

## **Marxism and the Information Superhighway**

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Media and computer technologies are creating dramatic changes that are producing an explosion of rhetoric and hype touting the benefits of the new information superhighway where individuals will supposedly get data and entertainment on demand, hook up into new virtual communities, and even create new identities. Such ideological hyperbole has accompanied the introduction of all new technologies, but this time the structures of contemporary capitalist economies, politics, society, culture, and everyday life are dramatically changing, requiring radical social theory to rethink its assumptions, models of society, and politics. In this article, I wish to argue that if Marxism is to have a future it must theorize the new media and computer technologies and revise its analyses of contemporary capitalist societies and socialist politics accordingly. I will also argue that the Marxian theory provides powerful perspectives to make sense of the momentous changes currently transforming every dimension of social reality, but that it needs to be reconstructed and updated as well.

### **FORCES OF PRODUCTION**

Media and computer technologies are among the most advanced forces of production which are creating a new global capitalist society which may well strengthen capitalist relations of production and hegemony, but also contain potential for democratizing, humanizing, and transforming existing inequities in the domain of class, race, and gender. Like most technologies, they can be used as instruments of domination or liberation, and can empower working people, or they can be used by capital as powerful instruments of domination. It is therefore a mistake to either celebrate new media and computer technologies in the mode of technophilia, or simply denounce them in the mode of technophobia. A critical theory of technology by contrast characterizes technologies both as potential instruments of liberation which could be used to democratize and humanize society and empower individuals, or as powerful instruments of capitalist domination and hegemony. The construction and effects of technologies depend in part on how corporations market and use the technologies and in part on the will and intelligence of individuals and social movements struggling to determine the structure, uses, and effects of the new technologies. Which side prevails in specific cases will determine the shape of the future.

So far, neo-liberals, libertarians, and technophiles of various stripes have been strongly celebratory of the potentials for new jobs, new modes of information and communication, and democratization, while radicals and traditional humanists have been largely denunciatory, exposing the illusions of media and computer ideologies, and attacking their actual implementation and use. The task for the Left in the face of new technologies, I would argue, is to theorize how they are currently being implemented, to discern their more positive potentials, and to develop strategies and struggles to work for their democratization and humanization. I have in previous publications (Kellner 1995a and 1995d) outlined some of the consequences of media culture in transforming contemporary society and politics, and in future studies I will delineate some of the features of the emerging computer culture, its syntheses with media culture, and its impact on every dimension of social life. Here I want to limit myself to

articulating some strategies concerning how progressives can use media and computer technologies to promote democratization and positive social change in order to counter the technophobia still widespread on the Left.

Classical Marxian perspectives provide a starting point to theorize the impact and use of new media and computer technologies. For Marxian theory, the new technologies are forces of production used by capital to produce a new media and computer society in which information, entertainment, education, and everyday life will be mediated by these technologies. The project of corporate capital is to commodify the new technologies as rapidly as possible to maximize capital accumulation and the project of the Left should be to struggle for their decommodification and to use the technologies against the interests of capital and in favor of empowering human beings. That is, the internet is now free to many who have government, or academic, affiliations and broadcast television is free to the entire public. There are moves by the entertainment and information industries, however, to privatize the Internet and charge for all television programming, perhaps on a pay per view basis. The struggle against commodification of information and entertainment will thus help determine the future of our communications system and environment.

Of course, the dominant ideology is that media and computer technologies inherently empower people and while there is some truth to this claim, it is also the case that these technologies could be used primarily to empower some people while exploiting, manipulating, and disempowering others. Thus, whether individuals do or do not have ready access to information in the future and the skills necessary to function in an information society will determine whether the society is more or less egalitarian and democratic in the future. At present, there are signs that red-lining of neighborhoods is taking place in the construction of information and entertainment systems, so that some groups will be left out of the coming information era, without access to information or participation in the emerging new public spheres that I describe below. There are countervailing signs, however, that efforts are being made in some school districts and communities to ensure that every individual gains access to new technologies to gain the skills, education, and information necessary to participate in a high-tech environment. It is indeed crucial that women, members of oppressed minorities, and the entire strata of the working class gain access to the education, skills, and technology required for jobs and participation in the public spheres of the future.

