

Cyberspace as the Next Marketing Frontier (?) - Questions and Issues

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In the late twentieth century, with modernity having lost its innocence, and its transparency having yielded to an unsettling opaqueness, a search for alternative categories of life has begun. The defining moments are no longer the dichotomies of time and space, past and future, near and far, but only the present and here. As Foucault (1979) noted, we are busy constructing the history of the present, freezing time into a new set of practices and discourses, and unburdening ourselves from the weight of history and the uneasy anticipation of the future. What we are creating is a world where we can lose ourselves and escape into the world of the hyperreal (or hype and real) manipulated by the ideologies and the technologies of the digital. In this phantasmagoric world, in trying to relinquish the vestiges of modernism, we are preparing to enter a futuristic world replete, however, with the symbolism of the distant past. Paradoxically, we seem to be seeking a reassurance that our physicality is still intact (if not real), and that we can, touch, feel, see and smell the various (artificial?) life forms that spin around us. It is as if we are moving in a gigantic circulating machine where both fission and fusion, fact and fiction are caught in a vertiginous web. No doubt, all of this seems to have inspired the sci-fi writer, Gibson (1984) to characterize what was previously thought of as mere fiction but today experienced as the reality of our living space as *cyberspace*. To quote Gibson from his serious yet frolicsome classic, *Neuromancer*:

Cyberspace. A consensual hallucination experienced daily by billions of legitimate operators...A graphic representation of data abstracted from the banks of every computer in the human system. Unthinkable complexity. Lines of light ranged in the nonspace of the mind, clusters and constellations of data. Like city lights, receding... (Gibson 1984 p.51)

Cyberspace and cyberculture are terms that are now in vogue (Escobar 1994). They represent the new electronic world of social activity, language, commerce, discursive practices that seem to have suddenly overtaken our lives, but, in reality, have been years in the making. The new manifestation of cyberspace is a dimensionless web-like space (WWW) and what we are witnessing today is the continuation of a long process which Daniel Bell identified thirty years ago as the beginnings of the postindustrial society that was becoming more knowledge based. He called the emerging industries the knowledge industries, the workers the knowledge workers, and the machines responsible for this transformation the knowledge-based machines, or more popularly the computers. Over the years, the prefix, knowledge, has given way to terms such as “intelligence,” “information,” and more recently to “cyber.”

In this paper, we shall provide an analysis of how cyberspace is beginning to impact on consumers, and what theoretical and practical implications emerge from this. Writing this paper at this juncture is akin to studying the raging waters of a river while standing right in the middle of it and hoping to make sense of the mysteries of the river current. By the time one is able to grasp the phenomena one intends to study, the very ground on which one stands has moved leaving no anchor from which an observation can be made. Detached observation is more difficult when the observer is also moving along with the observed.

That the new technologies of information and communication are all around us needs no special mention. They seem to be per(in?)vading our universe with sovereign vengeance. The information revolution which was heralded almost a quarter century ago is taking place as we are writing these lines. A good measure of the revolution is motivated by commercial opportunities that now involve markets and consumers as part of everyday life. This paper is about the nature of cyberspace as it pertains to consumers and their identities, and to the co-optation of this space by eager marketers. For some people, the term, cyberspace seems to be pretentious because it is evocative of hype and exaggeration. Perhaps, there is some truth to it. However, if history teaches us any lesson, an important one is that today's hypes could become tomorrow's realities. It is in this spirit that we want to examine several key issues. Our paper will address the following questions/issues.

1. What is cyberspace? How is it related to physical space? Are they (cyberspace and physical space) parallel spaces or, each a mirror of the other, or oppositional to each other?
2. What are the limits of cyberspace (as constructed and experienced)? How does it challenge modernist categories such as artificial and natural, culture and nature, real and virtual, mechanistic and organismic?
3. How are consumer identities established in cyberspace?
4. What technological possibilities exist in cyberspace that are relevant to consumer behavior and marketing? (Why is cyberspace a site of marketing control?)

What is Cyberspace

Is Cyberspace (The Allegorical Space?) the same as Physical Space?

Where in the world is Cyberspace?...How is cyberspace also a space? First, in mathematics, logic and computer science, it is common to speak of a space as a subset of a world. ..For any initial configuration of

elements and a set of rules, there is a space of possibilities defined. The system can assume many states, and the total of all states constitutes a space...There is a sense in which cyberspace is such a space. (Coyne 1995, p155).

In many respects, cyberspace is similar to physical space. Objects can occupy cyberspace...[T]here is the sense of [cyber]space as coordinate and measurable space... Cyberspace constrains and enables human interaction in ways similar to physical space...Behavioral patterns are intimately connected as in physical space...Cyberspace is thought to reproduce or represent Cartesian space. If physical space can be represented with three-dimensional coordinates, then this information can be stored, manipulated, and transformed by computer and displayed, using monitors, plotters, digital devices, flight simulators, and stereoscopic virtual-reality head sets. Furthermore, any information can be transformed into visual, audile, and now tactile form. In this sense, cyberspace reproduces and even transcends physical space. (Coyne 1995, p 155-156)

Cyberspace is thought to be a space in these four senses. It defines spaces of possibilities, it is measurable and numerically specifiable, it enables and constraints social activity, and it reproduces physical space. (Coyne 1995, p157)

Cyberspaces are basically computer mediated environments. They give rise to various kinds of simulacra (such as virtual environments, MUDs, digital images and sounds) and to new understanding of the relationship between the natural and the artificial, real versus imaginary, or as Massumi (1987) would call it, “realer than real” (see also Baudrillard 1983). Cyberspace is the farthest we have traveled into the world of reality if we do not count the magical and the supernatural. It is also far removed from the mechanical conception of modernity. Several developments in the cyberspatial culture are crucial for us here.

