

NAVIGATING GLOBALIZATION THROUGH INFO-DESIGN, AN ALTERNATIVE APPROACH TO UNDERSTANDING CYBERCULTURE

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Summary

Since the beginning of the 1980s, an extraordinary process of technological change and cultural innovation has been leaving its mark on practically every aspect of private and public life in Western society, resulting in what some have referred to as a network society. *Globalization* implies international interdependence across nations, providing potentially major opportunities and challenges for the future of societies and economies. There is a major need for more effective cooperation in order to cope with the challenges that result from this. The *Internet* can be seen as bringing about a new *culture of design*, originated not in science but in engineering, and yet to enter academic discussions fully. Rather than seeing technology and globalization as neutral instruments, the *design perspective* suggests they are proposing a *new rationality* and an ambitious yet tangible opportunity for *change*, resting on a new *knowledge economy* and on *culture-based local identities*.

This contribution has two goals: first, to visualize the Internet as a public space for cultural production, and a novel medium for understanding and organizing collectively constructed knowledge; second, to discuss on how new actors—women, children, developing communities, indigenous people, and other social movements—can point their way toward a new paradigm of globalization in their creative appropriation of the

information and communication technology (ICT), in ways that both defend human nature and transform cultural identities (see *The Internet and Political Economy*).

The whole world is now looking for new approaches to community problem-solving, as many of the old institutions (including the church, government, business, academia, and the science and technology establishment) and their traditional methods are being threatened by new—and old—problems that are becoming global problems. At the same time, it is becoming clear that the specialist or expert model is obsolete, and new approaches must be inclusive, discursive, participatory, and community-oriented (see *The Challenges of Building “Real” and “Virtual” Communities in the Twenty-first Century*). Hence the need to formulate new conceptual tools, such as *Info-design*, a collaborative approach to understanding the ICT that could help us be sensitive to the current changes and develop a keen sense of their historical specificity.

1. Introduction

There have been few times in history when one could say that “the future is already here.” Since the beginning of the 1980s, an extraordinary process of technological change and cultural innovation has been leaving its mark on practically every aspect of private and public life in Western society, resulting in what Manuel Castells has referred to as a network society. Like the printing press in the fifteenth century and the steam engine in the nineteenth, this period is shaped and characterized by an *industrial microelectronics revolution* that at the same time is destabilizing modern notions of labor, entertainment, and language; with the concomitant reorganization of social, biological, and even emotional life. The explosion of new technologies, the formation of geopolitical blocks, and novel forms of digitalized planetary connectivity such as the Internet are fostering novel scenarios and world orders, calling for alternative approaches.

Globalization implies international interdependence across nations, providing potentially major opportunities and challenges for the future of societies and economies. On the one hand, it has many potentially beneficial attributes such as unprecedented expansion of international trade throughout the world, improved health care, and creation of employment opportunities. On the other hand, it dramatically increases inequity between regions, and impoverishes many parts of the world. Moreover, it poses threats to the existing diverse cultures, beliefs, and values, primarily as the current process of globalization is techno-economic based. Economic crisis and a possible world depression as the finance economies burst are likely. There is a major need for more effective cooperation in order to cope with the challenges that result from this. Unless globalization also includes the globalization of labor (that is, the creation of job opportunities and the free movement of labor worldwide) and the globalization of cultures (that is, the creation of multicultural dialogue, and not the hegemony of one particular worldview), disaster looms ahead.

The *Internet* can be seen as bringing about a new *culture of design*, originated not in science but in engineering, and yet to enter academic discussions fully. Rather than seeing technology and globalization as neutral instruments, the *design perspective* suggests they are proposing a *new rationality* and an ambitious yet tangible opportunity

for *change*, resting on a new *knowledge economy* and on *culture-based local identities*. Thus, any technology represents a cultural invention, in the sense that it emerges out of particular social conditions, and in turn helps to create new ways of living life and facing challenges. We must interpret in this light, for instance, the new international community and decentralized managerial networks through which a “global” or “universal” logic find its meaning.

