

Techno-Politics, New Technologies, and the New Public Spheres

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The category of the intellectual, like everything else these days, is highly contested and up for grabs. Zygmunt Bauman contrasts intellectuals as legislators who wish to legislate universal values, usually in the service of state institutions, with intellectuals as interpreters, who merely interpret texts, public events, and other artifacts, deploying their specialized knowledge to explain or interpret things for publics (1987; 1992). He claims that there is a shift from modern intellectuals as legislators of universal values who legitimated the new modern social order to postmodern intellectuals as interpreters of social meanings, and thus theorizes a depoliticalization of the role of intellectuals in social life.

In contrast, I want to distinguish between "functional intellectuals", who serve to reproduce and legitimate the values of existing societies, contrasted to "critical-oppositional public intellectuals" who oppose the existing order and militate for progressive social change. Functional intellectuals were earlier the classical ideologues, whereas today they tend to be functionaries of parties or interest groups, or mere technicians who devise more efficient means to obtain certain ends. Technical-functional intellectuals apply their skills to increase technical knowledge in various specialized domains (medicine, physics, history, etc.) without questioning the ends, goals, or values that they are serving, or the social utility or disutility of their activities, while functional ideologues construct discourses to legitimate existing social relations, institutions, and practices.

Today, in an expanding global information economy, intellectuals are more important than ever in every aspect of human life. The concept of the intellectual traditionally involved workers in the sphere of mental labor, who produced ideas, wrote texts, and developed and transmitted intellectual abilities, as opposed to manual workers who produced goods and worked with their hands in the realms of manufacture, heavy industry, agriculture, and other fields that primarily depended on manual labor. The distinction between intellectual and manual labor was always an ideal type, was never absolute, and was itself subject to change and historical mutation. It is my argument that today the concept of the intellectual is undergoing significant mutations and must be rethought in relationship to new technologies and the new global economy and culture.

While functional intellectuals are servants of existing societies who specialize in legitimation and technical knowledge, critical-oppositional intellectuals struggle to create a better society. They traditionally voiced their criticisms in the name of existing values which they claim were being violated (i.e. truth, rights, rule by law, justice, etc.) and sometimes in the name of values or ideas which were said to be higher potentialities of the existing order (i.e. participatory democracy, socialism, genuine equality for women and blacks, ecological restoration, etc.). Critical intellectuals utilized their skills of speaking and writing to denounce injustices and abuses of power, and to fight for truth, justice, progress, and other universal values. In the words of Jean-Paul Sartre (1974: 285), "the duty of the intellectual is to denounce injustice wherever it occurs." [1] For Sartre, the domain of the critical intellectual is to write and speak within the

public sphere, denouncing oppression and fighting for human freedom and emancipation. On this model, a critical intellectual's task is to bear witness, to analyze, to expose, and to criticize a wide range of social evils.

The sphere and arena of the critical/oppositional intellectual has been "the word", and his or her function is to describe and denounce injustice wherever it may occur. The modern critical intellectual's field of action was what Habermas (1989) called the public sphere of democratic debate, political dialogue, and the writing and discussion of newspapers, journals, pamphlets, and books. Of course, not all intellectuals were critical or by any means progressive and, as noted, intellectuals were split into those critical and oppositional individuals who opposed injustice and oppression, as contrasted to functional intellectuals who produced ideological discourse and technical knowledge that legitimated and served the existing society. In the next section, I want to discuss some challenges from postmodern theory to the classical conceptions of the critical-oppositional intellectual and some of the ways that new technologies and their emerging public spheres offer exciting possibilities for democratic discussion and intervention, which call for a redefinition of the critical intellectual. Consequently, I will discuss some changes in the concept of the public sphere and how new technologies and spheres of public debate and conflict suggest some novel possibilities for redefining intellectuals in the present era.

The Public Sphere and the Intellectual

Democracy involves a separation of powers and popular participation in governmental affairs. During the era of the Enlightenment and 18th century democratic revolutions, public spheres emerged where individuals could discuss and debate issues of common concern (see Habermas 1989). Public spheres were also a site where criticism of the state and existing society could circulate. The institutions and spaces of the 18th century democratic public sphere included newspapers, journals, and a press independent from state ownership and control, coffee houses where individuals read newspapers and engaged in political discussion, literary salons where ideas and criticism were produced, and public assemblies which were the sites of public oratory and debate.