1. Cyberspace as parallel to the physical space.
2. Cyberspaces as the site of fragmented virtuality, a highly individualized, decentralized spaces of human subjectivity.
3. Cyberspaces as providing a different order of navigation.
4. Cyberspaces as subversive and transgressive of many of our established norms and expectations of behavior.
5. Cyberspaces as organismic while seeming to mimic the mechanistic view of physical space which is in linear and one of sequential ordering.
6. Cyberspace as giving rise to clans and anonymous communities.

Abandon realism. Cyberspace is a new conception of space and is oppositional to physical space.

...in patently unreal and artificial realities such as cyberspace, the principles of ordinary space and time, can in principle(!), be violated with impunity...After all, the ancient worlds of magic, myth, and legend to which cyberspace is heir, as well as the modern world of fantasy, fiction, movies, and cartoons, are replete with violations of the logic of everyday space and time: disappearances, underworlds, phantoms, warp speed travel,

mirrors and doors to alternate worlds, zero gravity, flattenings and reconstitutions, wormholes, scale inversions, and so on. And after all, why have cyberspace if we cannot (apparently) bend nature's rules there? (Benedikt, p. 128)

Cyberspaces are both imaginary and constructed spaces, products of digital frontierism and science fiction, and follow no predetermined principles of order and structure. They exist as much in human imagination as they do in everyday reality and there is no particular theoretical framework within which the spaces can be configured. There are no walls to bound these spaces, no physical terrain on which they can be cartographed, but they are nevertheless spaces where people move around (roam about?) without having to face each other. What characterizes the cyberspaces is the *physical location* of the subject independent of the *body*, embedded in a system of symbolic forms and information nodes. Cyberspaces are full of paradoxes, they are spaces where human beings can be in contact with one another on an instantaneous basis and still remain anonymous, where identities are hidden and camouflaged, and people can enter and withdraw, meet and discuss, see and not be seen. All of this is possible while sitting at home and gazing at the electronic screen (Turkle 1995). In spite of this seeming ethereality, the actual rhetoric of this new spatial adventure is cast in terms of established vocabulary, awash with the ideas of community, social interaction, the meeting of the minds, and the exchange of ideas.

Of course, the object is to render the cyberspace familiar and ensure that it approximates the real world. But then there are some features of cyberspace not found in the real space. Virtual environments are both marginal (in the sense that they are not accorded equal status with real life) environments and simulated environments. They do not need physical referents and individuals can experience virtual conditions not encountered in the real world. People can construct virtual objects in cyberspace and interact with them both as real and imaginary objects.

Cyberspace is a Communication and an Information Space

Cyberspace is a vast media matrix of the actual and the potential that incorporates the activities of telephone conversations, data transfer, electronic mail, computerized transactions, ATM transactions, on-line information services, video-conferencing, the new mass media, virtual reality...Cyberspace promises a bright and exciting technological future of unfettered communication and a reinvigoration of liberal and democratic community. (Coyne 1995, 150)

Cyberspace is a globally networked, computer-sustained, computer-accessed, multidimensional, artificial, or "virtual reality." In this reality, to which every computer is a window, seen or heard objects are neither

physical nor, necessarily, representations of physical objects but are, rather, in form, character and action, made up of data, of pure information. (Benedikt 1994, 122)

Cyberspace is a repository of information. It is not a conventional “air space” in the sense of a broadcasting channel. It is limitless. The information can be accessed by anybody with very limited investment. Unlike the broadcast space it need not be regulated for there is no space to distribute in the sense of allocating a limited resource among competing demands. Since the cyberspace is practically limitless, it presents its own problems. First, for any single individual, the need is finite but perhaps focused. The needs are not limitless. The challenge facing the individual is how to choose from the limitless world of information. In other words, the individual needs to have information about information. This is a new twist to information access. It is similar to another information space, the traditional library. In a typical library, the size of the library is not that critical for locating a book. Once there is a cataloging system any library material can be accessed if the user knows the author or the title. The difficulty arises when the user knows neither. However, it is still possible to do something about it via key words or doing subject search. In a similar fashion we can think of cyberspace information as a digital library. In any event, search engines are available to meet these needs and are constantly being updated.

