

Crossing the Postmodern Divide with Borgmann or Adventures in Cyberspace

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In his major works, Albert Borgmann has explored in depth and detail the role of technology in contemporary life and provided compelling critical, philosophical perspectives. In this study, I primarily discuss *Crossing the Postmodern Divide* (1992) in relation to the themes of his earlier *Technology and the Character of Contemporary Life* (1984). While appreciating Borgmann's attempt to provide distinctions between modernity and postmodernity as historical epochs, I challenge his analysis of a postmodern divide and sketch out an alternative conception of technology that critically engages some of Borgmann's positions. My argument will be that while technology threatens democracy, community, individual sovereignty, and other values many of us hold in common, it also provides the potential for a positive reconstruction of social life and an enhancement of human life. My provocation will be to deconstruct what I take to be a too sharp distinction in Borgmann's text between a "hyperreal" technosphere contrasted to a "real" world of concrete human interaction and focal activities. I attempt to show that some of Borgmann's own positive values can be realized in the cyberspaces of the new technologies and provide some examples. These reflections will force us to rethink the concepts of the public sphere, democracy, community, and technology.

Technology and Modernity: Borgmann's Perspectives

In his Introduction to *Crossing the Postmodern Divide*, Borgmann refers to "the expatriate quality of public life," writing: "We live in self-imposed exile from communal conversation and action. The public square is naked. American politics has lost its soul. The republic has become procedural, and we have become unencumbered selves. Individualism has become cancerous. We live in an age of narcissism and pursue loneliness" (1992: 3). He then provides many eloquent examples of contemporary sullenness and hyperactivity and unfolds a polemic assault against our present condition. Referring back to the themes of his earlier book, I would agree that technology is at least partly responsible for the problems that Borgmann eloquently evokes, but that it also provides possible solutions -- that the poison provides part of the cure.

There is no doubt that technology is a major constituent of our contemporary world and requires sophisticated philosophical perspectives to theorize its nature and effects. Technology has been acknowledged by Borgmann and many others as both a major constituent of the modern world and a possible lever to a new postmodernity. Moreover, both its proponents and critics agree that technology has been of momentous importance in constituting modernity and most theorists of postmodernity argue that it is new technologies which are largely responsible for taking us over the postmodern divide. But before taking this trip I want to critically engage Borgmann's thoughts on modernity and to focus on the role of technology in the modern adventure.

Borgmann's argument is that modernity is largely characterized by aggressive realism, a methodical universalism, and an ambiguous individualism. The modern project for Borgmann involves the use of science and technology to dominate nature; constructing a method that is largely technical to ground knowledge that will enable us to control nature and construct a

technological society; and the deployment of technology and its fruits to satisfy individual needs and ends in which technology is embedded in a means-ends nexus serving primarily the interests of atomized individuals.

Borgmann argues that philosophy is a seismographic register of epochal changes and reads off the features of modernity from the development of modern thought of which he is sharply critical. There have been numerous discourses on modernity in recent years and I believe that Borgmann goes too far in privileging philosophy as definitive of modernity. If one looks at modernity from the perspective of critical social theory one gets a somewhat different picture of the modern/postmodern divide (I also believe that modernity looks different from the vantage of the arts, or economics and politics, but this is a story for another day). From the standpoint of classical social theory -- the tradition of Marx, Weber, and Durkheim, et. al. -- modernity is interpreted as an epochal rupture involving momentous changes in the economy, polity, social order, culture, and everyday life. Within social theory, there are still passionate arguments concerning whether the capitalist economy, a democratic polity, an Enlightenment cultural revolution, the Protestant ethic à la Weber, urbanization and social differentiation, or -- as I would argue -- a concatenation of all of these factors is primarily responsible for the origins, development, and trajectory of the modern world (see Antonio and Kellner 1992).

Classical social theorists, like Habermas in our day but for different reasons, saw a positive potential in modernity and unrealized promises that could, however, be fulfilled in the future. Modernity thus looks different from the perspectives of democratic theory which see the rise of democracy, of a liberal public sphere, of bills of rights and constitutions as defining features. Likewise, if one looks at modernity from the perspective of classical social theory one might find the new forms of association, communities, cooperation, communication, and other forms of social interaction, as well as the benefits of modern cities. And modernity from the perspective of modernism in the arts sees a rich variety of innovative aesthetic movements and works transcending the limitations and conventions of traditional art (see Berman 1982).

All of these features of economic, social, political, and cultural modernity are admittedly ambiguous and we could have many books and conferences on the benefits and disasters of the capitalist economy; the nature, substance, benefits, and recurrent obstacles to realizing democracy; the gains and erosion of the positive forms of social association from earlier modernity; and the vicissitudes of modern culture. Indeed, I would conclude that modernity is a highly ambiguous phenomenon with tremendous achievements and potentials and copious problems and disasters. But I would argue that we need transdisciplinary perspectives to theorize modernity and I am skeptical as to whether it is in fact over and that we have crossed the postmodern divide -- as I will argue throughout this paper.