Bourgeois societies split, of course, across class lines and disparate class factions produced different political parties, organizations, public spaces, and ideologies with each class attracting specialists in words and writing known as intellectuals. Oppressed groups developed their own insurgent intellectuals, ranging from representatives of working class organizations, to women like Mary Wollstonecraft fighting for women's rights, to leaders of oppressed groups of color, ethnicity, sexual preference, and so on. Insurgent intellectuals attacked oppression and promoted action that would address the causes of subjugation, linking thought to action, theory to practice. Thus, during the 19th century, the working class developed its own oppositional public spheres in union halls, party cells and meeting places, saloons, and institutions of working class culture. With the rise of Social Democracy and other working class movements in Europe and the United States, an alternative press, radical cultural organizations, and the spaces of the strike, sit-in, and political insurrection emerged as sites of an oppositional public sphere.

At the same time, intellectuals in modern societies were conflicted beings with contradictory social functions. The classical critical intellectual -- represented by figures like the French

Enlightenment ideologues, Thomas Paine, Mary Wollstonecraft, and later figures like Heine, Marx, Hugo, Dreyfus, DuBois, Sartre, and Marcuse -- was to speak out against injustice and oppression and to fight for justice, equality, and the other values of the Enlightenment, as well as transcendent goals such as socialism or women's liberation. Indeed, the Enlightenment itself represents one of the most successful products of the critical individual, a discourse and movement which assigns intellectuals key social functions. And yet conservative intellectuals attacked the Enlightenment and its prodigy the French Revolution and produced discourses that legitimated every conceivable form of oppression from class to race, gender, and ethnic domination.

As modern societies developed, they depended more and more on intellectual labor, so intellectuals were increasingly integrated into the existing society, performing crucial social functions, and thus lost to a large extent, the critical-oppositional status that they enjoyed in early modern societies. With the postmodern turn in theory (Best and Kellner 1997), critiques began emerging of the ideal of the modern critical intellectual. Against the Enlightenment and Sartre's model of the committed intellectual who is engaged for freedom (*engagé*), Michel Foucault complained that Sartre represented an ideal of the classical intellectual who fought for universal values such as truth and freedom, and assumed the task of speaking for humanity (1977). Against such an exalted, and in his view exaggerated, conception, Foucault militated for a conception of the "specific intellectual" who intervened on the side of the oppressed in specific issues, not claiming to speak for the oppressed, but intervening as an intellectual in specific issues and debates.

Foucault's conception of the specific intellectual has been accompanied by a turn in postmodern politics toward new social movements and the hope that they can replace the state and party as the fulcrum for contemporary politics. For writers like Laclau and Mouffe (1985), power is diffuse and local and not merely to be found in macroinstitutions like the workplace, the state, or patriarchy.[2] For a number of postmodern theorists -- Foucault, Rorty, Lyotard, Laclau and Mouffe, etc. -- macropolitics that goes after big institutions like the state or capital is to be replaced by micropolitics, with specific intellectuals intervening in spheres like the university, the prison, the hospital, or for the rights of specific oppressed groups like sexual or ethnic minorities. Global and national politics and theories are rejected in favor of more local micropolitics, and the discourse and function of the intellectuals is seen as more specific, provisional, and modest than in modern theory and politics, subordinate to local struggles rather than more ambitious projects of emancipation and social transformation.

Such a binary distinction between macro and micro theory and politics, however, is problematical, as are absolutist commitments to either modern or postmodern theory tout court (Best and Kellner 1991 and 1997). It is clear from the events of 1989 surrounding the collapse of Soviet-style communism that the popular offensives against oppressive state-communist power combined micro and macropolitics. These struggles moved from local and specific sites in union halls, universities, churches, and small groups to mass demonstrations forcing democratic reforms and even classical mass insurrection aiming at an overthrow of the existing order, as in Romania. In these struggles, intellectuals played a variety of roles and deployed a diversity of discourses, ranging from the local and specific to the national and universal.