Cyberspace is Postmodern

(Descartes! Move over and make room for Heidegger)

“I used to date a woman who lived in a different city. We spent a lot of time together on e-mail. And we figured out a way we could sort of go to the movies together. We’d find a film that was playing at about the same time in both our cities. We’d drive to our respective theaters, chatting on our telephones. We’d watch the movie, and on the way home we’d use our cellular telephones again to discuss the show. In the future this sort of “virtual dating” will be better because the movie watching could be combined with a videoconference. (Bill Gates, 1995, 206)

Today the computer is an actor in a struggle between modern and postmodern understandings (Turkle 1995, 43)...Prefigured by Neuromancer’s matrix of informational space, postmodernism’s objects now exist outside science fiction. They exist in the information and connections of the Internet and the World Wide Web, and in the windows, icons, and layers of personal computing. They exist in the creatures on a SimLife computer game, and in the simulations of the quantum world...All of these are life on the screen. And with these objects, the abstract ideas in Jameson’s account of postmodernism become newly accessible and even consumable. (Turkle, 1995, 45)

In a deep (ontological sense) we are in the world (Coyne 1995, 167)

As has been noted before (Brown 1995, Firat and Venaktesh 1995), postmodernism is skeptical of fundamentals and foundations. In the context of information technology, Coyne

(1995) observes that, as opposed to systems theory which has for decades provided the basic principles of the structure of computerized environments, cyberspatial culture is viewed as postmodern in nature. It is postmodern because the conventional thinking about what is reality, how representational systems work and signifiatory systems perform are different from the modernist understanding. Postmodernism is a cultural position that introduces non-linearities in time and space, in virtual environments, in chains of signifiers, in decentered self, in the breaking down of the mind-body dualism, in the creation of expressive forms, in resurrecting language as a critical narrative, in decentering the gendered relationship and in general, in the breaking down of modernist dichotomies. Postmodernist discourse renounces hierarchical reasoning and closed systems approach to the study of computerized environments. It acknowledges that human systems are open systems and cautions against universalizing the principles of behavior in living organisms and human organizations which are characterized by complex transactions within their environments and which are poorly understood. Heidegger (1964) distinguishes between the ontic and the being in human discourse. Conventional sciences are ontic in nature looking for regular patterns of behavior and neat classification schemes. These approaches, useful as they are, are also limited in their appeal. To quote Coyne(1995),

Much postmodern writing follows Heideggerian line. Studies in information technology or design that accord primacy to information systems theory are categorized by postmoderns as ontic...[The] indifference on the part of postmodernism to systems theory means that postmodernism focuses on...power, how texts operate, questions about the constitution of the subject, how we are constituted by our technologies, and the dismantling of metaphysics. (p. 206)

Therefore, in the discourse on cyberspace our concerns are more with:

Simulation or the Construction of Simulacra

Signification and Identity Formation

Objects without referent - Mechanistic versus Organismic Forms

Virtual communities

Virtual spaces and Interactivity

Cyberspaces are not only cognitive spaces but behavioral spaces and experiential spaces. They are there to explore, and to create new possibilities. There is no need for prior knowledge as to what the space is, nor how to navigate it. One can enter cyberspace as the new born turtle reaches the deep waters within an instant of its birth. It is a place where one can experience new behaviors, repeat past behaviors, and hide behind the conscious. People can simulate the

spaces they roam, manipulate the texture of the spaces and find new ways to settle or colonize them. Because there are no physical boundaries in cyberspace, there are no limits to behavior or standardized responses. Euclidean parameters do not apply to cyberspaces. Cyberspaces permit considerable exploration of the kind unattainable in the real world. In other words, it is a world of simulation as well as exploration.

Cyberspace as Simulacrum

In this section we will examine four different dichotomies of modernity and how they have become problematic in the discourse on cyberspace. We identify the dichotomies as artificial and natural, culture and nature, real and virtual, and mechanistic and organismic.

One point of departure for this discussion is “the sciences of the artificial” as enunciated by Herbert Simon (1982). Another point of departure is related to Simon’s notion of artificiality but has origins in a different paradigm, “the social construction of reality” by Berger and Luckmann (1966). Berger and Luckmann focus on the social/cultural world while Simon’s focus is on cognitive and mechanistic world. Simon makes three arguments which must be taken seriously whether we agree with him or not.

Argument 1: “The world we live in today is much more a man-made, or artificial than it is a natural world. Almost every element in our environment shows evidence of artifice.”

Argument 2: “[W]e must be careful about equating “biological” with “natural.” A forest may be a phenomenon of nature; a farm is certainly not. The very species on which man depends for his food--his corn and cattle--are artifacts of ingenuity. A plowed field is no more part of nature than an asphalted street, no less.

Argument 3: However, in this artificiality of the world “man must obey the law of gravity as surely as does stone...”

The first argument sets the record straight that the modern person lives in the world of artifice more than in the world of nature. The second argument points to a distinction between biological and natural by stating that biological does not necessarily imply that the object is also

natural. Thus biological life can be constructed by the human being in the same way as an inanimate object (e.g. automobile) can. The third argument points to an inevitable irony in all of this. Whether we live in a world of nature or in a state of artifice, we still follow the laws of nature. The air plane which flies at high altitudes does not defy the law of gravity but does in fact obey it to the last detail. What ever tricks we play with nature are subject to what the nature imposes on us. We will return to this natural-artificial issue later on. Let us turn to nature-culture issue.

The nature-culture issue is more complex, and historically has been more central to the practice of the social sciences. We do not look for the laws of nature--and, if at all, only marginally--to guide us in developing appropriate norms of social or cultural behaviors. Without meaning to be tautological, all social behavior is socially constructed. For example, certain types of behavior are permitted and certain others are not based on social expediency. Many ritualistic practices are socially determined and regulated. To the extent social is not natural, we may even say that it is artificial--artificial as understood to be opposite to natural. Enter cyberspace which is an amalgam of artifice and a socially constructed, technologically mediated world of (un)reality. Cyberspace is where perhaps Simon on the one hand and Berger and Luckmann on the other can find a common ground.