This chapter has two aims: first, to visualize the Internet as a public space for cultural production, and a novel medium for understanding and organizing collectively constructed knowledge; and second, to discuss how new actors—women, children, developing communities, indigenous people, and other social movements—can chart their way towards a new paradigm of globalization in their creative appropriation of the information and communication technology (ICT), in ways that both defend human nature and transform cultural identities.

The whole world is now looking for new approaches to community problem-solving, as many of the old institutions (including the church, government, business, academia, and the science and technology establishment) and their traditional methods are being threatened by new—and old—problems that are becoming global problems. At the same time, it is becoming clear that the specialist or expert model is obsolete, and new approaches must be inclusive, discursive, participatory, and community-oriented.

The design perspective looks at the *collaborative* potential of the ICT as a valuable tool for developing countries, where sustainable development does not have to do with owning new high-technology but with addressing “South” communication needs and problems. If we look at any human situation, we will see that social problems arise in the domain of *relations*, as emotional conflicts in the intercrossing of contradictory desires, intentions, aspirations, and fears. Because of this, their resolution is not possible only through technological solutions, which also lead to a new set of problems. Hence the need to formulate new conceptual tools, such as *Info-design*, an interdisciplinary approach to understanding the ICT, that could help us be sensitive to the current changes and develop a keen sense of their historical specificity.

2. A Culture of Design

There are different positions as to what humans should be called. One is *Homo faber*. Another, favored by thinkers such as Gregory Bateson, is “*Homo metaphoricus*.” This understanding emphasizes the importance of *metaphor* and the *human nature of design*. The only way to understand something new, to start investigating something, or to bridge the unknown is through metaphors, mental maps and concepts of what we already know (taking care not to mistake the map for the territory!). For example, we used to understand the brain as a plumbing system, then a telephone, and later a computer. Now we understand it as a hologram or a parallel processor. In this way, our latest technology becomes the new metaphor; like the Internet and the World Wide Web, that can wake everyone up to the fact that humans are part of a vast life system, whose energy lies in a cooperative, systemic, holistic way of doing things.

To talk about *design*, metaphors are useful, for in a sense design is thinking about

something that does not exist yet. The *future* is, metaphorically, the space and time where design makes sense. Although the future is influenced by the past and the present, it is not determined by what has been or what it is. It remains open to our individually and collectively purposeful inventions, accomplished by design (see *Epistemology and Methodology in the Study of the Future*).

In a broad sense, *design* is understood as a potentiality that characterizes each human being, and which manifests itself in the invention of new social practices, be they products, services, or trends. It is a synthesis of *creativity* (imagining new things) and *innovation* (bringing those new things into existence) within the human-made world and its cultural activity systems. From this perspective, we are all designers, as we continuously make decisions that shape our futures and those of others. We choose our everyday reality: where and how we live, how we use our time and energy, what we value and whom we care about, how we earn and how we spend. All these choices involve dimensions of design. People learn to be designers by thinking and doing.

The *epistemology of design* can be articulated around seven principles. First, design is a domain that can become manifest in any area of knowledge and human action. Second, it is oriented towards the future. Third, it introduces something new in the world, and is thus linked to innovation. Fourth, it is connected to body and space, particularly the cognitive space. Fifth, design is oriented towards effective action. Sixth, it is linguistically anchored in a field of values and judgments. Seventh, it establishes an articulation between user and artifact; in this way, the domain of design is the domain of the interface.

The interface constitutes the designer's central domain of attention; it is through the interface design that the designer articulates a space of action for the user. In a sense, design outlines the sociocultural effectivity of a community of clients, encompassing this community cultural lifestyle and technological media. This is why design is not neutral. Powerful political and economic forces mold it; and it evolves and is adopted, because it fits the need of a particular community of people with shared values and circumstances.