Whereas postmodern theory contains important criticism of some of the illusions and ideologies of the traditional modern intellectual, it goes too far in some of its versions in rejecting the classical role of the critical intellectual. Moreover, some of the modern conception of the critical and oppositional intellectual remains useful. I would, in fact, reject the particular/universal intellectual dichotomy in favor of developing a normative concept of the "critical public intellectual." The public intellectual -- on this conception -- intervenes in the public sphere, fights against lies, oppression, and injustice and fights for rights, freedom, and democracy ala Sartre's committed intellectual. But a democratic public intellectual on my conception does not speak for others, does not abrogate or monopolize the function of speaking the truth, but simply participates in discussion and debate, defending specific ideas, values, or norms or principle that may be particular or universal. But if the values and discourse is universal, like human rights, they are contextual, provisional, normative and general and not valid for all time. Indeed, rights are products of social struggles and are thus social constructs and not innate or natural entities -- as the classical natural rights theorists would have it. But rights can be generalized, extended, and can take universal forms -- as with, for instance, a UN charter of human rights that holds that certain rights are valid for all individuals -- at least in this world at this point in time.

Thus, a critical intellectual can claim that they are not merely speaking for themselves, as in some of the more relativist postmodern conceptions, but are appealing to values and norms that are themselves the product of political struggle, that are recognized as social goods, and whose abrogation or curtailment can be seen as oppressive and worthy of being overturned. Critical intellectuals can practice immanent critique whereby they take the existing normative values as standards to criticize their abrogation in existing societies, as when the Frankfurt School used the norms of the Enlightenment to criticize their violation and suppression under fascism (Kellner 1989).

Consequently, one does not need all of the baggage of the universal intellectual to maintain a conception of a public or democratic intellectual in the present era. Intellectuals may well seek to occupy a higher ground than particularistic interests, a common ground seeking public interests and goods. But intellectuals should not abrogate the right to speak for all and should be aware that they are speaking from a determinate position with its own biases and limitations. Moreover, intellectuals should learn to get out of their particular frame of reference for more general ones, as well as to be able to take the position of the other, to empathize with more marginal and oppressed groups, to learn from them, and to support their struggles. To perpetually criticize oneself, to develop the capacity for self-reflection and critique -- as well as self-expression -- is thus part of the duty of the democratic intellectual.

New Technologies, New Public Spheres, and New Intellectuals

To some extent, within the current division of labor and eruption of new technologies, everyone is becoming an intellectual, forced to gain practical skills of literacy and the ability to use new technologies to succeed in school, to perform in the labor system, and to engage in the new forms of culture and society being developed in the contemporary era. As Gramsci argued earlier (1971), everyone is an intellectual in the sense that they learn and use language, can assimilate and produce culture, and gain intellectual skills that enable them to speak and participate in their culture and society. During an era in which information and intellectual labor are becoming more

and more a part of the economy and everyday life, the notion of the intellectual and intellectual labor is expanding rapidly to the entirety of society, creating new conceptions and challenges for the critical intellectual.

In the following discussion, I will argue that although the critical and democratic intellectual should assume new functions and activities today, the critical capacities and vision of the classical oppositional intellectual are still relevant, thus I suggest building on models of the past, rather than simply throwing them over, as in some types of postmodern theory. I want to suggest that rethinking the intellectual and the public sphere today requires rethinking the relationship between intellectuals and technology, and rethinking the concept of the public intellectual in relation to the vicissitudes of new computer and media technology.

In a certain sense, there was no important connection between the classical intellectual and technology. To be sure, intellectuals (especially scientific scholars like Leonardo de Vinci, Galileo, or Darwin) deployed technologies and entire groups like the British Royal Society were concerned with technologies and were indeed often inventors themselves. Some intellectuals used printing presses and were themselves printers and many, though not all, of the major intellectuals of the 20th century probably used a typewriter, though I personally know of no major studies of the relationship between the typewriter and intellectuals. Yet a classical intellectual did not have to be a specialist to deploy any specific technology and there was thus no intimate connection between intellectuals and technology.

However, I want to argue that in the contemporary high-tech societies there is emerging a significant expansion and redefinition of the public sphere and that these developments, connected primarily with media and computer technologies, require a reformulation and expansion of the concept of critical or committed intellectual, as well as a redefinition of the public intellectual. Earlier in the century, John Dewey envisaged developing a newspaper that would convey "thought news," bringing all the latest ideas in science, technology, and the intellectual world to a general public, which would also promote democracy (see the discussion of this project in Czitrom 1982: 104ff). In addition, Bertolt Brecht and Walter Benjamin (1969) saw the revolutionary potential of new technologies like film and radio and urged radical intellectuals to seize these new forces of production, to "refunction" them, and to turn them into instruments to democratize and revolutionize society. Sartre too worked on radio and television series and insisted that "committed writers must get into these relay station arts of the movies and radio" (1974: 177; for discussion of his *Les temps modernes* radio series, see 177-180).