The Real and the Virtual

The relationship between virtual/simulated environments and real environments can be conceptualized in several ways. Let us begin with a simple case of how simulation works and proceed progressively to more complex relationships between simulation and reality.

In the conventional discourse, the "real" environment is where the "real" action is, and the simulated environment becomes an exploratory, or preparatory environment. So, for example, a pilot using a flight simulator is trained in a simulated environment. This is an "as if" environment. The relationship between the simulated flight and real flying is as follows.

The objective here is to use the flight simulator as an artificial training ground that approximates real/natural flying conditions. There is no pretense here that the simulated environment is imbued with the characteristics of the real environment, but it nevertheless serves an important purpose. The risks are lower both to the flyer and the machine, the costs of mistake negligible, and the dangers of flying absent. The simulator provides necessary

learning opportunities, that is, as a preparatory device to real life experience. If we were to use a semiotic framework, the simulator can be considered the signifier and the real environment the signified. In this representational scheme, the signifier is not a perfect substitute and therefore occupies a less privileged position when compared to the signified. That is, even if one masters the simulator, merely on that basis one cannot qualify as a pilot unless he/she tests his/her prowess in real conditions.

A critical aspect of the relationship between the simulation and the real that we just discussed is that no technology exists to make the simulation a perfect substitute for the real. This is the basic structural limitation and is the starting point of the problematic of representation in cyberspace.

Let us now look at a marketing example which in most respects is similar to the flight simulator example. When an advertisement for ice cream appears in a magazine, there is no misconception that the ice cream in the ad is capable of satisfying one's appetite, for, obviously, the physiological condition of the body requires the real ice cream. One cannot eat ice cream that appears on the advertisement page however appetizing it might appear. As in the previous example, the virtual cannot compete with the real in its essential aspects and therefore we may say with some confidence that the real is superior to the virtual in a phenomenological sense. It is obvious in this example that no amount of virtuality can come close to a real scoop of ice cream if the objective is to satisfy one's physiological need of hunger. There is however a key difference between the flight simulator example and the ice cream example. The real flying conditions are not only real but they are natural (even allowing for Herbert Simon's extreme examples from above) while the real ice cream is not a natural product but man-made.

Be that as it may, both the examples cited above provide an unidimensional perspective of the relationship between the virtual and the real in that the virtual falls short of the real in some "essential aspects" and therefore is considered inferior. But this is not the only relationship that we encounter in our everyday lives. For instance, in a different context, we might ask the question, is the movie better than the book? Here the virtual is the movie, but can we say that the book is the real in the ice cream sense? In this example, the notion of the real breaks down. The movie is based on the book but the book has no greater reality than the movie but perhaps only a different reality. The only thing we can say about the book is that it has a temporal priority, and therefore we can call it the original (and not the real). The virtual represents the original but not in the sense of the ice cream ad representing the real scoop of ice cream. We

have now come to an interesting theoretical position. In the flight simulator example, the flight simulator is a simulation and the flying conditions are not only real but *natural*; in the ice cream example, the ice cream ad is virtual but the scoop of ice cream is real and *constructed*, and in the movie example, both the movie and the book are equally real and constructed.

In spite of these distinctions, were we to use a semiotic framework, these distinctions disappear because all the three of them, the flight simulator, the ice cream ad and the movie can be called the signifier and what they represent as the signified.

Let us now stretch the book example a little bit further. Supposing the book is a mediocre or an obscure book, and would have never risen to any prominence without the movie which is both an artistic and commercial success. Although the book is the temporal prior and therefore the original, the movie is certainly the more privileged if we accept a different set of criteria to judge their relative phenomenologies based on aesthetic and commercial considerations. The movie begins to exist in its own reality, independent of the book whose reality is not the same. To say that the movie simulates the book does not have much meaning, at least not in the ice cream sense where the real ice cream is also the "edible" product, a characteristic denied to the ad.

Now, let us give one last twist to the relationship between the simulation and the real to make one more important point. In the ice cream example, the real refers not so much to the ice cream but to its fundamental property that it satisfies a biological need that the simulation does not. There is no other privileged element in this relationship other than the biological-need-satisfying-ability. Let us now imagine a food situation where a food designer designs a new ice cream product that does not exist in reality. That is, he/she concocts a recipe purely out of his/her imagination from some sort of deductive scheme and the edible product does not yet exist. Supposing somebody comes up with the actual ice cream based on the designed model. If we use a temporal priority argument we may be obliged to say that the "real" ice cream is the simulation and the non-real ice-cream is the original. And if we use a semiotic framework, we can similarly argue that the edible ice cream is the signifier and the design of it is the signified. In this example, the original and the signified are different from the real. The real becomes the signifier in a sort of semiotic role reversal.

