomous, given and real. But there is another very essential component to the ideological process and that is the way in which the subject views his/her place in the world, or rather, the process of his/her construction. Instead of recognizing the self and the experience as constructed, ideologically produced

creations, both are treated as given and autonomous. Individuals "forget" the discourses that constructed them and see themselves as originating and controlling meaning:

"The crucial point... is that in taking on a subject position, the individual assumes that she is the author of the ideology or discourse which she is speaking. She speaks or thinks as if she were in control of meaning. She 'imagines' that she is the type of subject which humanism proposes -rational, unified, the source rather than the effect of language. It is the imaginary quality of the individual's identification with a subject position which gives it so much psychological and emotional force" (Weedon, 1987, p. 31).

Thus, rather than recognizing one's own identity as ideologically constructed and hence, already politically situated and determined, the individual assumes that s/he has free choice in developing political alignment or ideas and is capable of a rational assessment of his/her interests.

In the Borg collective, this appears very strongly. Borg drones that are separated from the collective see themselves as *choosing* to return. It also plays an active part in the way particularly U.S. employees perceive their relationship with the organization. The general perception is that one freely chooses one's organization, one's occupation and one's place in the organization, and that of course, one is free to leave if one does not like what is there. This is a construction that leaves the organization free of blame and criticism, does not allow for the possibility of organizational change (other than through individual departure) and also has the effect of disallowing negative sentiments on the part of the individual. These factors further inhibit the possibility of critical examination of ideological constructs such as organizational identity, a process that is already hampered by the various legitimating, reifying and rationalizing moves described earlier. In the Borg world, whatever dysfunctions exist are attributed to external contamination or technical problems, or both, and dealt with at the level of the individual drone. The collective however remains functional, efficient, and rational in its quest for system perfection. And the strength of both the collective itself and the collective identity is reflected in Seven of Nine's repeated and ongoing drive to rejoin, and reaffirm her "true" identity: "We ARE Borg!"

The other side of the story is seen when we look at the actual individual experience of being eliminated from the organizational collective through downsizing for instance. In studying people's downsizing experiences, Stein (1997) notes a predominance of images such as "sudden death," "Pearl Harbor," "Black Friday," "funerals," and the "Holocaust," suggesting that:

Downsizing is not primarily about economic competition and survival. Its hardened heart is about death, the dominion and triumph of death. It is about endless cycles of sacrifice to keep "the organization" alive, cleansed, profitable, and competitive, while consuming, one way or another, everyone in its midst. There is the unmistakable stench of burning human flesh in the air (p. 248).

### **The Borg in the Galaxy Revisited**

Looking finally at the issue of the organizational environment, neither the Borg nor systems theorists really consider organizational context, save for the purpose of meeting internal needs for growth and survival. Seen from a critical perspective, the modern world system, the context in which organizational systems exists, is defined in terms of the hegemonic position of global capitalism. Modern organizations are part of this context in terms of structure, dynamics and history, and operate within its defined parameters. From this perspective, system growth and

development are determined according to the logic and needs of the larger capitalist context. The imperative of profit maximization through increasing efficiency and productivity establishes “purpose,” or at least the limitations around which organizational purpose can be defined.

Modern system thinking accepts this context as either given or unimportant, making it possible to talk about participation, empowerment, conflict management, and organizational consensus without considering larger issues of power and domination. These issues, however, create fundamental contradictions in organizational systems, seriously affecting the usefulness of well-intentioned efforts in constructing open, participatory systems in which the individual can find a meaningful place. For instance, the profit maximization needs of the system and the needs of organizational members to make a decent living and lead a quality life are not necessarily compatible, especially in light of the history, structure and dynamics of power distribution, inside the organization and within the global capitalist context. The fragility of this relationship is revealed when changing situations offer better prospects to either of the parties.

The moment, for example, that an organization feels it can have a better chance at profit maximization it can terminate thousands of employees, even those with proven histories of company loyalty and productivity. Similarly, organization members may leave if they find better conditions for making a living elsewhere, despite company “investment” in them as human resources.