Previously, radio, television, and the other electronic media of communication tended to be closed to critical and oppositional voices both in systems controlled by the state and in private corporations. Public access and low power television, and community and guerilla radio, and now the Internet and computer technology open these technologies to intervention and use by critical-oppositional intellectuals.[3] Thus, radio, television, the Internet, and other electronic modes of communication have created new public spheres of debate, discussion, and information so that intellectuals who want to engage the public, to be where the people are at, and who thus want to intervene in the public affairs of their society should make use of these new communication technologies and develop new technopolitics.

Consequently, I would argue that effective use of technology is essential in contemporary politics and that intellectuals who wish to intervene in the new public spheres need to deploy new communications technologies 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, social control, and the promotion of conservative positions. 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 public intellectuals to gain new technical skills and to master new technologies.

I am thus suggesting that public intellectuals in the present moment must master new technologies and that there is thus a more intimate relationship between intellectuals and technology than in previous social configurations. To be an intellectual today involves use of the most advanced forces of production to develop and circulate ideas, to do research and involve oneself in political debate and discussion, and to intervene in the new public spheres produced by broadcasting and computing technologies. New public intellectuals should attempt to develop strategies that will use these technologies to attack domination and to promote empowerment, education, democracy, and political struggle -- or whatever goals are normatively posited as desirable to attain. There is thus an intrinsic connection in this argument between the fate of intellectuals and the forces of production which, as always, can be used for conservative or progressive ends.

Toward a Radical Democratic Techno-Politics

A revitalization of democracy in capitalist societies will therefore require a democratic media politics. Such a politics could involve a two-fold strategy of, first, attempting to democratize existing media to make them more responsive to the "public interest, convenience, and necessity." In the United States, the media watchdog group F.A.I.R. (Fairness and Accuracy in Media) has developed this alternative, criticizing mainstream media for failing to assume their democratic and journalistic responsibilities and calling for an expansion of voices and ideas within the media system. Such standard practices as writing letters or opinion pieces for newspapers or other print publications, calling into talk radio or television, or criticizing the failures of the mainstream media within their own institutions involves other examples of a democratization-from-within approach that attempts to democratize existing media institutions.

Another and different strategy involves the development of oppositional media, alternatives to the mainstream, developed outside of the established media system. On this approach, it is a pipedream to reform existing media that are capitalist machines out for profit and which primarily serve the interests of ruling elites. Thus, the development of alternative institutions within print, broadcasting, and other forms becomes the focus of this strategy which works outside of established institutions to develop alternative structures.

Although I have myself largely worked with alternative media over the past decades, I would argue that both strategies are necessary for the development of a democratic media politics and

that it is a mistake to pursue one at the neglect of the other. Developing a radical democratic media politics thus involves continued relentless criticism of the existing media system, attempts to democratize and reform it, and the production of alternative progressive media. On this account, democratizing our media system will require expansion of the alternative press, a revitalization of public television, an increased role for public access television, the eventual development of a public satellite system, community and low-power radio, democratized computer networks, and oppositional cultural politics within every sphere of culture, ranging from music to visual to print culture.

Of course, many will claim that democratic politics involves face-to-face conversation, discussion, and producing consensus. But for intelligent debate and consensus to be reached, individuals must be informed and radio, television, and computers are important sources of information in the present age. Thus, I am not proposing that media politics supplement all political activity and organizing, but am suggesting that a media politics should be developed to help activist groups and individuals obtain and disseminate information. One needs to distinguish between politics that use the Internet and new technologies to promote specific political goals and struggles, thus articulating a relation between the cybersphere and social life, contrasted to those that limit their politics to the cybersphere itself, either focusing narrowing on the politics of technology and the Internet, or making Internet discussion an end in itself, cut off from real-life political movements.

Many activist groups are coming to see that media politics is a key element of political organization and struggle and are developing forms of technopolitics in which they use the Internet and new technologies as arms of political struggle. Indeed, if progressive groups and movements are to produce a genuine alternative to the Right, they must increase their mass base and circulate their struggles to more segments of the population. After all, most people get their news and information from radio, television, and now computer-based sources, so that the broadcast media and new technologies arguably play a decisive role in defining political realities, shaping public opinion, and determining what is or what is not to be taken seriously. If intellectuals want to play a role in local and national political life, they must come to terms with the realities of electronic communication and computer technologies in order to develop strategies to make use of new technologies and possibilities for intervention.