Of course, the new technologies are for the most part only deployed at present in the overdeveloped countries. Currently, only one in five people in the world have telephones, much less computers or access to media technology, but proliferation of new communications technologies may help erode existing inequalities and divisions -- though they may well intensify class domination and gender, race, and class inequality and subordination. For this reason, it is also important for developing countries to devise strategies to enable its citizens to use new technologies to better themselves and to overcome existing inequalities and oppression.

Indeed, the new technologies are part of the creation of a new capitalist global order in which media and computer technologies are the very vanguard and instrument of globalization, intending to bring corporate information and entertainment to the entire planet (Cvetkovich and Kellner forthcoming). McLuhan's global village may well be a scenario for the future. It is clear,

however, that the massive media mergers of summer 1995 are harbingers of corporate concentration and strategies that intend to globally penetrate new markets and struggle for dominance in existing ones. The mergers between Disney and ABC, and possible mergers between Time Warner and Turner broadcasting (with a possible television network thrown in for good measure), are signs of new synergies between entertainment and information, and production and distribution systems, that will diminish sources of information and entertainment, at the same time as corporate products are globally disseminated, helping to produce a new global media culture.

Therefore, when talking of the media and information society we are talking of globalization, although at present the new technologies are primarily being implemented in the overdeveloped world. My discussion of strategy will accordingly limit itself to conditions in advanced capitalist societies, although it is of imperative importance that discussions also take place concerning how new technologies can aid people in the developing countries in their struggles for control over their futures.

### PESSIMISM OF THE INTELLECT

With the defeat of the movements of the 1960s and 1970s and the collapse of the actually existing socialist world, there are extremely good reasons for pessimism, and new media and computer technologies could give capital new sources of profitably and new instruments of social control, undreamed of in the corporate imaginaries of the past. On the other hand, Gramsci's motto "pessimism of the intellect, optimism of the will" still seems the appropriate response for radicals in the current situation. In this section, I will accordingly delineate some reasons for skepticism concerning the positive benefits of the new technologies as well as grounds for pessimism that they will serve primarily as instruments for capitalist hegemony. In the remainder of the article, however, I will concentrate on activist strategies and ways that the new technologies might help the democratic and socialist project.

All the utopian talk of information superhighways and the great media societies of the future helps to mask the fact that contemporary capitalist societies are in a situation of seemingly permanent crisis with increased human suffering due to deteriorating social conditions. The 1995 Republican party Contract on America threatens to increase poverty, homelessness, and class, gender and race inequalities, while providing more wealth and power to the privileged. Meanwhile, the conditions of everyday life, even in the metropolises of the United States, are disintegrating dramatically. Numbers of homeless and unemployed continue to grow; epidemics of cancer, AIDS, and other deadly diseases proliferate with no cure in sight; crime and violence are on the rise; tobacco, drugs, and alcohol take millions of lives yearly; drinking water continues to be contaminated by toxic chemicals and basic foods are adulterated with chemicals, additives, and pesticides, many of which contribute to deadly diseases. Accidents and deaths in the workplace grow, while people are subject to increased surveillance, insecurity, and cutbacks in social benefits.

As compensation for decaying social conditions, those who can afford it are offered an always increasing dose of media culture, consumption, and new technologies. The numbers of channels on cable television continue to multiply, with current estimates of more than 500 channels on the

horizon. There are also predictions of the imminent arrival of supplementary programs available on demand via computer in the immediate future which will make possible interactive video. The hours of television watching continue to grow, the amount of advertising continues to increase, and computers are producing a new technoimaginary, often shaped by capitalist values, thus the colonization of leisure and society by media culture first described by the Frankfurt school continues apace.

What Guy Debord called "the society of the spectacle" (1970) inverts the relationship between the imaginary and the real with positivity and value invested in media and commodity spectacles while everyday life becomes ever more uniform, banal, and degraded. Debord's concept helps describe the current fascination with computer culture that provides exciting new worlds of information, entertainment, and interaction, compensating for declining social conditions. Part of the downside of the computer and media society, therefore, is that it masks deteriorating social conditions and crisis, challenging radical theory to deploy these very technologies to point to current problems and to propose solutions.

Unfortunately, those who are most exploited and oppressed by the social order can afford little more than the "free" entertainment provided by media culture, especially television. As an escape from social misery, or distraction from the cares and woes of everyday existence, people turn to media culture to produce some meaning and value in their lives. Sports offer identification with glamour, power, and success, "empowering" those who identify with winning teams and stars. Soap operas and situation comedies provide "education" for coping in the contemporary social order, while action entertainment demonstrates who has power and who doesn't, who can and cannot exercise violence, and who does and does not get awarded with the benefits of the "good life" in the media and consumer society. Advertising demonstrates how to solve problems and how to be happy, successful, and popular -- through proper commodity behavior. Films glamorize the "American way of life" and provide unreal models of identification, while images of violence constantly increase.