Of course, one can read modernity from the perspectives of philosophy, as Borgmann does, and this optic might very well illuminate key features of the modern world, but such a largely philosophical optic misses, as I am suggesting, some of the more positive, but also ambiguous and enduring features of modernity. And one also might occlude from a purely philosophical perspective the embeddedness of technology in social relations and within a specific socio-economic system, which I believe the perspectives of the sort of critical social theory developed by Marx, Weber, Lukàcs, and the Frankfurt School affords. Consequently, I will argue that this

tradition provides a better optic to illuminate our present situation and the role of technology in the contemporary world than the philosophical traditions and this theme will be a primary focus of much of the rest of my paper.

A Postmodern Divide?

The perspectives of critical social theory become relevant when one analyzes Borgmann's concept of a postmodern divide and we address the question of how we can best characterize our contemporary moment. Borgmann primarily sketches the postmodern divide in terms of a philosophical critique of modern ideology, or if you prefer, the modern mind-set, the modern Gestell, or what Borgmann sometimes calls the "modern project" or "modernism." He writes that: "An epoch approaches its end when its fundamental conviction begins to weaken and no longer inspires enthusiasm among its advocates. That is true of each of the three parts of the modern project: realism, universalism, and individualism" (1992: 48). It is here that Borgmann privileges "the seismographic significance of modern philosophy" that registers this shift. Borgmann elicits Richard Rorty in his *Philosophy and the Mirror of Nature* as a paradigmatic critic of the modern project of securing representational knowledge to dominate nature grounded in a foundation of truth and certainty that would provide the tools to dominate nature -- and who advocates a shift to a more modest concept of philosophy as conversation and, I might add, interpretation.

Yet it is Adorno and Horkheimer in *Dialectic of Enlightenment* (1972 [1947]) who -- decades before Rorty -- provide a powerful critique of the Enlightenment project of the domination of nature and radically deconstruct the foundations, premises, and systems of modern thought which lead from the slingshot to the hydrogen bomb -- to use a later phrase of Adorno. Moreover, while Adorno and Horkheimer, Rorty, Borgmann, myself, many philosophers of technology, and some postmodern theorists are prepared to break with the aggressive mindset that sees nature as the stuff of domination and that conceives of science and technology as instruments of domination, this is still a dominant mindset among the economic, political, and intellectual elites who are hegemonic. Further, such "realism" is probably shared by all too many sectors of the public as well, thus it is not clear that there is a postmodern break with the dominant mindset of modernity, though there have certainly been a plethora of critiques and proposed alternatives -- including Borgmann.

Likewise, while the same theorists who I mentioned above --as well as feminists like Carol Gilligan whom Borgmann cites -- reject the concept of a universalist method of truth or set of techniques to dominate and control nature, neo-positivistic concepts of science, faith in technocracy and technical solutions according to correct method, and desire for rigor and quantitative "hard" science which guarantee truth and objectivity continue to constitute the dominant mindset in leading intellectual and academic circles. Borgmann writes that: "universalism has been dethroned in almost every field of contemporary culture, from mathematics, by way of physics and biology to anthropology, the law, and literature. It is now seen as an anxious and pretentious yet ultimately futile effort to enforce rigor and uniformity in an unruly and luxuriant world" (1992: 55). Yet it is largely avant-gardes in these fields who are contesting the modern paradigm and even in philosophy belief in rigor, foundations, correct techniques and modes of argumentation continue to prevail -- at least this is the impression I get

from philosophy conventions, department tenure meetings, and perusals of mainstream philosophy journals.

Finally, although the possessive individualism criticized by Borgmann has led to social anomie, destruction of community, and downright despair, unfortunately there is little evidence that significant numbers of people are turning away from a limited and destructive conception of the individual -- a point that Borgmann himself makes:

Despite its beneficence, the transformative power of postmodernism is in doubt because it has failed to resolve the ambiguity of individualism. The latter term designates the human condition that has lost its premodern communal bonds. But we lack a unified and positive understanding of the person who would answer to the term. The individual was thought to be the beginning and end of the modern project, its author and beneficiary, but this coherence was an illusion (79).

And so while some philosophers see the limitations of the modern mind-set and paradigms, I am afraid that the features which Borgmann ascribes to modernity still hold sway, although they are admittedly and in many ways deservedly under attack. Yet Borgmann concludes his interrogations of modernity with the uncharacteristically positive and optimistic note that:

The intellectual, artistic, and economic developments of the past generation have led us beyond the broad and once fertile plains of modernism to a point where, looking back, we can see that we have risen irreversibly above the unworried aggressiveness, boundlessness, and unencumberedness of modernism. The latter now seems brash and heedless to us, if not downright arrogant and oppressive. The transition from modernism to postmodernism is reflected in many kindred shifts of sympathy: from the belief in a manifest destiny to respect for Native American wisdom, from male chauvinism to many kinds of feminism, from liberal democratic theory to communitarian reflections, from litigation to mediation, from heroic medical technology to the hospice movement, from industrialism to environmentalism, from hard to soft solutions (78).