The Democratization of Computers and Information

Given the growing importance of computers and information in the new technocapitalist society, producing alternative information networks and systems must therefore be an essential ingredient of a progressive media and information politics. The computerization of the world is well underway and possibilities are growing for new information networks and computer communication systems. To avoid corporate and government monopolization and control of information, new public information networks and centers are also necessary so that citizens of the future can have access to the information needed to intelligently participate in a democratic society. For computers, like broadcasting, can be used for or against democracy.

Indeed, computers are a potentially democratic technology. While broadcast communication tends to be one-way and unidirectional,[4] computer communication is bi- or omni-directional.

Where TV-watching is often passive, computer involvement can be interactive and participatory. Individuals can use computers to send email to communicate with other individuals, or can directly communicate via modems which use the telephone to link individuals with each other in interactive networks. Modems can tap into community bulletin boards, web sites, computer conference sites, or chat rooms, that make possible a new type of interactive public communication. Democracy involves democratic participation and debate as well as voting. In the Big Media Age, most people were kept out of democratic discussion and were rendered by broadcast technologies passive consumers of infotainment. Access to media was controlled by big corporations and a limited range of voices and views were allowed to circulate (see Kellner 1992).

In the Internet Age, everyone with access to a computer, modem, and Internet service can participate in discussion and debate, empowering large numbers of individuals and groups kept out of the democratic dialogue during the Big Media Age. Consequently, a technopolitics can unfold in the new public spheres of cyberspace and provide a supplement, though not a replacement, for intervening in face-to-face public debate and discussion. For instance, many computer bulletin boards and web sites have a political debate conference where individuals can type in their opinions and other individuals can read them and if they wish respond. Other sites have live real-time chat rooms where people can meet and interact. These forms of cyberdemocracy constitute a new form of public dialogue and interaction, and take place in new public spheres, thus expanding our conception of democracy.

Obviously, such involvement should not replace political struggle in the real world and the danger exists that Internet democracy will become a closed in space and world in itself in which individuals delude themselves that they are active politically merely through exchanging messages or circulating information. Yet computer data bases and web sites provide essential sources of information and new technologies tremendously facilitate information-searching and research. Mainstream data bases include Lexis/Nexis and Dialogue which contain an enormous array of newspapers, magazines, journals, transcripts of TV programs, news conferences, congressional hearings, and newsletters, reproduced in full. Alternative data bases include PeaceNet which has over 600 conferences on topics of ecology, war and peace, feminism, and hundreds of other topics, as well as countless websites that provide free information and literature which individuals can access, read, and if they wish download and printout. In these sites, progressives put in alternative information and some of the conferences have lively debates. Between the mainstream and alternative computer data bases, individuals and groups can access an impressive amount of information in a relatively short time.

I was able to research my book on the media and the Gulf war, for instance, because I could access information on various topics from a variety of sources simply by punching in code words which enabled me to discern the conflicting media versions of the Gulf war and to put in question the version being promoted by the Bush administration and Pentagon (Kellner 1992). Eventually, many of the lies and disinformation promoted by the U.S. government in the war were thoroughly exposed by a variety of sources, accessible to computer data base searches. Corporations, government institutions, the major political parties, and other groups are taking advantage of these computer data bases and progressive must learn to access and use them to produce the information necessary to prevail in the public debates of the future.

The politics of information in the future must struggle to see that alternative information is accessible in mainstream computer data bases, as well as alternative ones.[5] Indeed, the proliferation of the World Wide Web enables independent and alternative groups and individuals to create their own web sites, to make their information available to people through the globe, often free of charge. In the next section, I will give some examples of how computer technopolitics have deployed web sites, bulletin-boards, mailing lists, and email campaigns to promote a variety of political struggles. First, however, I want to conclude this section by noting that a synergy is emerging between the new sources of information, new media and technologies, and political organization and struggle. Progressive print and broadcast media organs can obtain information from computer sources and disseminate it to the public. Oppositional political groups can obtain information from these sources and disseminate it back through print, broadcast, and computer technologies. Information critical of, say, transnational corporate policies can be disseminated through a multiplicity of sites, so individuals and political groups need to be aware of the potential for the transmission of information through a variety of media in the contemporary era.