The above examples and discussion lead to a fundamental theoretical issue concerning the relationship between the simulation and the real. Normally, when we use the term,

"simulation," we assume that there is something "real" that is being represented. We are now ready to ask the question, is it possible to have simulation without the real? What does this mean? Here the problematic word is not simulation but the word, "real." The previous discussion was designed to show that in common discourse, we tend to use the words, the "real," the "simulation" and the "original" in a rather uncritical fashion whereas in actual fact, these terms take on meanings based on the context. The reality of these terms is much more complex for what is "real" is as much a construction as the simulation is. That is, as Baudrillard (1983) is never tired of reminding us, the simulation can become more real than the real and sometimes simulation is its own reality, and there is nothing but signifiers.

When we move to the technological realm, the problem is compounded. Let us briefly examine the various technologies of everyday (real?) life. What is an automobile? It does not simulate anything. It is a reality in itself as is any technology in the home, the telephone, the refrigerator, the vacuum cleaner, the VCR, TV, camera, stereo recorder, and so on. Each of them was a new reality when it was invented and continues to be one in its own right. These are constructions with no resemblance to anything prior to that. These examples suggest that they are neither simulations nor are they the simulated. They are their own reality not in the sense of a natural real or organic real, but something that exists outside these two frames of reference. They constitute a "cultural real." The cultural real privileges neither the simulation nor the simulated.

Cyberspace is a combination of the new and the old. It is new in the sense that new technological possibilities create new social spaces but it is also old in the sense that the social/cultural imperatives have remained unaltered. But as Poster (1995) reminds us, cyberspace is not a Greek agora, but a new territorial concept completely (if not, over-) determined by the late twentieth century technology.

From the Virtual/Real to the Mechanistic/Organismic - Mechanistic Ideas of Representation

Beginning with Descartes our understanding of the world has followed a mechanistic route. Essentially, the mechanistic approach formalizes the ideas or symbols we use to represent the world in a rationalistic fashion. In addition, it also attempts to formalize the process of thinking itself. Thinking in this perspective means instrumental reasoning, calculation, using

formal rules of evidence and monitoring standardized/predictable performance. Rational thinking is a conscious, competent administration of an idea, aided by procedural methods.

The mechanistic and formalistic idea of representation was also at the heart of computing in its beginning stages and continues even today to some extent. Data are representations of facts and computer technology is essentially directed toward storing and manipulating of data.

The mechanistic paradigm underlies the design of various domestic technologies that exhibit a purpose, are singular, and well-ordered. To the extent that mind is presumed to control matter, we view these machines as controllable devices whose functions are dictated by human needs and dictates, and whose operations and purposes appear to be very transparent. Any interaction with the machine implies this relationship.

But in parallel to this mechanistic view of the world, there always existed a romantic view. Human emotions and unconscious desires always resisted these mechanistic and formalistic norms of behavior and looked for forms of liberatory moments. Poetry always existed side by side with logic. However, in all of these cases, the romantic elements played a secondary role to the rationalistic framework because of social norms and institutional structures.

While the mechanistic view lent itself to collective order and rationality, the romantic view was a privileged, individualistic, artistic expression, which allowed for physical and bodily articulations.

We elaborate this idea further in Figure 1. The rectangular formulation is a modified Greimasian square which pits mechanism against organism. Familiar domestic technologies (kitchen appliances and automobiles) are classified as mechanistic devices characterized by singularity of purpose and well-defined systems. Together they constitute the mechanistic space. At the opposite end are computers and the new cyberspace technologies (World Wide Web) that occupy the organismic space. They are both ill-defined relative to the mechanistic technologies. The relationship of the technologies to the human agency varies. The mechanistic technologies serve the human being in the performance of various mechanical chores. The organismic technologies mimic human intelligence and also serve human needs at a higher level. The extreme form of this relationship is where the computer can act as a simulated human being. Writing in 1984, Turkle (1984) compared the computer as the mirror in which the human being could see himself or herself. This imagery was further modified in

her latest book, *Life on the Screen* (Turkle 1995). Using a postmodern interpretation, she characterized the computer screen as the door behind which other humans reside and can be contacted. We have moved a long way from the kitchen appliances to the Web technology.

Computers are no longer viewed as merely computational devices working with mass amounts of data. The cyberspace has become a site of romantic vision and experience, and all the suppressed emotional areas of life are blossoming in cyberspace. One can see this in various technological manifestations of cyberspace--interactive media, virtual technologies, simulated art and a host of similar developments.

Mechanical to Computational to Bio-Technical

We are moving from a mechanical concept of the world to a computational concept and further into a bio-technical concept of the world. For centuries, a key argument centered around culture and nature dichotomy questioning which of the two was superior in explaining or guiding human behavior. The debate continues and keeps some of us occupied. A few thinkers have suggested that the dispute between nature and culture is itself socially constructed, for according to some of them what is natural is cultural and what is cultural is natural. While the debate regarding nature-culture goes on, a parallel debate has surfaced in recent years, natural vs. artificial. Whatever progress we have recorded in the last 300 years is in the world of the artificial. For more than three decades our focus has been on not just artificial but artificial intelligence (AI). This has more recently expanded into artificial life (AL) suggesting that we are moving away from AI to AL. The aesthetic of the body has also accordingly shifted to artificial formulations of the body.