Borgmann then notes countervailing tendencies -- "shifts from light to darkness as well: from Enlightenment to dogmatism, from tolerance to ethnic strife, from liberalism to self-righteousness, from freedom to censorship" -- but concludes that "the shifts to the good have prevailed" (78). Here we could endlessly argue whether or not this paradigm shift has or has not taken place in these specific issues, and whether shifts to the good or the bad or somewhere in between have occurred. But the crux of the matter is that Borgmann does not really convincingly theorize a postmodern divide. He does produce a model, or ideal type, of the modern project, shows that it is under assault in certain sectors of contemporary philosophy and life, but does not provide a convincing set of criteria to distinguish the modern from the postmodern, or arguments and evidence that we have actually crossed the postmodern divide to reach the other side.

To be sure, Borgmann attempts himself to articulate an alternative project that he calls "postmodern realism," but I have my doubts whether this notion is adequate to articulate a divide between modern and postmodern thought. Indeed, I would argue that perspectivism and social constructivism is at the heart of the postmodern critique which is radically at odds with the sort of realism that Borgmann professes. Indeed, Borgmann consistently maintains a realist ontology

and philosophy of nature and there is a covertly normative realism embedded in Borgmann's concepts of focal things and practices as well (1984 and 1992). In effect, Borgmann is telling us to attend to the really real, the authentic, in organizing our life. That, for instance, we should engage in the "real" activities of eating, gardening, running, and the like, and avoid fragmentation and dispersion in superficial practices and unreal consumer or media fantasies -- or, as I shall discuss and contest -- the realm of cyberspace.

Two senses of realism are thus collapsed in Borgmann: an ontological conception of reality with a normative celebration of that which is deemed to be really real and authentic: e.g. focal things and practices. But for postmodern theory, "reality" is a construct and notions of the "authentic" or really real are regularly deconstructed. Thus, I would argue that the main lines of the postmodern critique are directed against such forms of realism and that the notion of a "postmodern realism" runs against the main lines of postmodern thought. Moreover, even if there has been some shift in philosophical paradigms, I'm not sure this alone would support the sort of epochal shift from one historical period to another that Borgmann evokes with his concept of a "postmodern divide." My own view is that while there are what might be called emergent tendencies that might lead to overcoming the modern mindset or project as described by Borgmann and others, that these emergent and allegedly "postmodern" phenomena, at present, cannot bear the burden of articulating a postmodern divide from the modern, or serve as evidence of the transcendence of the modern -- although there is arguably evidence of a postmodern turn in many circles.

Indeed, for the concept of the postmodern to have force and substance, I would argue that we need to distinguish between modernity and postmodernity as historical epochs; modernism and postmodernism as forms of art; and modern and postmodern theory (see Best and Kellner 1991 and 1997), and believe that Borgmann collapses these distinctions. For the most part, Borgmann, as I am suggesting, folds his conception of a postmodern paradigm shift in philosophy into an epochal conception of postmodernity, although in the latter part of Borgmann's discussion of the postmodern (Chapter Three), he discusses architecture and what he calls a postmodern economy rooted in information processing. In these evocations of postmodern culture and society, there are more promising candidates to theorize a postmodern divide, yet I would argue that we need to shift from philosophy to social theory and cultural critique, or to transdisciplinary perspectives, to theorize these divisions. This is, I believe, the unarticulated direction in which Borgmann is going, but currently he tends to overly privilege philosophy -- whereas I would argue that we need to focus more intently on the economy, culture, and society to see the paradigm shifts from the modern to the postmodern in action and producing a rather different mode of life, rooted, as we shall see, in the dramatic impact of new technologies -- as well as the global restructuring of capitalism (see Best and Kellner 1997 and forthcoming).

In other words, I am arguing on a meta-level to go beyond philosophy to transdisciplinary social theory as was developed by the Frankfurt School, some versions of postmodern theory, and is happening today in some versions of feminism, cultural studies, and critical multiculturalism (see Kellner 1995). Thus, while I don't think that Borgmann has demonstrated a paradigm shift in philosophy and culture from the modern to the postmodern, I do believe that such distinctions can be made (see Best and Kellner 1997) and that there are undoubtedly manifestations of a postmodern shift in architecture and other cultural forms, as Borgmann suggests, although he

does not systematically engage the transition from modernism to postmodernism in the arts à la Jameson (1984 and 1991), who correlates the sort of absence of affect, fragmentation, pastiche, and implosion in the arts with the experiences of postmodern subjects, arguing that postmodernism has become a "cultural dominant" and new mode of subjectivity and experience. While I do not agree with Jameson that postmodernism in culture is already a cultural dominant, it is certainly an important emergent force that may very well help register a shift underway more broadly from modern to postmodern paradigms.

Borgmann does address recent trends in the economy and in particular information processing, and I would agree here that a postmodern paradigm shift is evident, described in terms of the emergence of a postindustrial society, information society, post-Fordism, postmodern globalization, and various other conceptions related to the restructuring of capitalism. Indeed, it is evident that immense changes are occurring in the economy and sooner or later these will effect, for better and worse, every aspect of life; when capital mutates, effects ripple from one end of the globe to the other, from one social domain to another. Thus, I agree with Borgmann that new modes of information-processing and new computer and media technologies -- as well as virtual reality, simulation, and other exotic high tech instruments -- are producing a set of dramatic changes in the economy, society, culture, and everyday life. In order to avoid technological determinism, however, I would propose theorizing the current developments in technology within the context of a global restructuring of capitalism, engaging the ways that new syntheses of capital and technology are dramatically transforming every aspect of our life (Best and Kellner, forthcoming).