Those who celebrate the coming information society tend not to focus on what kind of society produces an information highway and multi-media cornucopia for its privileged denizens while denying others the basic necessities of life. Without critical perspectives on contemporary media and computer society with its emerging information and entertainment infrastructure, all celebrations of an information highway and coming media utopia are purely ideological, serving to veil the current misery of millions and increasing poverty of U.S. culture and society.

Indeed, surrender of criticism and oppositional resistance to the injustices and oppression in the contemporary technocapitalist societies is nothing more than capitulation to a way of life that produces incredible suffering for people throughout the world. Moreover, to some extent the media and information society is already here and what wonders has it wrought? Has the entertainment and information of the present age brought about increased happiness, freedom, and well-being, even for those privileged to access it?

Rather social and cultural barbarism is one of the most striking features of the present age. Perhaps a future age will look back at this era of political and media culture with disbelief. It could be that denizens of an age of interactive technologies will look back at the passive couch

potatoes of this era in wonder. Perhaps those able to access information from a wealth of sources from computer data bases will be astonished that in this era the vast majority of people depended on television for their prime source of information. Perhaps later generations who have access to a vast array of significantly different and better cultural texts at their fingertips will be amazed that people actually wasted their time on the programs of commercial television, radio, and film during the present era. Perhaps individuals in a future age will be astonished that people watched so much television, saw so many poor films, listened to so much mediocre music, and read such trashy magazines and books, hour after hour, day after day, year after year.

People in the future may indeed look back at our age of media culture as an astonishing age of cultural barbarism in which commercially driven culture industries pandered to the lowest common denominator, pouring out films, TV shows, novels, and other artifacts which depicted violence as the way to solve problems, that debased women and people of color, and that repeated the same old tired genre formulas over and over. The endless sequels of popular film and eternal recurrence of the same in the fields of television, popular music, and other forms of media culture might strike a future age as highly primitive and barbaric. A future age might look at an era that idolized Sylvester Stallone, Madonna, Michael Jackson, Beavis and Butt-Head, Bruce Willis and Demi Moore, fashion models, and other celebrities as highly peculiar, as very weird. Future generations may look at our advertising- saturated culture as the crudest and crassest commercialism, as one of the most amazing wastes of time and resources in the history of civilization.

Perhaps future historians will be astonished that during the 1980s and 1990s, mediocrities like Ronald Reagan, George Bush, and Bill Clinton were Presidents of the United States; that reactionary Margaret Thatcher and nullity John Major ruled England; that Helmut Kohl and his pedestrian conservative party governed Germany; that Italy was ruled by Christian and Social Democrats who were revealed to be highly corrupt, followed by the election of a media baron who used disgust with the current political system to mask his reactionary political ideas; that lackluster conservatives Brian Mulroney, Kim Campbell, and Mike Harris governed federally and provincially in Canada; that alcoholic demagogue Boris Yeltsin reigned in Russia after the collapse of the Soviet Union; and that similar mediocre, greedy, corrupt, and vicious individuals controlled much of the world.

Future ages might look back on the incredible concentration of wealth and striking class differences, the phenomenal amount of world hunger and poverty, the deadly diseases, the violence and social disorder, and lack of humane and egalitarian social institutions and perceive this condition as truly astonishing. Our time might thus be looked upon one day as a dark age of incredible ignorance, backwardness, and brutality where life is much more nasty, brutish, and short than it needs to be.

Perhaps our time will be looked at as an especially backward period when individuals had not yet adjusted to new technologies, when they were overwhelmed by new media, and were not yet well enough educated to govern themselves and control the technologies and media. Perhaps a future generation will come to terms with the new media and technologies and use them to enhance their individual lives. Perhaps the growing choice of media artifacts will empower individuals to increase their realm of choice and control over their culture and thus to increase

their autonomy and sovereignty. Perhaps in the future there will be media study groups, like the book study groups of our era, in which individuals gather together personally and virtually to critically dissect media artifacts. Perhaps media education will be a standard part of schooling from grade school on up to the universities and beyond. Perhaps individuals will learn to use the new technologies to communicate with each other, to produce their own media artifacts which are circulated and distributed throughout society, so that previously marginalized voices are able to speak, so that the full range and diversity of cultures find expression, so that individuals and groups can speak to others, be creative, and participate in the production of society and culture.

