

Information Technology and the International Public Sphere¹

Craig Calhoun

Information technology and globalization have each been the objects of enormous hope and considerable disappointment. So too is their combination in the notion of an international public sphere supported by the Internet and other communications media. This is basic to the dream of international civil society that has flourished since the early 1990s as the collapse of communism and opening of capitalist markets. And indeed, such an international public sphere clearly already exists. Equally clearly, however, it has not yet provided the basis for cosmopolitan democracy its advocates have hoped.

The task of this paper is to outline something of the stakes of thinking about an international public sphere, the role that information technology can play in it, and some of the challenges that lie in the way of realizing its potential. I will discuss IT and the international public sphere against the background of globalization and shifting bases of for the production and dissemination of knowledge. I will not attempt to review the empirical specifics of where and how and by whom the Internet is used, or how public communication based on one technology compares to that based on others. While this would be useful and there are beginning to be interesting case studies to complement the usual journalistic anecdotes, social science research on the Internet has barely started.² The present paper does not offer findings so much as attempt to orient questions.

Globalization

Information technology has of course been an important basis for globalization. This did not start with the Internet, despite its hype. From the sextant to the map to the invention of calculus, the development of early modern navigation was centrally a matter of information technology—and the ships circulated information as well as goods and helped to link the globe in networks of exchange and control. Telegraphs, radio, and television; trains, cars, and airplanes all helped to establish links across space and shorten the time-lags to action at a distance. The development of national and international highway infrastructures paved the way to flows of information long before the “information superhighway”. Colonial empires were pioneers in information technology from at least the 16th century. They developed bureaucracies, accounting systems, file-management hardware and software, and both open and secret networks of

¹ Presented to the International Sociological Association, Brisbane, Australia, July 11, 2002. An earlier version of this paper was presented to Directions and Implications of Advanced Computing 2000, Computer Professionals for Social Responsibility, Seattle, May 20, 2000

² See Dimaggio, Hargittai, Neuman, and Robinson (2001) for a useful review (though an overwhelmingly North American one). Even where there is serious research on the Internet, it is more likely to address the behavior of individual users than social processes or public communication as such, and it is commonly contained within national contexts (and within the global North). See Wellman (1999, 2003) for a useful account of research, though this remains heavily oriented to the processes of sociability. Important as this is, it is distinct from reorganization of power, the construction of more or less autopoietic systems, and the problems of design of complex technical infrastructures.

communication. They also remind us that new forms of war figure centrally in the story of modern globalization—with new weaponry, certainly, but also military reliance on ever-more complex systems of control and coordination managed by technologies that evolved quickly from carrier pigeons to coded telegraph messages to satellite transmissions. As the last suggests, too, globalization has all along included an element of surveillance, which has always been a matter of data management and analysis as much as observation, and which has benefited from technologies to improve each.

Old though some of the trends are, the last twenty years' innovations in computer and communications technologies have also been powerful. Modern financial markets are inconceivable without computer mediated communication—and action. Not only are there nearly instant flows of money through global networks, ever more complex forms of derivatives are driven by algorithms their “owners” never know and trading is done indirectly by software “robots” programmed by their human “supervisors”. Satellite transmissions and electronic filing of stories speeds up the flow of information through broadcast and print media. New Internet media complement older forms of circulation of public (and sometimes not so public) information. Migrants maintain global diasporic cultures and translocal communities partly by email and websites. The Internet is an important support also for global social movements and for local social movements seeking global attention or support. It is important, though, not to imagine that with electronic help popular forces can easily get the jump on more centralized or elite powers—whether economic or political. For all the energy and innovation of global activism challenging neoliberalism or inequality, at least as much and a good deal more resources are deployed in support of global capitalism. NGOs focus not just on human rights or the environment but on accountancy standards, corporate advocacy, and arbitration between firms. And information technology is employed intensively in organizing global production processes as well as global markets. It makes possible not only just-in-time shipping but centralized control of manufacturing facilities that are physically dispersed throughout the world. What distinguishes the last thirty years or so, as Manuel Castells (1999, I: 92) puts it, is the creation of “an economy with the capacity to work as a unit in real time on a planetary scale.” This is a “global” rather than merely a “world” economy. It is also the basis for Castells' metaphor of the “network society”, which refers not simply to the fact of global connections but also the adaptive advantage of flexible, network-based forms of organization in relation to dynamic, global capitalism.

Global interconnections still include war, of course, which itself is transformed by the rise of flexible, network organizations (Kaldor 1999, 2002). This is covered by nearly instantaneous press reports and often carefully managed visual images that make it a broadcast spectacle. In three senses it is appropriate to speak of information technology contributing to the emergence of “virtual war”. First, there is the conversion of warfare into a media spectacle woven into the same fabric as Hollywood war movies. Second, there is the blurred line between war games and automated strategic response as Pentagon planners rely on computer models (Der Derian 2002). Third, there is the waging of air wars that keep casualties all but invisible—for those in the planes or back at the missile bases. In this second sense, war may be “virtual” for the United States with its enormous technological superiority and military strategy premised on the notion that American casualties cannot be tolerated even while it is all too “real” for those suffering on the

ground. The Persian Gulf War inaugurated this new asymmetrical virtuality; it was honed in Kosovo and deployed effectively in Afghanistan. But virtual war is not the whole story. New forms of war increasingly involve nonstate actors—famously, the terrorist network Al Qaeda. These sometimes rely heavily on the Internet to maintain organization and plan action while dispersed. They also use both broadcast and computer-mediated communications to disseminate their message and recruit new adherents. While “virtual war” sanitizes killing by technological mediation and keeps bloody violence at a distance, terrorists rely on exactly the opposite use of technology. Violence is not simply a way to accomplish military objectives for terrorist networks, it is one of their objectives in itself. Footage of the World Trade Center attacks offered Al Qaeda and similar groups one of the world’s greatest recruiting videos. And part of the message was that technology could be a double-edged sword, one that those who considered themselves oppressed could master and use against its creators.