This discussion brings us again to Borgmann's thematic of technology and contemporary life and here I will polemically engage Borgmann's views on technology and our contemporary moment, as well as Borgmann's philosophical perspectives.

Postmodern/Focal Realism vs. Hyperreality

In *Crossing the Postmodern Divide*, Borgmann claims that two contrasting options confront us as we encounter the present situation which he describes as the choice between an "instrumental hyperreality" and "hypermodernism" opposed to "postmodern realism" and "focal realism." Hypermodernism describes an intensification of the worst features of modernity and is constituted by a "hyperreality, "hyperactivity" and "hyperintelligence" (Chapter 4), which he contrasts with "focal realism," "patient vigor," and "communal celebration" (Chapter 5). Borgmann thus deploys three sets of triadic schemata to contrast the modern with two ways of living the postmodern condition, one of which intensifies modernism (i.e. hypermodernism) and one that breaks more radically with it and thus constitutes a genuinely postmodern alternative. In Borgmann's words: "The alternative tendency is to outgrow technology as a way of life and to put it in the service of reality, of the things that command our respect and grace our life. This I call postmodern realism" (82)

Borgmann thus deploys a crucial normative distinction between a hypermodernism contrasted to postmodern focal realism, which provides, as Andrew Light has argued (1995), a remapping of Borgmann's earlier distinction between devices contrasted to focal things and practices. These distinctions delineate what Borgmann's dislikes and likes in the contemporary moment, thus the

two sets of terms function in his thought as positive and negative markers which critically counterpoise "real" experience to "hyperreal" experience. For instance, as the following examples indicate, Borgmann persistently attacks hyperreal experience and practice, excoriating "the cancerous growth of video culture" (10) and claiming that: "This middle region of physical reality is divided today by the line between the real and the hyperreal. On the one side are things of commanding presence, continuous with the world; on the other, disposable and discontinuous experiences" (118). Borgmann also writes that: "Having left modernism [e.g. as a mode of theory and intellectual paradigm] behind us, we now have to decide whether to proceed on the endless and joyless plain of hypermodernism or to cross over to another more real world" (126).

Borgmann thus recommends that we "outgrow technology as a way of life," put technology in the service of reality, and make focal things and practices the fundamentals of our life (1992: 82ff). While I agree that we should not blindly worship technology, that we should put it in the service of enhancing our lives and serving our most cherished values, I disagree with Borgmann's distinction between hyperreality and reality and his assigning technological modes of experience or interaction to the hyperreal as opposed to "real" interaction with nature, objects, and human beings -- which he in turn privileges over the hyperreal technosphere and its seductions. In the remainder of this paper, I want to argue that new technological modes of experience and interaction are just as real and life enhancing as conversation, gardening, taking a hike in the wilds, or caring for animals -- examples positively valorized by Borgmann. I believe that Borgmann's distinction between the real and hyperreal and his denigration of hyperreality are problematic, that we need to deconstruct such oppositions, and should see how new technologies make possible the sort of focal, life-enhancing experiences and activities that Borgmann himself calls for.

Of course, the new technologies and technological mode of experience have some of the downsides that Borgmann points to and there are losses as well as gains in the uses of the new computer and information technologies that I will focus on. But the point that I would stress is that we need a dialectical optic on technology and, crucially, we need to focus our energies on the devising of uses for new technologies that will enhance our lives and serve the values that we hold in common. Consequently, I share the practical and political concerns of those philosophers of technology who want the philosophy of technology to concern itself with how technology can enhance our lives, can be put into progressive political uses -- or that counters destructive and life-negating technologies and applications.

In the last chapter of *Crossing the Postmodern Divide*, Borgmann sketches out his own political vision and perspectives, and it is revealing that positive interactions with technology do not play a role in his deliberations. On one level, I appreciate the last sections of Borgmann's book that sketches out a political and normative postmodern agenda with the discussions of focal realism, patient vigor, and communal celebration -- this is for me far preferable to the apolitical and nihilistic versions of postmodernism that are circulating. Against such cynical and nihilistic versions of postmodern theory (Baudrillard and some of his followers come to mind), Borgmann provides a constructive and positive version. But he seems to leave out experiences with and uses of new technologies in those activities and the values and activities that he celebrates are counterpoised to "bad" "hyperreal" experiences and activities betraying aspects of a technophobic refusal to see more positive uses of technology.

In fact, I found it curious that in his discussion of information processing, Borgmann describes the computerization of the economy with examples from business, but does not describe the ways that computer technologies are becoming embedded in the fabric of our own everyday lives and practices. Here -- to supplement Borgmann's positive program but also perhaps to question and deconstruct his "real" vs "hyperreal" dichotomy -- I want to describe some concrete examples of how use of new technologies can be something like Borgmann's own focal things and practices, and can help produce new modes of communication, writing, and art, which make possible the sort of positive postmodern experiences and activities that Borgmann himself desires. I would argue that these technologies and their uses are just as real as our interactions in other dimensions of experience, though there are novelties and positive and negative features that need to be attended to, discussed, and engaged. I also wish to argue that the new cyberspaces of media and computer technology produce new public spheres that might help overcome individual isolation, apathy, and sullenness that have alienated large sectors of the public from our polity and from other people.