The nature and direction of labor-management relations are determined as a product of the ongoing struggle between the needs of capital and the needs of labor. This struggle also includes the state, direction, and nature of corporate-society relations. Inside modern organizations this struggle is in large part determined by management’s right to hire and fire at will. In some countries, this power is limited by law regarding issues of discrimination and/or laws protecting the rights of labor. In other countries, especially the new dominions of the so-called global economy, such limitations are minimal. In this way, the capitalist organization, by authority of private property rights, can choose to design organizational system in whichever way it desires, regardless of the needs or wishes of its members. It can take on mechanistic, organic, or even multi-minded identities and structures based on its determination of the best path to greater profit maximization.

### **Conclusion: Systems Thinking and Hopes for the Future**

So far this paper examined the appeals and problems associated with the application of systems thinking to organizations. From an internal Borg perspective, systems theory presents a view of organizations as harmonious, interconnected and highly adaptable, emphasizing the interconnected, communicative and consensual nature of organizational relations. Yet, an external perspective shows the possibility of organizational systems applications as oppressive, a-contextual, and highly ideological. Which vision is real? Will we all become technologically/culturally-enhanced members in effective learning organizations and live happily ever after? Or alternatively, will we all be assimilated into a frightening world dominated by organizations in pursuit of profit maximization with little or no regard for the consequences of their actions? And in either case, is resistance indeed futile? What really is the future and potential of systems theory?

Gharajedaghi (1999, pp.10-23) discusses the evolution of systems thinking from what he calls “mindless systems” or the mechanistic view, through “unminded systems,” a biological view, to “multiminded systems” or a socio-cultural view. This transition of thought is presented as the “first paradigm shift” regarding the nature of organizations. The “second paradigm shift”

involves the simultaneous transformation of the “nature of inquiry,” a shift that parallels the changing conceptions of the nature of systems.

According to Gharajedaghi (1999, p.11), these shifts include three generations of systems thinking: 1. Operations research; 2. Cybernetics and open systems; and 3. A social model. In the First Generation of systems thinking, exemplified in operations research, a mechanistic and deterministic approach is used to deal with the problems of interdependency. In Second generation thinking, exemplified in cybernetics and open systems thinking, organizational problems involve dual challenges of dealing with interdependency and self-organization in the context of "living systems" (Gharajedaghi, 1999, p. 11). In the Third generation of systems thinking, the problem of organizations is expanded to meet the challenges of interdependency, selforganization and choice in the context of socio-cultural systems. In this last stage, organizations are seen as purposeful living systems, negentropic and capable of selforganization (Gharajedaghi, 1999, p. 16)

This last transformation of systems thinking represents an important advance, in that it considers “socio-cultural” context as important, a feature not found in the other views. Gharajedaghi defines this context in terms a “shared image” of a community: “Incorporating their experiences, beliefs, attitudes, and ideals, it is the ultimate product and reflection of their history and the manifestation of their identity - man creates his culture and his culture creates him” (p. 85).

While context definition is extremely important, it is the particular definition of context that makes third generation systems theory less than adequate in providing meaningful and useful explanations. The major problem from our point of view is the depiction of this “socio-cultural” context as something that just seems to evolve naturally as part of an historical development of a community. This ignores the fact that culture and “history” are parts of a collective project of social reality construction conducted in a context of unequal power relations among members. The instruments used to construct this creation include naked power and coercion, violence, politics, negotiation, and sometimes consensus.

The omission of the inequality context of sociocultural realities begs a number of important questions. Is this omission a product of paradigmatic limitations, which hopefully will evolve into a “fourth generation” of systems thinking? Or is it a part of the ideological presentation of organizational reality intended to obfuscate and distract attention away from issues of inequality, justice, and ethical responsibility? If the first situation prevails, then we can work with intellectual and conceptual shortcomings. And just as there seems to be a “normal” evolutionary progression of thinking from the simplistic assumptions of the mechanistic worldview to a more holistic and dynamic understanding, we can probably expect further improvements in later manifestations of systems thinking which may indeed consider more complex and problematic issues and ideas.

On the other hand, if this depiction of the “socio-cultural” context or environment is determined ideologically, then we have major problems. Systems thinking, theory and application become instruments used for the purpose of advancing the interests of the dominating segments of society, at the expense of everyone else. Here the interests of the “system,” as defined through the ideologically determined version of social and organizational reality, are presented as coinciding and even complimentary to the interests of organizational stakeholders. The management of individual-system relations then involves finding the means to magnify this coincidence and to iron out misunderstandings and miscommunication after which we can continue in our narrow pursuit of organizational efficiency/effectiveness as instruments for greater productivity, and profit maximization.