Perhaps future individuals and governments will discern the importance of culture and subsidize a wide range of cultural artifacts, freeing cultural expression from the tyranny of the market and the iron yoke of advertising. Perhaps the works of the monstrous media conglomerates -- ABC/Disney, Time Warner/Turner, SONY/Columbia, Paramount/Viacom/Blockbuster, CBS/Westinghouse -- will be shunned and abhorred by audiences who find their products intrinsically debased, insulting, and boring, and these conglomerates will wither away, to be replaced by a vibrant spectrum of media cultural expression and a wide range of visions and voices.

Perhaps, but perhaps not. Perhaps the future will spend more time watching increased amounts of ever stupider products and the lowest common denominator will sink ever lower, to an era of cultural barbarism impossible to envisage in the present. Perhaps the present will appear as a Golden Age of individualism, freedom, and democracy to future inhabitants of dystopic societies, much as the post-holocaust, apocalyptic science fiction films present our late 20th century present as utopian compared to the dismal future depicted in the films.

### OPTIMISM OF THE WILL

In any case, the coming media culture and information highway is probably, in one form or another, our shared fate and so we should begin thinking what sort of a future we do and do not want and should act accordingly. If Marxian theory wishes to have a future it must therefore both map the social conditions of the present moment and sketch out alternative socialist futures that will use the new technologies to benefit everyone, and not just the privileged few and giant corporations. A revitalized Marxism could reinvigorate the utopian imagination that has always been part of the tradition and articulate imagined and possible futures to help to guide our present and future choices and action. Reflection on possible media futures calls attention to the urgency of impending tasks for cultural activism that have been neglected or suppressed in the tumult and confusion of the present.

Indeed, cultural wars have been the distinguishing feature of most technocapitalist societies since the 1960s. In the United States, society and politics have been a contested terrain between liberals and conservatives with radicals increasingly marginalized after being of key importance in the 1960s and early 1970s. Media culture and new technologies have been at the center of the struggles of the present age (see Kellner and Ryan 1988; Kellner 1990 and 1995a). In fact, one could argue that the victory of Reagan and the Right in the United States in 1980 was related to the Right's effective use of television, radio, fax and computer communication, direct mailings, telephones, and other sophisticated political uses of new technologies. Furthermore, one could

argue that Clinton's victory over Bush in 1992, and the surprising success of the Perot campaign, were related to effective uses of media and communication technologies. And more recently in the US, the Republican and rightwing success in the 1994 elections can be related to their use of talk radio, computer bulletin boards, and other technologies.

Consequently, I would argue that effective use of technology is essential in contemporary politics and that activists who wish to intervene in the new public spheres need to deploy new communications media to participate in democratic debate and to shape the future of contemporary societies and culture. My argument is that first broadcast media like radio and television, and now computers have produced new public spheres and spaces for information, debate, and participation that contain both the potential to invigorate democracy and to increase the dissemination of critical and progressive ideas -- as well as new possibilities for manipulation and social control. But participation in these new public spheres -- computer bulletin boards and discussion groups, talk radio and television, and the emerging sphere of what I call cyberspace democracy require intellectuals to gain new technical skills and to master new technologies.

The new media and computer technologies can and are being used by both sides in the cultural wars of the present, and are further marginalizing those without access to media and computer technologies and the new public spheres they are producing. As I indicated, the Republican right has been extremely effective in its use of new technologies, as have extreme Right militia groups that use computer bulletin-boards, faxes, talk radio, public access television, and circulating videotapes to disseminate their messages of hate and paranoia -- a well-documented phenomena after the tragedy of the Oklahoma bombing perpetuated by such groups. But a variety of insurgent intellectuals and activists are also making use of these new technologies and public spheres in their political struggles. The peasants and guerilla armies struggling in Chiapas, Mexico from the beginning used computer data bases, guerrilla radio, and other forms of media to circulate their struggles and ideas. Every manifesto, text, and bulletin written in Chiapas was immediately circulated through the world via computer networks. In January 1995, the Mexican government moved against the insurgent movement, but computer networks were used to inform and mobilize individuals and groups throughout the world to support their struggles against repressive Mexican government action.