New Technologies and New Focal Things and Practices

Borgmann often very effectively does philosophy with examples and I will attempt to emulate his procedure here. Let us begin with email and computer communication. For some years, I have used email everyday to communicate with people all over the world. This has facilitated a lot of business communication, saving a lot of time and bother sometimes involved in planning trips, writing articles, and communicating instrumentally with colleagues. But computer communication also arguably nourishes personal and professional relationships that may lead to enduring friendships and productive relationships. Thus, technologically mediated-communication can be used for interpersonal communication as well as business, and can nourish significant social interaction and relationships, as well as serve merely instrumental purposes.

Indeed, I would argue that email and computer communication also have the features of establishing new forms of connectiveness and interaction. As noted, it enables me to connect with colleagues and friends all over the world, but also makes possible connections with people whom I have not met, thus expanding my network of friends and colleagues. Moreover, it is even possible to communicate in real time with people on a one-to-one basis via split screen or in new audio-video interactive spaces, as well as with groups of people in MOOs and MUDs, or computer conferences. There are admittedly losses and downsides to this mode of communication, but also, I would argue, benefits. While sometimes face-to-face communication is preferable, and telephone conversation is preferable to email, it is not always possible to engage in such interaction, thus, minimally, electronic computer-mediated communication supplements and expands one's connections and interactions.

Moreover, computer conferencing and MOOs and MUDs make possible interaction with a wider range and variety of individuals than is usually possible in face-to-face communication and without the burdens of travel. In past years, I have participated in virtual conferences in the PMC and IATH MOOs. The later conference was organized in Florida and during a Saturday afternoon session in 1995, we logged on to a MOO in Virginia. The interaction made possible a

much more intense exchange of ideas than is usually possible at conferences which limits exchange of ideas since individuals can only speak one at a time, often participants do not say much of interest, and, as we know too well, some speakers tend to monopolize the conversation. In MOO conferences, by contrast, individuals can textually multiply their ideas, one can interact in an intense way with more individuals and ideas, and observers can comment on the proceedings -- with the entire event captured and archived for later scrutiny and further discussion and debate.

There are, of course, also losses in this sort of electronic conference in comparison to the sort of traditional face-to-face conference which can elicit exciting dialogue and interpersonal interaction (though after thirty years of conference-going I would say that this is the exception rather than the rule). One can cultivate more personal and interactive relationships in face-to-face interaction, though computer-mediated communication can also create relationships that can be enhanced in real life. In computer conferences, one sacrifices the joys of travel, but also avoids the hardships. One does not have to disrupt the fabric of everyday life and can interact with people without leaving one's home, saving time (and money) often wasted on travel, and can spend this savings by engaging in more rewarding focal activities.

While computer-mediated communication can be intense and interactive, there are undeniably losses due to absence of concrete presence, voice, personal interaction, and other semiotic features of interpersonal interaction. But I would not create a hierarchy of interpersonal face-to-face versus electronic communication in any absolute register, and would argue for a logic of both/and rather than either/or, seeing these modes of communication and interaction as complementary and supplementary rather than mutually exclusive. Face-to-face communication can facilitate manipulation and domination as well as positive interaction; it can be boring and time-consuming and trap individuals in situations they do not really want to be in. Moreover, I certainly do not see what is intrinsically harmful about computer communication if it is a supplement to concrete social interactions, although I realize there is a danger of getting lost in virtual worlds, losing interpersonal communicative and interactive skills, and the ability to socially interact with others.

In terms of research and writing, which is also an important focal domain of academic and intellectual life, I would claim that computer data bases, the Internet, and Web surfing provide tremendous resources and supplementation to standard academic practices. Accessing computer data bases and web sites often saves research time, provides a wealth of information, access to alternative sources, and opens up debates to wider range of views -- though one might also benefit from traditional modes of library research and I am not trying to valorize one over the other. Indeed, I would argue that new modes of communication, research, and writing are a supplement to traditional forms and should not be seen as their replacement.

Yet new technologies like CD-ROMs and other forms of multimedia provide new possibilities for creative work and education. For instance, I worked on a CD-ROM on Emile de Antonio's film *Painters Painting with Voyager*, editing over 700 pages of interviews with artists that de Antonio conducted, providing biographies of the artists, and contextualizing of the film and art history, thus providing over 1,000 pages of text, too much for a book, but easily accommodated on CD-ROM. While Borgmann says that art has been subverted by technology (1992: 136), I

would argue that new technology provides new possibilities for aesthetic creativity -- and have worked with cyberartists Pat Lichty and Jon Epstein to develop illustrations for my books and websites. In addition, I would argue that museum and other websites make accessible to the entire world the heritage of world art that might not otherwise be accessible to many individuals. To be sure, such electronic reproduction of art, like slides and print reproduction, constitutes a loss of aura of the presence of the art work, but it provides supplementary experience and textual information that can enhance eventual museum experience of the works themselves.

