

# Polluted Self Reconfiguration In The Cyberera

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## Abstract:

The advent of cybertechnologies has led to radical paradigm shifts in our social, economic, cultural, and psychological conceptualizations. The paper investigates the advent of cyborgs, indeed our transformation into cyborgs, and the impact of this transformation upon identities and face management, which has an important social value since the late modernism. Cyborg is a designation for the inhabitants of the new environment: the cyberspace. They represent manifold boundary pollutions. The idea of cyberspace already marks the fusion of the real with the imagined and the fantastic. This new virtual space is being inhabited with a new kind of actors: intelligent agents. A fusion of animal and machine. The boundary between human and non-human is also being transgressed. The problematic concept of selfhood and the related technologies constitute the subject of this discourse. It is argued that this process of confusion and corruption can be viewed as also a process of breaking down monological communication and totality.

**Keywords:** Cyberera, Cybertechnologies, Self reconfiguration

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## 1. Introduction

The social construction of self in the process of interaction and communication has become a major topic of investigation in recent decades. The Greek word *persona-lity* has a dramatic meaning: the mask we wear as we present us to ourselves and others. However, it is increasingly being appreciated during our times that the face, or at least its perception, actual or not, is not to be regarded as objectively determined and given, but can actively be managed (Goffman, 1959; Nercissians, 2004; Rheingold, 1993). In the existential-phenomenological approach, being presents itself to awareness as a being-in-the-world in which the person and its surrounding environment are regarded as inextricably intertwined one co-constituting the other. An individual develops identity or persona as a function of interaction with others, through an exchange of information that allows for more specific definitions of identity and behavior. The process of establishing social identity, then, becomes closely allied to the concept of the front, which defines the situation for those who observe the performance and acts as means allowing for others to understand the individual on the basis of projected character traits that have culturally perceived meanings. Institutions, such as the family, peer groups, friends, fellow-workers, and the larger society influence human verbal and nonverbal communication. Humans, based on social perceptions that are rooted in their experience, try to act appropriately following social expectations so as to construct a positive identity for themselves. It is natural, then, to expect that the revolutionary changes in the prevailing modes of communication, there will also be paradigmatic shifts in identity construction. Since it is widely held that the transformations in modes of social interaction is largely driven by the very rapid progress registered in information and communication technologies, we can investigate what might be designated as identity technology: the techniques of self presentation and face management in cyberera. The example of personal home pages illustrates the fact that the web should not always be conceptualized as a means for exchanging information; for construction of identities is obviously a more revealing description of the former. It has frequently been noted that individuals have a great deal of control over the construction of their online identities. The cybermedia have drastically altered social interaction by reducing the physical

isolation of various groups and communities and by blurring the lines between public and private spaces. It can be argued that even a virtual space, does not become a community until it is occupied by individuals. However, in a place that has no physicality, occupation must be constructed discursively and can, in more aspects that were possible via past media of communications, be completely imagined. The representation of the interlocutor is the first step towards the collective sense

making, since it brings the producer and the consumer of the message indirectly into an active role in its production and interpretation. It asks the author to adapt to the reader's knowledge, interests, and goals, and conversely, expects the reader to interpret the author's message in the light of the prevailing cultural codes. This study has been dedicated to the investigation of pollution in the contemporary world and starts from the alternative view: perceiving the cyberspace as presenting identities. Thus the problem of identity pollution will constitute the core of the discussions. The next section will elaborate on the notion of cyborgs. The concluding section will analyze the dialectics between pollution and emancipation issues.

## 2. Cyborgs: Cybernetic Organism

The impact of technology driven social transformations has led to a radical shift in the contemporary organization of socioeconomic relations in general, productive activities in particular. No longer is the concept of monolithic, standardized, mass produced, optimized product deemed desirable. Modularization, customer centricity, custom design, adaptability, on the fly recomposability, component reusability, and agility constitute some of the dominant trends in contemporary economy, which is dominated by the new sector of intangible goods, including services and knowledge items. Intelligent parts, which are capable of self-reconfiguring and dynamically collaborating with other entities through the cyberspace are becoming prototypical. These sociocognitively endowed creatures are becoming the new inhabitants of the cyberspace (Haraway, 1991; Kollock and Smith, 1998; Mann, 2001; Laws, Taleb-Bendiab, and Wade, 2001; Nercissians, 2005). The ultimate aim is to enable the dynamic, intelligent and autonomous composition of entities to achieve user and business goals, thereby creating compound services to address changing needs. The term *holon* (*holos* = whole and *on* = part) has been proposed to describe the social and biological tendencies of contemporary recomposable systems. This term reflects the tendencies of such systems to act as autonomous entities, yet cooperating to form apparently self-organising hierarchies of subsystems, such as the cells, tissues, organs in biology. Our own interaction in a networked world where we have created various intelligent tools that are essentially extensions of ourselves, vastly increasing our psychosomatically constrained capabilities, has created a different sense of ourselves. In a holonic multi-agent system, autonomous agents may join others to form, reconfigure, or leave a holarchy, an organized community of humans, robots, workflow, software, and other natural and artificial agents to achieve specific goals through organic division of activities. Our psychic lives are also profoundly affected by what we experience online. As we augment memory, cognition