Indeed, a similar international struggle using computer networks and other technologies was waged during the summer of 1995 to save from execution a black activist Mumia Abdul-Jamal accused of murdering a Philadelphia policemen, whom his defenders claim is innocent and was deprived of a fair trial. Earlier, audiotapes were used to promote the revolution in Iran and to promote alternative information by political movements throughout the world. The Tiananmen Square democracy movement in China and various groups fighting against the remnants of Stalinism in the former communist bloc and Soviet Union used computer bulletin boards, as well as a variety of forms of communications, to circulate their struggles. Thus, using new technologies to link theory and practice is neither extraneous to political action nor merely utopian.

In fact, a series of conflicts 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 (I have already suggested that the turn to the right in the 1994 election was largely due to more effective conservative use of media and computer technologies).

Likewise, African-American insurgent intellectuals have made use of broadcast and computer technologies to circulate 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 bulletin-boards, 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.

Consequently, a variety of insurgent intellectuals are currently using the new technologies to circulate their struggles and information. The technologies of communication are becoming more and more accessible to young people and average citizens and they should be used to promote democratic self-expression and social progress. Thus, technologies that have traditionally blocked the expansion of participatory democracy, by transforming politics into media spectacles and the battle of images, could also be used to help invigorate democratic debate and participation.

### MEDIA AND CULTURAL ACTIVISM

Thus, ironically, the technologies that could help produce the end of participatory democracy could also be used to help democratize society and to revitalize the waning fortunes of the Left, as I shall argue in the following discussion. But the Left has been on the whole negligent in failing to develop strategies and practices for media intervention and the production of alternative media. There has been little discussion within Marxist social theory concerning how radio, television, film, computers, and other media technology could be transformed and used as instruments of social enlightenment and progress. Earlier, the Frankfurt school seemed inherently skeptical of media technologies and viewed them as totally controlled by capitalist corporations and broad segments of the Left have followed this position. Indeed, when the classical theories of the cultural industries were being formed, this was more or less the case. The failure of radicals today to engage the issue of alternative media is more puzzling and less excusable since there are currently a variety of venues for alternative film and video production, community radio, computer bulletin boards and discussion forums, and other forms of communications within which progressives can readily intervene -- especially academic radicals and activists who have access to computer and media technologies, as I shall argue below.

Hence, a critical theory of technology should discuss the ways that new technologies can be

used both as instruments of liberation and domination, analyzing how media and culture serve interests of social control and hegemony, and how the media and technologies can be transformed at least in part into instruments of social enlightenment and progress. This requires focus on alternative media strategies and reflections on how media technology can be reconfigured and used to empower individuals. It requires developing practical activist strategies to intervene in public access television, community radio, computer bulletin-boards, and other domains currently emerging. To genuinely empower individuals requires giving them knowledge of media production and allowing them to produce media that are then disseminated to the public. Increasing media activism could significantly enhance democracy, making possible the proliferation of voices and allowing those voices that have been silenced or marginalized to speak.

Critical media pedagogy and activism require new roles and functions for intellectuals (see Kellner 1995d). Media and computer culture is producing new cyberspaces to explore and map, and new terrains of political struggle and intervention. The new cyberintellectuals of the present may not be the organic intellectuals of a class, but we can become technointellectuals of new technologies, cultural experiences, and spaces, charting and navigating through the brave new worlds of media culture and technoculture. These technologies can thus be used not only as instruments of domination, but also of liberation. Dialectics of technology: new media and computers can be used as instruments of manipulation and social control or of social enlightenment and transformation, and it is up to the activist cultural producers and intellectuals of the present and future to determine which way the new technologies will be used and developed and whose interests they serve.

A democratic media politics will accordingly be concerned that the new media and computer technologies will be used to serve the interests of the people and not the corporate elites. A democratic media politics will strive to see that media are used to inform and enlighten individuals rather than to manipulate them. A democratic media politics will teach individuals how to use the new technologies, to articulate their own experiences and interests, and to promote democratic debate and diversity, allowing a full range of voices and ideas to become part of the cyberdemocracy of the future.