When we turn to more social and political uses of new computer technologies, the concept of an information superhighway highlights the need to have an internet system that is free, open to all, and providing public spaces for diverse purposes and interaction. Given the extent to which capital and its logic of commodification have colonized ever more areas of everyday life in recent years, it is somewhat astonishing that cyberspace is by and large decommodified for large numbers of people -- at least in the overdeveloped countries like the United States. In the U.S., government and educational institutions, and some businesses, provide free Internet access and in some cases free computers, or at least workplace access. With flat-rate monthly phone bills (which I know do not exist in much of the world), one can thus have access to a cornucopia of information and entertainment on the Internet for free, one of the few decommodified spaces in the ultracommodified world of technocapitalism.

The metaphor of frontier signifies the adventure of computer explorations and quests which in conjunction with the concept of an information superhighway evokes images of a journey, a trip, postmodern adventures in information processing, communication, aesthetic creativity, and exploration -- replicating some of the adventures of early modernity in the new cyberspaces. We are entering new frontiers, new modes of communication and interaction, new sources of knowledge and creativity, and new forms of social interaction. There are, of course, dangers that one can get lost in this world, and there is no doubt that some of our students and fellow citizens are getting enmeshed in the sometimes problematic worlds of cyberspace that include mindless games, stupid chitchat, and problematic activities such as pornography and gambling, as well as the more productive uses that I am valorizing.

And while metaphors of the 'net and 'web point to connectedness, rhizomatic and multilayered levels of experience and texture, the same metaphors also signify, more negatively, that one can become trapped inside an artificial world, lost in the funhouses of cyberspace, unable to escape to worlds and relations outside. Yet many political organizations are using the Internet to advance their struggles and to connect people with real world issues. Many labor organizations are also beginning to make use of the new technologies. Mike Cooley (1987) has written of how computer systems can reskill rather than deskill workers, while Shosana Zuboff (1988) has discussed the ways in which high-tech can be used to "informate" workplaces rather than automate them, expanding workers' knowledge and control over operations rather than reducing and eliminating it. The Clean Clothes Campaign, a movement started by Dutch women in 1990 in support of Filipino garment workers has supported strikes throughout the world, exposing exploitative working conditions (see their website at <http://www.cleanclothes.org/1/index.html>). In 1997, activists involved in Korean workers strikes and Merseyside dock strike in England used websites to gain international solidarity (for the latter see <http://www.gn.apc.org/lbournet/docks/>).

Labor organizations, such as the North South Dignity of Labor group, note that computer networks are useful for coordinating and distributing information, but cannot replace print media that is accessible to more of its members, face-to-face meetings, and traditional forms of political struggle. Thus, the trick is to articulate one's communications politics with actual political movements and struggles so that cyberstruggle is an arm of political battle rather than its replacement or substitute. The most efficacious Internet struggles have indeed intersected with real struggles ranging from campaigns to free political prisoners, to boycotts of corporate projects, to actual political struggles, as noted above. Hence, to capital's globalization from above, cyberactivists have been attempting to carry out globalization from below, developing networks of solidarity and circulating struggle throughout the globe. To the capitalist international of transnational corporate globalization, a Fifth International of computer-mediated activism is emerging, to use Waterman's phrase (1992), that is qualitatively different from the party-based socialist and communist Internationals. Such networking links labor, feminist, ecological, peace, and other progressive groups providing the basis for a new politics of alliance and solidarity to overcome the limitations of postmodern identity politics (on the latter, see Best and Kellner 1997 and forthcoming).

Moreover, a series of struggles around gender and race are also mediated by new communications technologies. After the 1991 Clarence Thomas Hearings in the United States on his fitness to be Supreme Court Justice, Thomas's assault on claims of sexual harassment by Anita Hill and others, and the failure of the almost all male US Senate to disqualify the obviously unqualified Thomas, prompted women to use computer and other technologies to attack male privilege in the political system in the United States and to rally women to support women candidates. The result in the 1992 election was the election of more women candidates than in any previous election and a general rejection of conservative rule.

Many feminists have now established websites, mailing lists, and other forms of cybercommunication to circulate their struggles. Likewise, African-American insurgent intellectuals have made use of broadcast and computer technologies to advance their struggles. John Fiske (1994) has described some African-American radio projects in the "techostruggles" of the present age and the central role of the media in recent struggles around race and gender. African-American "knowledge warriors" are using radio, computer networks, and other media to circulate their ideas and counter-knowledge on a variety of issues, contesting the mainstream and offering alternative views and politics. Likewise, activists in communities of color -- like Oakland, Harlem, and Los Angeles -- are setting up community computer and media centers to teach the skills necessary to survive the onslaught of the mediatization of culture and computerization of society to people in their communities.

Obviously, rightwing and reactionary groups can and have used the Internet to promote their political agendas. In a short time, one can easily access an exotic witch's brew of ultraright websites maintained by the Ku Klux Klan, myriad neo-Nazi groups including Aryan Nations and various Patriot militia groups. Internet discussion lists also promote these views and the ultraright is extremely active on many computer forums, as well as their radio programs and stations, public access television programs, fax campaigns, video and even rock music production. These groups are hardly harmless, having promoted terrorism of various sorts

ranging from church burnings to the bombings of public buildings. Adopting quasi-Leninist discourse and tactics for ultraright causes, these groups have been successful in recruiting working class members devastated by the developments of global capitalism which have resulted in widespread unemployment for traditional forms of industrial, agricultural, and unskilled labor.