and sensation through computer networks, biotechnology and genetic engineering, and nanotechnology, we bring new cyborg selves into existence. A cyborg is a cybernetic organism, a hybrid of machine and organism, a creature of social reality as well as a creature of fiction. Cyborg is a kind of disassembled and reassembled, postmodern collective and personal self. The ubiquity and invisibility of cyborgs is precisely why these sunshine-belt machines are so effective. These new inhabitants of the cyberspace are largely intangible both politically and materially. They are about consciousness, or its simulation. The most obvious problems related to pollution in cyberspace can thus be subdivided into two categories: whether the sudden and rapid colonization of cyberspace will not amount to littering, rendering the task of community construction increasingly difficult; and whether the vast possibilities provided by virtuality will not lead to prevalence of deceptive identities. The issue of the counterfeit hinges on appearance, which has now been radically transformed by technologies of simulation. But upon closer analysis other problems related to pollution come to fore. With so many modular segments to couple together into a coherent life, with rapidly changing configurations, how will cyborgs maintain a coherent self that includes and transcends all of those modules? With the distinction between natural and artificial nearly gone, and the immensely expanded possibilities for inherited long-term memory storage, we might well confound the ability to link seamlessly the diverse experiences of multiple selves over the span of many careers, families, and identities. The main pollution related to identities thus becomes the pollution of boundaries. Construction of self concept involves boundary making. Pollution of boundaries confuses the concepts of sameness and otherness. Differance is a starting point of semiotics and signification. Its pollution undermines uniformity in sense making. Cyborgs especially involve boundary pollutions. Distinctions between the real and the imagined, nature and culture, physical and organic, living and inanimate, objective and subjective, human and non-human, male and female, old and young, are all problematic now. Our entering the cybernetic world poses acute identity crisis threatening to undermine rationality, that ultimate end of modernity.

### 3. Conclusion

Pollution has always been viewed as a result of one-sidedness, carelessness, and selfishness. In the final analysis, it reflects modes of hegemony and dominance. The advent of cyberera, it has been argued, has led to profound shifts in power relations. In the cybernetic era, symbols as the main tools of representation become the main tools for reproducing power relations (Haraway, 1991; Lucas, and Nercissians, 2005). Writing, it has been conjectured, is pre-eminently the technology of cyborgs, etched surfaces of the late twentieth century. Cyborg politics

is the struggle for language and the struggle against perfect communication, against the one code that translates all meaning perfectly. The machine is no longer an object to be animated, worshipped, and dominated. The machine is us, our processes, an aspect of our embodiment. We can be responsible for machines, they do not dominate or threaten us. We are also responsible for boundaries: we are they. Cyborg imagery can suggest a way out of the maze of dualisms in which we have explained our bodies and our tools to ourselves. This is a dream not of a common language, but of a powerful infidel heteroglossia. The new era can be perceived as being about lived social and bodily realities in which people are not afraid of their joint kinship with animals and machines, not afraid of permanently partial identities and contradictory standpoints. The pollution in boundaries and dualisms can at the same time be the breaking down of monological communication and totality. To survive, we must be in continual search for more beneficial bondings, constantly changing social structures in order to find more fruitful structures. As cyborgs, we are in perpetual outlook to leverage entities that assist us to mark the cyberworld, which marked us as other.

### References

- [1] E. Goffman, *The Presentation of Self in Everyday Life*. Garden City, New York: Doubleday, 1959.
- [2] D. Haraway, "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century," in *Simians, Cyborgs and Women: The Reinvention of Nature*. New York; Routledge, 1991, 149-181.
- [3] P. Kollock, and Smith M. (eds). *Communities in Cyberspace*. London: Routledge 1998
- [4] A.G. Laws, A. Taleb-Bendiab, S.J. Wade, "Towards A Viable Reference Architecture For Multi-Agent Supported Holonic Manufacturing Systems". *Journal of Applied Systems Studies* 2 (1) (2001) 61-81.
- [5] C. Lucas, and E. Nercissians, "Bio- Socio-Psychologically Motivated Computing and Language: Trends and Outlook". 2<sup>nd</sup> Conference on Linguistics, Neural Systems, and Artificial Intelligence, Ferdowsi University, Mashad: February 15- 17, 2005.
- [6] S. Mann, *Cyborg: Digital Destiny and Human Possibility in the Age of the Wearable Computer*. Doubleday, Canada: Barnes & Noble 2001
- [7] E. Nercissians, "Culture, Identity, and Development in Cyber Era". The 3<sup>rd</sup> International Conference on

the Anthropological Study of Iran and Caucasus: Culture and Technology. UNESCO Hall. Tehran, Iran: March 3, 2004.

- [8] E. Nercissians, "Anthropology and Information Technology". Invited Lecture, GIAN International Miniworkshop on Information Technology: Future Trends and Socio- Cultural Impact, University of Tehran, Tehran: February 26- 28, 2005.
- [9] H. Rheingold,. The Virtual Community: Homesteading on the Electronic Frontier. MA: Addison-Wesley Pub. Co. 1993.