Moreover, the Internet may be a vehicle for new forms of alternative radio, television, film, art, and every form of culture as well as information and print material. New multimedia technologies are already visible on web sites and Internet radio and television is now in its infancy. This would truly make possible Brecht's dream of a communications system where everyone was a sender and receiver and would greatly proliferate the range and diversity of voices and texts and would also no doubt give a new dimension to the concept of information/cultural overload. Indeed, we must obviously gain a whole set of new literacies to use and deploy the new technologies (see Kellner 1998). But in conclusion, I want to limit my focus on new technologies and techno-politics within the dynamics of political struggle in the present day.

TechnoPolitics and Political Struggle

Since new technologies are dramatically transforming every sphere of life, the key challenge is how to theorize this great transformation and how to devise strategies to make productive use of the new technologies. Obviously, radical critique of dehumanizing, exploitative, and oppressive uses of new technologies in the workplace, schooling, public sphere, and everyday life are more necessary than ever, but so are strategies that use new technologies to rebuild our cities, schools, economy, and society. I want to focus, therefore, in the remainder of this section on how new technologies can be used for increasing democratization and empowering individuals with some examples of the use of new technologies by oppositional social movements struggling for progressive social change.

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.

Obviously, much of the world does not even have telephone service, much less computers, and there are vast discrepancies in terms of who has access to computers and who participates in the technological revolution and cyberdemocracy today. Critics of new technologies and cyberspace repeat incessantly that it is by and large young, white, middle or upper class males who are the dominant players in the cyberspaces of the present, and while this is true, statistics and surveys indicate that many more women, people of color, seniors, and other minority categories are becoming increasingly active. Moreover, it appears that computers are becoming part of the standard household consumer package in the overdeveloped world and will perhaps be as common as television sets by the beginning of the next century, and certainly more important for work, social life, and education than the TV set. Moreover, there are plans afoot to wire the entire world with satellites that would make the Internet and communication revolution accessible to people who do not now even have telephones, televisions, or even electricity.[6]

However widespread and common -- or not -- computers and new technologies become, it is clear that they are of essential importance already for labor, politics, education, and social life, and that people who want to participate in the public and cultural life of the future will need to have computer access and literacy. Moreover, although there is the threat and real danger that the computerization of society will increase the current inequalities and inequities in relations of class, race, and gender power, there is the possibility that a democratized and computerized public sphere might provide opportunities to overcome these injustices. I will accordingly address below some of the ways that oppressed and disempowered groups are using the new technologies to advance their interests and progressive political agendas. But first I want to address another frequent criticism of the Internet and computer activism and technopolitics.

Critics of the Internet and cyberdemocracy frequently point to the military origins of the technology and its central role in the processes of dominant corporate and state power. Yet it is amazing that the Internet for large numbers is decommodified and is becoming more and more decentralized, becoming open to more and more voices and groups. Thus, cyberdemocracy and the Internet should be seen as a site of conflict, as a contested terrain, and progressives should look to its possibilities for resistance and circulation of struggle. Dominant corporate and state powers, as well as conservative and rightist groups, have been making serious use of new technologies to advance their agendas and if public intellectuals want to become players in the cultural and political battles of the future, they must devise ways to use new technologies to advance a progressive agenda and the interests of the oppressed and forces of resistance and contestation.

There are by now copious examples of how the Internet and cyberdemocracy have been used in oppositional political movements. A large number of insurgent intellectuals are already making use of these new technologies and public spheres in their political projects. 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 produced by the Zapatista Army of National Liberation who occupied land in the southern Mexican state of Chiapas in 1994 was immediately circulated through the world via

computer networks.⁷ In January 1995, the Mexican government moved against the movement and computer networks were used to inform and mobilize individuals and groups throughout the world to support the Zapatistas struggles against repressive Mexican government action. There were many demonstrations in support of the rebels throughout the world, prominent journalists, human rights observers, and delegations travelled to Chiapas in solidarity and to report on the uprising, and the Mexican and U.S. governments were bombarded with messages arguing for negotiations rather than repression; the Mexican government accordingly backed off their repression of the insurgents and as of this writing in Summer 1998, they have continued to negotiate with them, although there was an assassination of perceived Zapatista forces by local death squads in early 1998 -- which once again triggered significant Internet-generated pressures of the Mexican government to prosecute the perpetrators.