The Internet is thus a contested terrain, used by Left, Right, and Center to promote their own agendas and interests. The political battles of the future may well be fought in the streets, factories, parliaments, and other sites of past struggle, but all political struggle is already mediated by media, computer, and information technologies and will increasingly be so in the future. Those interested in the politics and culture of the future should therefore be clear on the important role of the new public spheres and intervene accordingly.

Now I would argue that these new modes of technological experience are at least positive supplements to interactions with nature, objects, and human beings and should not be posited as antithetical and simply dismissed as hyperreal, hyperactive, or some such negative valuative term. Such a dismissal would prematurely close off potentially exciting and life-enhancing new realms of experience and expansions of "reality," as I would put it. And so I would question Borgmann's real/hyperreal distinction and negative valorizations of technologically-mediated activity, arguing that the new realms of cyberspace have positive potentials, as well as dangers and limitations. The challenge, then, is to use technology in life-enhancing, fulfilling, and socially progressive ways, to create a better society and mode of life. And I believe that for better or worse technology is our fate, it is an inexorable force that is dramatically changing every aspect of our lives, and that it challenges us to devise ways to make it more life-enhancing.

Borgmann, however, sometimes totalizes technology in negative terms as when he writes: "If we agree to call this distinctive approach to the reordering of the world modern technology, we should put the challenge to postmodernism by asking whether postmodernism will be more than technology by other means" (1992: 80). What does this mean? Are there overtones here of Ellul's technique that takes over, becoming totalitarian, of autonomous technology coming to totally dominate us? Is technology merely a negative mode of domination, of an oppressive ordering that is counterpoised against a "good" realm of nature, community, and reality? I have argued for a deconstruction of the opposition real/hyperreal with the latter stigmatized tout court as inferior, deficient, and even harmful -- though in some cases it might be. In the spirit of pragmatism, I have been attempting to distinguish between life-enhancing and diminishing examples of uses of technology, as well as progressive and reactionary uses, and provided some examples of what I considered positive uses of new technologies.

Borgmann, however, might very well dismiss my examples and arguments as cases of what he calls "hyperintelligence" that he claims "is obviously growing and thickening, suffocating reality and rendering humanity less mindful and intelligent" (1992: 108). On the other hand, Borgmann positively valorizes an "active intelligence" in intimate contact and interaction with reality and I am arguing that cyberspace interaction could be interpreted as such an example of "active intelligence" which I would consider just another mode of reality, another realm of experience, and not an inferior or debased form of hyperreality.

We need to articulate a standpoint of critique, from which one can make distinctions between

positive and negative uses of technology. I would suggest that those forms and uses of technology that enhance positive values such as democracy, community, freedom, self-development, and the like can be deemed life-enhancing and meritorious, while those forms and uses of technology which promote domination and oppression, or which subvert democracy, community, freedom, creativity, and other positive values, can be considered blameworthy. Of course, often one cannot make such a clear distinction, there can be unintended consequences of introducing technologies, and technologies are often highly ambivalent. Yet, it is a mistake, I believe, to dismiss technology per se as dehumanizing or life-negating and to only valorize non-technological activities and interaction as genuinely focal things and practices.

In conclusion, I want to return to the question of the postmodern divide and the issue of whether we have or not crossed over such a divide. I have raised some questions concerning Borgmann's analysis of the postmodern turn in an earlier section and wish to sketch out next my own perspectives on our current situation in the next section. Between the Modern and the Postmodern

And so we come to the question of whether we have crossed a postmodern divide, or, as I would argue, we are currently dwelling in a liminal stage between the modern and the postmodern. Postmodern theorists, like Baudrillard (1993), postulate that technology has propelled us into a brave new world of hyperreality, simulation, and the ecstasy of communication that constitutes the catastrophe of modernity and an entirely new postmodern technoscape which he and his followers describe in hyperbolic terms. Borgmann is more modest in his concept of a postmodern divide which he mainly sketches out in terms of a paradigm shift most visible in philosophy. My own position is that there is a postmodern turn in theory and culture underway and something like a new postmodern society in the making, but while I concede that we may very well be on the way toward a postmodern divide would argue that we haven't yet crossed over to the other side (see Best and Kellner 1997 and forthcoming).

The radicality of postmodern discourse is the claim that we have entered a dramatically novel era which requires entirely new theories and politics. These postmodern theories posit an extreme break and rupture with modern culture and society, assuming that the historical epoch of modernity is over and that we are living in an entirely new social order, a postmodernity. The claim is analogous to the earlier modern arguments that the Enlightenment broke with the unreflective, childlike past (Kant), or that the French and industrial revolutions produced an altogether new modern society radically different from traditional society. Modern social theory arose as an attempt to describe the emergent modern societies. Classical modern theorists like Marx pointed out that for the first time in history, life was organized around the production (and later consumption) of commodities. Industrial men, women, and children were becoming species of a new type of homo faber (literally toiling animals), who were condemned to novel modern forms of misery and servitude. Nietzsche described in turn the innovative social forms of modern society and the rise of a modern state and mass society, while classical social theorists like Durkheim and Weber described the forms of social differentiation, rationalization, and secularization characteristic of modern societies (see Antonio and Kellner 1992).