Mechanism Versus Organism - A Final Note

The basis of computerization is the effacement of the distinction between mechanism and organism. We are now picturing machines as organisms or self-replicating artifices. Organisms do not have a purpose, at least one that can theorize about. For example, we can't easily ask a question why cats, dogs or humans inhabit the planet. What one can say, if s/he is not an atheist, is that God willed it. Of course, we can also say that because dogs have a keen sense of smell, they are good in finding criminals. But this is not why the dog was created in the first place. We invented the purpose once we knew what dogs could do. On the other hand, mechanisms have purpose (granted "purpose" is culturally determined and signified); we build a machine so the machine can do something. We can talk about the automobile having a

purpose, that is, as a means of transportation. The main purpose of an organism seems to be self-replication and this is as close we can get to in uncovering its purpose. The site for the effacement of the distinction between mechanism and organism is cyberspace.

Computerized Aesthetic

If the basis of cyberspace is the effacement of the distinction between mechanism and organism, we may be looking at machine-organisms as self-replicating artifices. The main purpose of an organism is to self-replicate but, as we stated earlier, this is true of a machine. However, this traditional distinction between mechanism and organism is being eroded with the entry of new technologies of information. Of particular interest for our discussion is how the blurring of this distinction has an impact on individual identity. We discuss individual identity by first exploring the notion of body in cyberspace.

Aestheticization of the Body

We would like to find a position for the body in cyberspace. Since cyberspaces are virtual, or more real than real, our conceptualizations of the body also follow these virtualities.

The field of marketing has historically and quite aggressively appropriated the human body as the site of its discourse (Joy and Venaktesh 1994). Hundreds of products are manufactured and sold with human anatomy and clothing as the prime targets of marketing. One can argue that a major part of consumer culture is devoted to the aestheticization of the body culture. Marketing has been simultaneously exploitative and seductive, and has universalized this aesthetic temporally and spatially. Because of the modernist hang-up with mind-body dichotomy with mind being given a preferred status, marketing had to contend with a defensive posture in promoting the body culture.

With the emergence of the sciences of the artificial, and the new technologies of computerized aesthetic, the very notion of the body is undergoing serious and active debate. These new disciplines of the artificial are high status scientific disciplines and their approaches to the cultivation of the physical via the artificial have received much intellectual support. These new disciplinary ideas are penetrating into our notions of subjectivities not simply metaphorically or phenomenologically but by creating a social problematic of the contemporary world. The question then is what is the nature of subjectivity in cyberspace.

In the Cartesian framework, the mind-centeredness dominates our view of the world. In the postmodern world, we are moving more and more into a body-centered framework. Two important manifestations permit this conclusion. First of all, the architecture of cyberspace lends itself to the permutations of bodily expressions and displays through the use of color, three dimensional graphics and other visual imagery. Cyberspatial manipulations are subject to interactivity, which means that the user is more a bricoleur in Levi-Strauss's sense. Second, the manipulation of cyberspace needs no special skills. Many of them are available for mere asking at the touch of a button and the manipulation of objects in cyberspace is as easy as lifting a pen.

Cyberspace is not only the realm of the artificial but the realm of artificial life. In a Cartesian world, artificial intelligence (AI) provides the dominant model for thinking. The best example is the computer in the famous movie, 2001 Space Odyssey with a mind but no movable body. In a non-Cartesian world, artificial intelligence slowly gives way to artificial life (AL). The earliest manifestation of artificial life is the computer virus. Computer virus is a self-replicating organism with minimum intelligence and maximum destructive power. The principle of self-replication can be easily extended to other cyber forms.

Social Body versus Ontological Body

Stone (1995) uses virtuality in terms of the relationship between the sense of self and the body. As she says, this is "virtual because the accustomed grounding of social interaction in the physical facticity of human bodies is changing." (p.17) For example, what she has in mind is a socially constructed body instead of an ontologically present body. In a move similar to Turkle's (1995), Stone considers her approaches as a shift from modernity to postmodernity, as shown in the following.

Modernity	Self and Body	Located in the same physical space
Transition	Self and body	Both socially constructed both socially mediated
Cyber technology	Spatial location of the subject independently of the physical body.	

She also raises some interesting questions (p.17). How are bodies represented through technology? How is desire constructed through representation? What is the relationship between the body and self-awareness? What is the role of play in the emergent paradigm of human-computer interaction? And overall, what is happening to sociality and desire at the end of the mechanical age?

According to Stone (1995) there are many historical developments leading to the issue of current virtuality. These include suburban living and the use of automobiles (virtual geography), shopping malls and spectacularizations. The technologies of cyberspace, the electronic media, computers, large scale information networks, ATMs, arcade games etc. are nothing but manifestations of these postmodern fragmented life patterns.

Consumer Subjectivity in Cyberspace

The models of virtuality in cyberspace provide new forms of subjectivity. For example, many of the contingent essentialisms of cyberspace come from science fiction--Neuromancer, Bladerunner. Hollywood presents the realms of possibility and advertising takes its cue from what happens in Hollywood--where hi-tech determines the protocols of contemporary consumer culture.