Seeing the progressive potential of advanced communication technologies, Frantz Fanon (1967) described the central role of the radio in the Algerian Revolution, and Lenin highlighted the importance of film in promoting communist ideology after the revolution. In addition, audiotapes were used to promote the revolution in Iran and to promote alternative information by political movements throughout the world (see Downing 1984). The Tianenamen Square democracy movement in China and various groups struggling against the remnants of Stalinism in the former communist bloc and Soviet Union used computer bulletin boards and networks, as well as a variety of forms of communications, to circulate their struggles. Moreover, opponents involved in anti-NAFTA struggles made extensive use of the new communications technology (see Brenner 1994 and Fredericks 1994). Such multinational networking and circulation of information failed to stop NAFTA, but created alliances useful for the struggles of the future. As Nick Witheford (forthcoming) notes: "The anti-NAFTA coalitions, while mobilizing a depth of opposition entirely unexpected by capital, failed in their immediate objectives. But the transcontinental dialogues which emerged checked -- though by no means eliminated -- the chauvinist element in North American opposition to free trade. The movement created a powerful pedagogical crucible for cross-sectoral and cross-border organizing. And it opened pathways for future connections, including electronic ones, which were later effectively mobilized by the Zapatista uprising and in continuing initiatives against maquiladora exploitation."

Thus, using new technologies to link information and practice, to circulate struggles, is neither extraneous to political battles nor merely utopian. Even if material gains are not won, often the information circulated or alliances formed can be of use. For example, two British activists were sued by the fastfood chain McDonald's for distributing leaflets denouncing the corporation's low wages, advertising practices, involvement in deforestation, harvesting of animals, and promotion of junk food and an unhealthy diet. The activists counterattacked, organized a McLibel campaign, assembled a McSpotlight website with a tremendous amount of information criticizing the corporation, and assembled experts to testify and confirm their criticisms. The five-year civil trial, which ended ambiguously in July 1997, created unprecedented bad publicity for McDonald's and was circulated throughout the world via Internet websites, mailing lists, and discussion groups. The McLibel group claims that their website was accessed over twelve million times and the *Guardian* reported that the site "claimed to be the most comprehensive source of information on a multinational corporation ever assembled" and was indeed one of the more successful anticorporate campaigns (February 22, 1996; see <http://www.mcspotlight.org>).

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 Shoshana Zuboff (1988) has discussed the ways in which high-tech can be used to "informatize" 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 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 www.gn.apc.org/lbournet/docks/).[8]

On the whole, 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 more accessible to many of its members, face-to-face meetings, and traditional forms of political struggle. Thus, the challenge 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 encompassing campaigns to free political prisoners, boycotts of corporate projects, and actual labor and even revolutionary 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 planet. 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 1991, 1997, and forthcoming).

Moreover, a series of struggles around gender, sex, 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. Younger women, sometimes deploying the concept of "riotgrrrls," have created electronically-mediated 'zines, web sites, and discussion groups to promote their ideas and to discuss their problems and struggles. African-American women, Latinas, and other groups of women as well have been developing web sites and discussion lists to advance their interests. And AIDS activists are employing new technologies to

disseminate and discuss medical information and to activate their constituencies for courses of political action and struggle.

Likewise, African-American insurgent intellectuals have made use of broadcast and computer technologies to promote their struggles. John Fiske (1994) has described some African-American radio projects in the "technostruggles" 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 mediaization of culture and computerization of society to people in their communities.

Indeed, a variety of local activists have been using the Internet to criticize local government, to oppose corporate policies, and to organize people around specific issues. These efforts range from developing websites to oppose local policies, such as an attempt to transform a military airport into a civilian one in El Toro, California to gadflies who expose corruption in local government, to citizen groups who use the Internet to inform, recruit, and organize individuals to become active in various political movements and struggles.[9] Thus, new communications technologies enable ordinary citizens and activists to themselves become intellectuals, to produce and disseminate information, and to participate in debates and struggles, thus helping to realize Gramsci's dicta that anyone could be an intellectual.

Obviously, rightwing and reactionary groups can and have used the Internet to promote their political agendas as well. 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 productions. These groups are hardly harmless, having promoted terrorism of various sorts extending from church burnings to the bombings of public buildings. Adopting quasi-Leninist discourse and tactics for ultraright causes, these extremist 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.

Concluding Remarks

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.