### MEDIA AND CULTURAL POLITICS

There has also been a failure on the Left to discern the importance of media and cultural politics. This is unfortunate for the questions of who will control the media of the future and debates over the public's access to media, media accountability and responsibility, media funding and regulation, and what kinds of culture are best for cultivating individual freedom, democracy, and human happiness and well-being will become increasingly important in the future. Indeed, there are currently powerful struggles going on within and between government, business, and the public concerning who will control the new technologies of the so-called information superhighway, who will profit from them, and what role the public will play in determining the future of our new technologies and media culture. Individuals need to get involved in these debates and informed concerning the importance of the issues involved.

There are recent attempts to censor communication on the Internet, to commodify it, charging

for what is now relatively free, to allow commercial uses of it, and to open it to corporate domination. Other groups are struggling to preserve uncensored and free communication, to guarantee democratic access and participation, and to make the resources of the new technologies open and accessible to everyone, thus promoting, rather than restricting, democracy. These struggles will determine the future of our culture and society and are therefore of prime importance to those concerned with the future of democracy and movements for equality and social justice.

The proliferation of media culture and technologies thus focuses attention on the importance of media politics and the need for public intervention in debates over the future of media culture and communications in the information highways and entertainment by-ways of the future. As suggested, one of the key issues of the future will concern whether communications and culture are increasingly commodified or are decommodified. Defenders of commercial television in the United States are always praising "free television," a dubious product, however, only made possible at the expense of allowing advertising to clutter the airwaves and giving advertisers and commercial interests significant power over programming. In the future, however, every single TV program may be commodified, owned by corporations which will charge for everything. Likewise, today computer bulletin boards and routes of communication on the Internet are free to those who have University, or government, accounts, whereas all computer communication may be commodified in the future, as is telephone communication. The struggle here is therefore to decommodify computer communication and information, to make the Internet and other information highways of the future open and accessible to everyone, free of charge, to expand public access television and community radio, and to develop alternative cultural institutions and practices that are funded by the community or state and made available to the people, open to community control and empowerment.

In France, the government carried out an experiment, providing free Minitel computers to all telephone customers. These computers were initially to be used for getting information, like time, weather, train and airplane schedules, and the like. But they were soon used for public computer communications, with discussion groups, bulletin-boards, and other uses quickly developing. It could well be that computers will be linked to telephones in every household of the future, part of the standard package, at least in the overdeveloped countries, much like television today. Consequently, efforts must be made so that everyone who does not currently own a computer can get one and become linked to the information highways and thus become part of the new culture and society that they will make possible. Otherwise, use and access to the new technologies will be restricted to those privileged groups able to purchase them and thus will strengthen current forms of inequality and subordination.

Indeed, the very concept of "information superhighways" contains a democratic core that could provide a terrain and discourse of struggle. While the notion that information superhighways will automatically guarantee a free flow of useful and abundant information to all is obviously ideological, a flim flam promotional discourse to sell the agenda of powerful corporations, the superhighway metaphor has some significance for democratic struggles. For our national highway space is that of a public domain, part of a public space open and accessible to all, free of charge. There are, of course, also public tollways and the danger of the corporate information and entertainment scenarios of the future is that megacorporations will own and control these

resources, charging tolls for entry and use, transforming freeways into tollways.

Thus, while the Internet and other computer networks are currently free, at least for some users, there are plans to privatize them and to take them over, charging for use and access. Against such plans, one should utilize the discourse of the public sphere and public domain and struggle to keep these highways open to and accessible to all, free of charge and corporate control. Likewise, a democratic media politics will struggle for community television and radio, providing public access to all citizens so that the entire community can take part in democratic discussion and debate (see Kellner 1990).

As I have noted, there are already a vast number of activist projects involving computer and media technologies. As I write, more and more progressives are establishing computer bulletin-boards, participating in discussion groups, and creating Web sites that contain valuable information. For instance, there is a Marx and Engels Web site that has entire texts on-line, free and accessible to all, just as there is a very active Marxism discussion group which anyone can join. These sites constitute new public spheres for the future and new sites of information and debate and progressives should become familiar with these sites and actively intervene -- as are conservatives, libertarians, and others.

The free flow of information and communications is essential to a democratic society and thus democracy requires that powerful instruments of information and communication be accessible to all. Keeping the information superhighways open, protecting current highways like the Internet and struggling to open it to more people, is thus a key element of a contemporary democratic media politics. Without a free flow of information (in the sense both of uncensored and decommodified), citizens cannot be adequately informed and without access to forums of public discussion and debate, citizens are excluded from the dialogue that constitutes the very soul of participatory democracy.