Bodies and Spaces

Global Identities

A world in which the global traffic of knowledge, secrets, measurements, indicators, entertainments, and alter-human agency takes on form...entered equally from a basement in Vancouver, a boat in Port-au-Prince, a cab in New York, a garage in Texas City, an apartment in Rome, an office in Hongkong, a bar in Kyoto, a cafe in Kinshasa, a laboratory in the moon (Benedikt 1994, p.1)

As an acknowledgment of this paradoxical, postmodern space, Appadurai (1993) identifies five different scapes: ethnoscapas, technoscapas, finascapas, mediascapas, and ideoscapas. The first refers to the movement of populations around the world -- tourists, immigrants, exiles, refugees, guestworkers -- all of which is happening at unprecedented levels. The movement of these groups is closely linked to the movement of international economic and cultural capital. The second refers to the generation and movement of new technologies creating new global grids and the shifting of know-how. The third refers to the shifting of financial capital through a labyrinth of institutional arrangements and application of information technologies in an instantaneous fashion. The fourth refers both to the distribution of electronic capabilities to produce and disseminate information (newspapers, magazines, television stations, film

production studios, etc.) and to the images of the world created by these media. Mediascapes have a postmodernist character, because they are image-based, and they fragment cultural realities and complicate the imagined lives of passive consumers. They are, in a sense, the apostles of a new world (religious?) order where techno-fantasies are allowed to clash with immediate life experiences. Finally, ideoscapes refer to a concatenation of images guided by political and ideological considerations. The global flows occur in and through the growing disjunctures between the five landscapes as they collide in cyberspace.

These cultural flows, notes Appadurai, create two kinds of fetishism -- the fetishism of production and the fetishism of consumption. By production fetishism, he means "an illusion created by contemporary transnational production which masks translocal capital, transnational earning flows, global management and often faraway workers in the idiom of spectacle of local control, national productivity and territorial sovereignty." In this formulation, the locale becomes the fetish which disguises the globally dispersed forces that actually drive the production process. Consumer fetishism represents the idea that the consumer is transformed, through commodity flows (and the mediascapes) into a sign, with global electronic communications assuming the role of key technology in the worldwide dissemination of cultural ideas. Although these messages are globally standardized, globalization is not synonymous with homogenization, it is just that globalization uses the instruments of homogenization -- clothing and fashion, music and entertainment, food and aesthetic experience -- to create heterogenized markets, that is, to serve and service the locals with global universal signs, transmitted through cyberspace.

Identity and Virtual Communities

The idea of a community accessible only via my computer screen sounded cold to me at first, but I learned quickly that people can feel passionately about e-mail and computer conferences. I've become one of them. I care about people I meet through my computer, and I care deeply about the future of the medium that enables us to assemble... People in virtual communities use words on screens to exchange pleasantries and argue, engage in intellectual discourse, conduct commerce, exchange knowledge, share emotional support, make plans, brainstorm, gossip, feud, fall in love, find friends and lose them, play games, flirt, create a little high art and a lot of idle talk. People in virtual communities do just about everything people do in real life, but we leave our bodies behind. (Rheingold, 1993, p1/3)

New members meet every evening at 9.00p.m. in the NEW MEMBERS LOUNGE. On-line conversations are often punctuated with textual "smileys" and on-line shorthand.

Below is a list of some of the common ones you might come across,

:) Smile

:D Laughing

;) Wink

:* Kiss
 :X My lips are sealed
 :(Frown
 :P Stick out Tongue. . .
 { } Hug
 brb be right back
 ...Ask a Guide. Go into the People Connection Lobby (Command L) and find someone with the word "Guide" in their name. Parents can limit their child's on-line activities -- use KEYWORD PARENTAL CONTROL.
 (From a membership promotional blurb - America On Line)

Very few terms in contemporary linguistics evoke such images as community. Contemporary societies, or the so-called developed, industrial societies seem to yearn for lost symbols and institutional orders that are difficult to retrieve in these ever-changing times. Western societies, and, in particular, the American society, are nostalgic about the notion of community which, over the years, has taken a back seat in the face of rampant individualism and modernistic logic. In the emerging postmodern cyberculture, two aspects remain critical to our understanding of human behavior in cyberspace--the constitution of identity and the formation of community. Durkheim (1914) was one of the first social theorists to raise the issue of balancing individual autonomy and social solidarity as the basis of community formation. In the last hundred years much has been written in this area and the recent popular work by Bellah et. al (1985) further confirms that this issue is very much alive even today. The notion that the sense of community has been eroded significantly in industrial societies is a frequently discussed issue in the academic circles as well as in political discourse (Etzioni 1994). Habermas (1987) has pushed this idea still further by stating that the "system" has replaced the "life world" as the organizing principle of human existence and has therefore given rise to an interesting paradox that in industrial democracies both individual freedom and communal spirit are becoming the ultimate casualties. The loss of individual freedom means a loss of individual identity. The loss of individual identity means the loss of community. Well, enter cyberspace.

Some authors believe that perhaps in cyberculture both individual identity and the sense of community can be restored. However, within the cyberculture, these terms may not mean the same. In contradistinction to the "real cultural space" which has marked human life over the course of history, cyberculture is not a face-to-face culture. While we can still use the terms, "freedom," "identity," and "community" the question needs to be asked, do they really mean the same thing in the context of cyberculture? This issue has never been more urgent.