Some postmodern theorists claim that a rupture has taken place in history every bit as great as the divide between modern and premodern societies. The break is described by postmodernists as

the transition from modernity to postmodernity, by Marxists as the restructuring of global capitalism and the emergence of a new regime of post-Fordist accumulation and transnational capitalism, and by certain sociological theorists as the move to a "post-industrial," or "information society." A wide range of theorists interpret the contemporary moment in terms of specific mutations of the economy, polity, society, and culture, described in a variety of competing vocabularies. There are thus a proliferation of new discourses which have attempted to capture the novelty of the present moment, of which postmodern theories are the most prominent.

Although it is prudent to be skeptical of extreme postmodern claims that would render obsolete the assumptions, values, categories, culture, and politics of the modern era, it must be admitted that significant changes are taking place and that many of the old modern theories and categories can no longer adequately describe our contemporary culture, politics, and society. Whereas the modern era swept in unprecedented forces of secularization, rationalization, commodification, individualization, urbanization, nationalism, bureaucratization, and massification, the last three decades have seen the decline of the nation-state, decolonialization, explosions of ethnicity and fundamentalism, the rise to unparalleled power of media culture, the revolutionizing force of computers, and the spread of new forms of virtual reality and hyperreality described in new postmodern theories and literature like cyberpunk.

And yet the extreme claims for a postmodern break and rupture do violence to our sense of enduring continuities with the past and the fact that many ideas and phenomena which are claimed to be "postmodern" have their origins or analogues precisely in the modern era. Consequently, I would argue that we are living between a now aging modern era and an emerging postmodern era that remains to be adequately conceptualized, charted, and mapped. In Bernstein's (1991) appropriation of Benjamin and Adorno, we are living in a "new constellation" of changing elements that are irreducible to a common denominator, in a "force-field" of dynamic interplay of the old and new.

Historical epochs do not rise and fall in neat patterns or at precise chronological moments. Perhaps our current situation is parallel in some ways to the Renaissance, which constituted a long period of transition between the end of premodern societies and the emergence of modern ones. Such periods are characterized by conflicts between the old and the new and the birthpangs associated with the eruption of a new era. Indeed, change between one era and another is always protracted, contradictory, and usually painful. But the sense of "betweenness," or transition, requires that one grasp the continuities with the past as well as the novelties of the present and future. Thus, it is also important to capture the continuities with the modern, as well as discontinuities, in order to make sense of our current predicament.

Living in a borderland between the old and the new creates tension, insecurity, and even panic, as well as excitement and exhilaration, thus producing a cultural and social environment of shifting moods and an open but often troubling future. The discourse of the postmodern is therefore deeply implicated in the hopes and fears of the present and is an important component of our current situation. Thus, the ubiquity of the term "postmodern," its constant proliferation, its refusal to fade away, and its seeming longevity -- several decades is a long time for a mere "fad" in our rapidly changing world -- suggest that it is addressing contemporary concerns in a

useful way, that it illuminates certain contemporary realities, that it resonates to experience, and that it is an important part of the contemporary critical lexicon that one has to come to terms with, one way or another.

Consequently, it would be a mistake to merely dismiss the discourse of the postmodern out of hand as a mere fad or ephemeral fashion. Although many predicted that the phenomenon is over, there continue to be waves of books, articles, conferences, and proliferation of postmodern discourses. People continue to feel passionately about the postmodern and the discourse obviously speaks to important changes in our culture and society and by now has acquired a certain weight. Postmodern theory has penetrated almost all academic disciplines, producing critiques of modern theory and alternative postmodern theoretical practices in philosophy, social theory, politics, economics, anthropology, geography, science, and just about every academic field (see, for instance, the survey of postmodern modes of inquiry in Dickens and Fontana 1994 and the discussion of the postmodern paradigm shift in Best and Kellner 1997, Chapter 6). Groups and individuals marginalized in the society, culture, and university have taken the term as their own and use it to oppose the established order of things. Since many of these individuals are younger, one expects that the discourse will continue to be used for some time to come.

In addition, the discourse is remarkably flexible and open, and individuals can use it to promote a lot of different agendas, as well as a lot of babble and gibberish. Although some discourse of the postmodern (i.e. Baudrillard and his followers) is exceedingly cynical and ultraskeptical, those who wish to promote religion have also used the discourse to attack modernity and Enlightenment rationalism (i.e. Smith 1982), as has Borgmann. Individuals have used it to promote a tremendous variety of theoretical and political agendas, producing a bewildering cacophony of postmodern discourses. Many have invested cultural capital in promoting the turn, while others are invested in attacking it. The discourse of the postmodern is thus an integral part of the contemporary scene and will, we believe, be with us for a long time to come. Therefore, we must take it seriously and engage it critically.

It is the merit of Borgmann's recent work to seriously and critically engage the postmodern turn and to construct a positive normative ethical and political version of postmodern theory that provide provocative perspectives on the contemporary era. He carries out a sustained and radical critique of modernity and projects positive postmodern alternatives which challenge us to focus on what is most important and fundamental to our lives. Thus Borgmann requires us to question anew the role of technology in the present moment and to develop appropriate ethical and political responses to its presence and demands.