Design, as an *interdiscipline*, thus finds its primary space in the close relation between technology and society. The *design process* is part of a complex wave of technological change, which is intimately related to social change. It is *both* a process and an artifact. In the design process there emerges an understanding of possibilities that cannot be predetermined beforehand. As an *artifact*, design serves human purposes through the creation of functional assemblies or systems that become part of people's lives.

3. Technology, Globalization, and the New World Order

New computer, information, and biological technologies are the pivotal element in the current profound transformation. It is the rise of a new *technological paradigm*, and not social, economic, or political changes per se. This paradigm was in gestation since the development of integrated circuits in the 1950s and microprocessors in the 1970s, and has seen a progressive expansion into even more powerful interacting networks at a global scale. This expansion has prompted a dramatic restructuring of capital and

society worldwide. We may thus understand *globalization* as a dynamic and conflictive period marked by new original media, which are bringing about a fundamental transformation in the structure of modern society, from the vantage points of biology, language, history, and culture.

As Manuel Castells has explained, the *information technology paradigm* has a series of *novel features*: it applies information not only to new products but to knowledge and information generation themselves, creating a cumulative feedback loop between innovation and its uses; it is pervasive in its effects, affecting practically all domains of human activity; it has a logic toward ever more complex networks of interaction; it is flexible in its ability to ceaselessly reconfigure itself; and it links various types of technology—from the electronic to the biological—into a highly integrated system.

As far as the economy is concerned, information capitalism can be best described as a *knowledge economy*, an economy with the capacity to work as a unit in *real time* and on a *planetary scale* in which transnational capital is managed in globally integrated financial markets. Labor becomes a global resource; science, technology, and information are globally organized; and trade becomes largely organized by dominant firms and strategic cores on a worldwide scale (see Global Management of Knowledge Systems).

Globalization of financial markets contributes greatly to the creation of an even more complex international monetary system, and efforts will be needed to preserve the stability of this system and fundamentally transform it. A new international *division of labor* settles in around four positions: producers of *high value*, based on informational labor; producers of *high volume*, based on low cost labor; producers of *raw materials*, based on natural endowments; and redundant producers, reduced to *devalued labor*. These positions do not necessarily coincide with countries, but are organized in networks and flows, depending on the technical infrastructure of the informational markets.

There are limits to this global economy, of course. Expanding international trade and investment has led and will continue to lead to major potential increases in prosperity, especially for those sectors of the world economy that are globally technological and electronically linked. Moreover, the global economy is highly differentiated in geographical terms, highly exclusionary, and unstable in its boundaries.

Most people in the planet do not yet work for the global economy or buy from the virtual markets. Its core is a tightly interdependent network between US, Japan, and Western Europe—also a triad of wealth, power, and technology—around which all the other areas of the world organized their economies in multiple dependency relations. Thus, while economies should open—that is, not be burdened by state bureaucracies—they should retain their *local culture* and *knowledge systems*.

At heart this means moving away from the corporatist model to a world cooperative model. Otherwise, the losers of globalization will be the most vulnerable—the aged, nature, women and children. The winners will be the elite in developing nations—those with capital or with influence abroad.

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Biographical Sketch

Silvia Austerlic was born in Buenos Aires, Argentina, in 1965. She studied graphic design at the University of Buenos Aires, where she was a teacher of art history from 1990 to 1997. In 1997 she helped to set up a Virtual University of Latin America (<http://www ldc.lu.se/latinam/uvla/uvla1.htm>). Since 1995 she has been working on an info-design conceptual framework to counteract the cultural impacts caused by changes in the use of information and communication technologies. Her design interest is to develop new ways of thinking, sharing, and using the collaborative potential of the Internet to empower the voice of new actors in ways that both protect human nature and transform cultural identities. She currently lives in Santa Cruz, California, where she studies web design and digital media.