In terms of identity formation in cyberspace, some psychoanalytical and dramaturgical approaches have been proffered (Turkle 1995, Stone 1995). The primary emphasis in these

approaches is to explore how individuals project themselves on the screen and what personalities they assume in such projections. The underlying idea is that the cyber medium lends itself to certain changes in this projection process, so one can assume any persona of his/her choice which may be different from the persona in the real space. There is a distinction between the more familiar “role” playing in "real" life and changing one's persona on the cyberscreen. In role playing, the individual identity is not altered and everybody knows that it is the same individual who is assuming a different role because the social circumstances warrant it. Thus an individual can play the role of a parent or a manager or a teacher depending on the social situation. The role the individual plays in real life is public knowledge. But life on the screen allows people to assume different identities so they can play the same role in multiple ways and this is not known to anybody except the individual. Cyberspace permits this because, the individual is able to hide behind the screen under an identity of his or her choice. What is the motivation for identity change or identity concealment? It ranges from the simple thrill of novelty seeking to seeking a new set of experiences not possible in the real space. In either case, the individual is able to protect her/his real identity and revert to it without having to surrender his/her entire persona to strangers. Thus cyberspace is a space for strangers who can behave as if they are intimate friends. This certainly is a new dimension to human experience bordering on the magical or schizophrenic depending on one's point of view.

In a paradoxical fashion to this simultaneous identity construction and identity concealment, or because of it, the cyberspace is also viewed as a community space. In this virtual land, people can become part of a community and share their experiences with others as if they are in a real community. No body has promoted the idea of community in cyberspace as “Well” as Howard Rheingold (1993). In a narrative that almost borders on fiction, Rheingold waxes eloquent on the pristine notion of virtual community. We know from the writings of sociologists that communities are social groupings in perpetuity, sharing a common language, a common physical/experiential setting that gives rise to face-to-face contact, a common set of practices, and a common set of expectations. Communities provide mechanisms for socialization, a sense of individual identity and a site where individuals prepare themselves for the life of adulthood and family/work life. Communities provide continuity in terms of generational structure, provide psychological spaces and zones of comfort. Because community members develop a sense of solidarity, there is a lot of mutual help and understanding. People *give* without necessarily expecting immediate returns. Besides, communities provide social memory and continuity of the species. Evidently, not all of these are possible within the context of cyberculture, at least not in the precise fashion. By the same token, what is possible in

cyberculture is not possible in real culture. Virtual communities do offer their members a shared space, a shared language, and an intimate communication space. Advice is sought and given, friendships are developed and lasting intimacies are attempted.

Virtual community spaces also offer a culture of freedom, freedom of accessing information, freedom of travel. The mobilities that are characteristic of cybertravel provide distinct experiences for "cybertravelers" for whom these experiences may include seeing different worlds and seeing themselves in these worlds. The cybertraveler can say, "that's me there, I can freely roam about in that world." This form of cybertraveling relies on the construction of identity both by identifying oneself with, and differentiating oneself from other cybertravelers. The cybertraveler can enter the world of others without intruding on them and without being intruded upon by others. This is the essence of cybercommunity or the virtual community. Since such a community is supportive and non-threatening, individuals can build empathetic identities. Empathetic identities can be relationally autonomous. They exist separately and yet inform and draw on each other, shape each other through cybercontact. In other words, going back to the issues we raised earlier, looming behind this identity construction is the construction of a virtual community. Thus the Durkheimian balancing act, between individual autonomy and social solidarity, is supposedly resolved in cyberspace for one does not lose his/her individuality but only gains by being part of the community.

Some Final Thoughts - Cyberspace as the Site of (Marketing) Control

Given the liberatory potential of cyberspace, where does it leave the individual ultimately. In the name of consumer freedom, we are seeing many dark forces of control. Parallel to the possibility of creating new freedoms in cyberspace one also sees spheres of control--the control of consumer space by marketers. Various statistics show that 80% of the internet is now completely occupied by merchants of commerce. The rhetoric of cyberspace is full of choice, freedom, dispersed identities for the consumer. But marketers are gradually moving into this social space and redefining the notions of consumer choice and freedom. If indeed the cyberspace were to really become a world of consumer freedom, this might mean that marketers might lose grip over their consumers. But this ought not to happen. So the marketing question is, not how to preserve the true intent of the rhetoric, but only its apparent meaning. In a recent article in the Harvard Business Review (HBR), this issue was raised with great concern and anxiety (Hagel and Rayport 1997). As everybody knows, HBR is primarily a management oriented journal and is an unabashed handmaiden of commerce. There are

usually no surprises in the journal's orientation. The concern expressed by the authors is real. They acknowledge that with the new technologies of cyberspace, it is now possible to collect more information about individual customers. In other words, there is very little that one could not know about a consumer for everything resides in the cyber database for every one to see--that is, every one who can afford to see. Consumer identities are being totally appropriated by marketers via the information data base in the name of providing better services and products. The control of the consumer is through a web of information whose net is cast wide and far. The more information one has about the consumer the more control one has over the consumer. This obvious principle is being fully tested in the world of virtuality and in the name of consumer freedom. As consumers strive to build new identities on the internet, they are also being quickly transformed into data points in data bases. Getting back to the HBR article, instead of raising the issue that consumers might become the ultimate losers in the information war, the authors' concern is not the consumer but the marketer. One can rephrase their concern as a new title of their article, "How to protect marketing while collecting information about the consumer." As marketing unleashes its beguiling power over the cyberspace, the question we must ask is, whither the life of consumer freedom in cyberspace.

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