While we might personally prefer democratic organizations to authoritarian ones, more open organic systems over closed mechanistic ones, and the consideration of people before profits, our critique of current usage of systems thinking is not one of promoting one set of values over another. On the contrary, our critique rests on the way systems thinking is being used in a manner that diminishes its holistic nature. The first and most fundamental way in which this is done is by editing out consideration and awareness of the global capitalist nature of the modern world system and all of its implications. This reduces systems theory's ability to meaningfully deal with the notion of context and systems/context interactions. The second and related way has to do with systems theory's much debated treatment of rational decision models in organizations, and the downplaying if not dismissal of non-rational/irrational components of individual and organizational elements of the process. This too violates fundamental systems beliefs relating to complexity, nonlinearity, and the role of subjectivity in decision making. Finally, by forcing issues of power and conflict into the "managed/manageable" systems conception of organization it cripples systems theory's ability to truly understand and deal with the meaning of conflict and change. Considering the larger political-economic context, then, appears to be an imperative for the development of systems theory. A related factor involves the consideration of issues of ideology, values and ethics.

The critical view of ideology as the "politics of subject constitution and representative practice" (Deetz, 1992, p. 25) focuses attention on an important point. Since all subjects are ideologically produced, it is not really possible to think of anyone as being free of ideology, as somehow capable of rationally or correctly knowing and assessing one's own interests. Consequently, ideological relations between the individual and the world are better described as "arbitrary," unreflective and one-sided than as "false" or untrue. The goal then is not to somehow attain an ideology- or power-free space, but rather to expose the arbitrary nature of dominant ideology and to expose people to competing ideologies or ideas. As Deetz (1992, p. 26) puts it: "The critical importance is, thus, not to get behind discourse to a subject, but to reclaim the conflicts which keep one ideological formation from ruling or becoming treated as self-evident and natural. It is not a more certain/fair/accurate consensus but a more meaningful conflict that is critical."

In the StarTrek Universe, this conflict is expressed in the ideological struggle between the Borg and the Federation. The Federation's quest to "liberate" Seven from her oppressive Borg identity contains an equally oppressive force that seeks to construct her as part of the Federation's "collective." While this new identity of course appears free and morally correct to the viewer, it is no less arbitrary and hardly allows for conflicts and choices that are meaningful in the larger sense. It is exactly this dilemma that poses the real critical challenge to all theorists, namely that of critically assessing the possibly complicitous role of theory in maintaining structures of power and control.

The twentieth century did not only witness the firm establishment of control in the hands of management, and the re-design of technical and social relations to confirm this control. It also witnessed the active participation of the academy in this process. This established "management" as an academic field - an interesting ideological move in itself given the common political commitments of the discipline. It also in many ways has shifted the focus of education, which is increasingly funded by business and as a consequence, now perceives it as its duty to prepare students for the workplace, rather than to train and develop critical minds. Following Habermas (1973) we fully acknowledge the importance and legitimacy of technical and practical interests, in society as well as in the academy, but we would argue that the academy in particular has a moral and ethical responsibility to represent and express the emancipatory

interest. This is especially important when it involves something like systems theory and its application to modern organizations. Here, we believe the academic interest should not necessarily or only be in understanding its nature and advancing its effectiveness as a managerial tool. Rather, the academic interest should also be to question the current understanding and application of systems theory, its ideological uses, its possible dysfunctions and its implications for the development of healthy and humane organizations and people.

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### **Biographical Notes**

Astrid Kersten (Ph.D., 1989, University of Pittsburgh) is Professor of Management at La Roche College in Pittsburgh, Pennsylvania, U.S.A. She has served as Series Editor for Hampton Press and as Reviewer/Editorial Board Member for *Human Communication Research* and *Communication Monographs*. Her research and consulting interests include critical organizational theory, diversity management, organizational neurosis and organizational change. Some of her work has been published in *Journal of Organizational Change Management*, *Communication Yearbook*, *Current Topics in Management*, various edited books and european magazines and journals.

Mohammed H. Sidky (Ph.D., 1987, University of Pittsburgh) is Associate Professor of Business at Point Park College, Pittsburgh, Pennsylvania, U.S.A. His research interests include world systems, political economy, and critical approaches to organizational studies.