Public intellectuals thus need to acquire new forms of technological literacy to intervene in the new public spheres of the media and information society. In addition to traditional literacy skills centered upon reading, writing, and speaking, intellectuals need to learn to use the new technologies to engage the public.[10] The new technologies thus expand the field and capacities of the intellectual as well as the possibilities for public intervention. During the Age of the Big Media, critical-oppositional intellectuals were by and large marginalized, unable to gain access to the major media of information and communication. With the decentralization of the Internet, however, new possibilities for the public intellectual exist to reach broad publics. It is therefore the responsibility of the public intellectual to critically engage these new technologies, as well as to critically analyze the diverse developments of the cyberculture. This requires dialectical thinking that discriminates between costs and benefits, upsides and downsides, of new technologies and devising ways that new technologies can be used to promote positive values like education, democracy, and Enlightenment. Public intellectuals thus face new challenges and the future of democracy depends in part as to whether new technologies will be used for domination or democratization, and whether intellectuals sit on the sidelines or participate in the development of new democratic public spheres.

Notes

1. It has not been generally noted that the problematic of defining the nature and function of the intellectual was a major theme of Sartre's philosophy, or that he reformulated his concept of the committed intellectual in the 1970s, during his last decade of political and intellectual activity. For some examples of his discourse on intellectuals, see Sartre 1962, 1970, 1974, and 1975, and the discussion in Kellner 1974/5 and 1995b.

2. On the variety of, often conflicting, postmodern politics, see the survey in Best and Kellner 1991, 1997, and forthcoming and Bertens 1995.

3. For some years now, I have been urging progressives to make use of new communications broadcast media (Kellner 1979; 1985; 1990; 1992) and was involved in a public access television program in Austin, Texas from 1979 to the mid-1990s which produced over 600 programs and won the George Stoney Award for public affairs television. I now am arguing that the Internet and new computer technologies not only provide a venue for an expansion of alternative television and radio, but also provide a new interactive public sphere of communication and political dialogue that itself redefines democracy and the public sphere.

4. But does not need to be. Call-in and talk radio and television, as well as electronic town meetings, can involve two-way communication and participatory democratic discussions. Theorists like Baudrillard who argue against television and the media on the grounds that they promote only one-way, top-down communication essentialize the media and freeze the current forms of the media into fixed configurations, covering over the fact that media can be reconstructed, refunctioned, and constantly changed.

5. Dialogue, LexisNexis, and the other mainstream computer data bases with which I am familiar exclude such publications as *Mother Jones*, *The Utne Reader*, *The Progressive*, *Z Magazine*, and other progressive periodicals -- though they are always incorporating more

sources. Alternative publications like *The Utne Reader* and *Z Magazine*, however, have produced a variety of lively electronic salons and interactive sites. Moreover, in recent years, email lists, bulletin boards and web sites run by radical economic, sociological, and political groups download articles from mainstream and alternative media into their computer networks, allowing people to access material, often free of charge.

6. It was announced in April 1997 that Boeing Aircraft joined Bill Gates in investing in a satellite communications company, Teledesic, which plans to send up 288 small low-orbit satellites to cover most of the Americas and then the world in 2002 that could give up to 20 million people satellite Internet access at a given moment. See *USA Today*, April 30, 1997; in May 1998, Motorola joined the "Internet in the Sky" Project, scrapping its own \$12.9 billion plan to build a satellite network capable of delivering highspeed data communications anywhere on the planet and instead joined the Teledesic project, pushing aside Boeing to become Teledesic's prime contractor (*New York Times*, May 22, 1998). An "Internet-in-the-Sky" would make possible access to new technologies for groups and regions that did not even have telephones, thus expanding the potential for democratic and progressive uses of new technologies.

7. See Cleaver 1994, the documents collected in *Zapatistas 1994*, and Castells 1997.

8. For an overview of the use of electronic communication technology by labor, see the studies by Moody 1988; Waterman 1990 and 1992; and Brecher and Costello 1994. Labor projects using the new technologies include the U.S. based LaborNet, the European Geonet, the Canadian LaborL, the South African WorkNet, the Asia Labour Monitor Resource Centre, Mujer a Mujer, representing Latina women's groups, and the Third World Network, while PeaceNet in the United States is devoted to a variety of progressive peace and justice issues.

9. See "Invasion of the Gadflies in Cyberspace," *Los Angeles Times*, May 18, 1998, and Castells 1997, Chapters 2-4.

10. For the new forms of multiliteracy needed to use the new technologies for education, communication, and politics, see Kellner 1998.