These issues require a social theory grounded in political economy to adequately contextualize the situation within which a media and communications politics could developed. Lack of an adequate theory of political economy within current cultural studies is a main source of the avoidance of public policy concerns that Tony Bennett has been criticizing (1992). Without a sense of how the larger social forces (i.e. the nature of the broadcasting industry, state policy towards communications, etc.) impinge on everyday life, it is impossible to grasp the relevance of public policy and media politics for the nature of the system of communications and culture in a given society. Yet in a context in which new technologies of communications are creating dramatic changes in culture, leisure activity, and everyday life, it is important to perceive the importance of media politics and the ways that the system and framework of communications in a given society help determine what sort of programming and effects are produced.

But without situating discussions of public policy within the context of social theory and political economy that analyzes existing configurations of power and domination, discussions of public policy are hopelessly abstract and besides the point. In the United States, during the reign of Reagan and Bush (1980- 1992), there really weren't any openings for progressive public policy interventions on the national level. Instead, the political urgency at the time, on the level of national politics, was defending liberal gains of the past against conservative onslaughts (I

would imagine that something like this was also the case in England during the regimes of Thatcher and Major, and in other countries ruled by conservative governments). On the other hand, the era of conservative rule saw many exciting local interventions, with lively alternative cultures proliferating and intense political struggles, often cultural in focus, taking part on the local level. This experience perhaps influenced the postmodern politics which emphasized local, rather than national, struggles, but it is important to see that both local and national struggles and issues are important. On the local level, one can often more visibly make a difference, though even rearguard defensive operations on the national level are also significant, as are public policy interventions that advocate genuine reform on any level. The neglect of cultural politics by the Left is distressing and is a sign of the atrophy of radical theory and practice in the present moment.

For a critical media pedagogy can cultivate citizenship by helping form individuals free from media manipulation, capable of criticizing media culture and of obtaining information from diverse sources, allowing an informed citizenry to make intelligent political judgements. Critical media pedagogy can thus serve as part of a process of social enlightenment, producing new roles for critical and public intellectuals. Media culture itself is producing new public spheres and the need for intervention in new arenas of public debate -- community radio, public access television, computer bulletin-boards, Web sites, and so on. Media culture is producing new texts and artifacts, generating the need to cultivate a media literacy able to read and decode its images, scenes, narratives and spectacles.

Yet media and computer culture also present the challenge to cultivate new spaces for political discussion and interaction, to produce alternative forms of media and culture, to use the media to promote social enlightenment, and to think how media and computer culture can be used for democratization. The challenge of media culture thus produces new vocations for the intellectual: its ubiquity and complexity requires critical intellectuals to subvert disciplinary boundaries and to draw on a range of disciplines to understand media and computer culture. It challenges public intellectuals to use media culture to promote democratization and to produce new spaces and alternatives to the conservative mainstream.

It is therefore a mistake either to turn one's back upon and to ignore media and computer culture, or to totally embrace it. The new technologies and their impact on social life must be thoroughly analyzed, and possibilities should be explored to provide alternative modes of culture and discourse outside of its conventional forms and genres. Media and computer culture is perhaps our fate and cultural ambience as we rush toward the future and we must therefore chart this new terrain and see how we can make it work for the goals of increasing freedom, happiness, democracy, and other values that we wish to preserve and enhance as we race toward a new century and new forms of society and culture.

## NOTES

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. For my current perspectives on Marxism qua social theory and radical politics, see Kellner

1995b and 1995c, and for my reflections on how new technologies are changing contemporary societies and politics, see Kellner 1989a, 1989b, 1990, 1992, and 1995a.

. See Horkheimer and Adorno 1972 and the discussion in Kellner 1989a. Since I will be sharply critical of the lack of activist perspectives concerning new technologies in the classical Frankfurt school, I should note my debt to this tradition and to indicate that it continues to provide important starting points for theorizing culture, communication, and technologies in the present age; see Kellner 1989a.

. For examples of radical use of media, see Downing 1984. . The exception here was Walter Benjamin (1969) who developed radical media strategies; on this and for fuller discussion of the contributions and limitations of the Frankfurt school, see Kellner 1989a. Baudrillard (1983) is especially contemptuous of alternative media; see my discussion in Kellner 1989b.

. On critical media pedagogy, see Giroux 1992 and 1994; Scholle 1994; and McLaren, Hammer, Reilly, and Sholle 1995; and Kellner 1995.