So far, cyberterrorism has been minimal and largely symbolic—as for example Indians and Pakistanis flooded several sites in each other’s countries, demonstrating not only enmity but also the capacity to penetrate security systems. This capacity is relatively widespread, but still unevenly so. Distribution of skill may be one reason for the low prominence of cyberterrorism. While few if any discontented populations lack members with the skills to hack into websites, organizing a major destabilizing of social systems by means of attacking a technological system is more complex than merely hacking in. More important, perhaps, is that while cyberterrorism has begun to figure in science fiction it has not yet lent itself to spectacular representation. A key feature of the World Trade Center attacks is that they both imitated film and made good film. They followed a template for a spectacular public devastation that was more widely available and thus easier to publicly conceptualize and communicate about than cyberterrorism. While an attack on a computer system might be a more effective way to bring parts of the global financial system to crisis than an attack on buildings, it wouldn’t be equally capable of immediate, clearly interpretable global representation. It would in important senses be a private attack on the public world, not a public attack.

It is also important to note the extent to which global discussions of IT and its regulation have come to be embedded in security concerns. Especially since September 11, security (and military, intelligence, and police cooperation) have moved to the forefront of the agenda among those organizing interstate connections. This is likely to have long term implications for the development of IT use, which is contingent in important ways on the legal-regulatory infrastructure created. This involves issues about security and surveillance as well as property rights which are seldom openly debated in the public sphere.

Alongside war, and partly spread by war, disease also figures prominently in the “dark side” of globalization. This is not just a matter of possible bioterrorism. More people die daily of AIDS than died in the World Trade Center attacks. And if the spread of deadly viruses from the less well developed (and thus less healthy and less vaccinated) world is a source of anxiety in rich countries, it is nonetheless the poor who suffer disproportionately from nearly all diseases. And disparities in access to treatment become one of the most dramatic faces of global inequality. Here too information technology matters, though what we see most is the weakness of the global public sphere in spurring effective action. We see also the power of Western and especially American media.

These portrayed AIDS largely as a gay disease, thus adding a stigma to the difficulties of fighting it in the rest of the world—where homosexual contact is a minor vector compares to heterosexual transmission, drug use, and unsafe blood supplies—and as more or less ‘handled’ by drugs available only at a cost prohibitive to much of the world.

In this context, it is worth noting that the most influential of electronic media is not yet the Internet or any form of computer mediated communication but still television. Even its reach is not altogether global, but it comes close. Access to and use of the Internet are still much more uneven, and although usage of the Internet grows it is less basic to shaping the broad “information background” to all public discourse. The different technologies are mutually intertwined, of course, not only with Internet sites run by television broadcasters but with news reports gathered by Internet. Just as television often alerts people to stories they will read in newspapers, so an email message can tell someone to turn on the TV or a TV show can send someone to the web for more detail.³ Aside from inequalities of access, there may be even more telling inequalities in production of content for various media. Though access to the Internet is uneven, it does allow for point-to-point communication, dispersed access to common information resources, and relatively inexpensive posting of new content. Broadcast media remain almost completely one-directional, with broadcasters determining the form in which content appears and with the costs of competitive entry high. On the other hand, while more and more information is available on the Internet there is a wealth of globally significant knowledge still accessible only in the libraries and computer data centers of rich countries. The results of most social science research on the world’s less developed countries, for example, are accessible only in the knowledge centers of the rich countries. Moreover, commercial sites tend to drown out nonprofit ones oriented to the public good and search engines not only miss much of the web but generally relegate small scale sites to their back pages.

Global news media are heavily controlled by a small number of Western corporations and public broadcasters from a few Western governments.⁴ This is mitigated somewhat by the prevalence of national broadcasters, though without their own substantial news-gathering operations the global content these can provide is limited to what they can acquire from the major global providers. One of the interesting sidebars to the post-September 11 “war on terrorism” was the emergence of al Jezeera as an important global media player. This Arabic network not only broadcast throughout the Arabic-speaking world it became a key source of content for the major American networks and European broadcasters. Much Western commentary initially treated al Jezeera with suspicion, viewing it as “an Arab voice” while the Western media were treated as neutral or universal. That al Jezeera became a conduit for the messages of Osama bin Laden fueled this perception, but it may be more apt to see al Jezeera as part of the emergence of a transnational Arabic-language public sphere.

All the electronic media, like books, newspapers, and the International Postal Union before them play a crucial role in extending communication beyond local, face-to-face contexts. They thus underwrite globalization. Again, though, there is a tendency in

³ It is important to recognize, though, the extent to which broadcast media subsidize the provision of news by Internet—because the latter is not yet autonomously profitable.

⁴ The literature on media concentration is huge; see, among the best examples (but still heavily US focused), McChesney (1999) and Compaine and Gomery (2000).

some of the speculative literature of early enthusiasts to imagine that the new media turn the tables on traditional inequality of access to information and effectiveness of communication more than they do. It is certainly true that international activism of indigenous peoples, environmentalists, and opponents of the WTO has been organized in new ways and with greater efficacy because of the Internet. It is equally certainly not the case that such use yet rivals the efficacy of information control by transnational corporations. Both the corporate control of much public content provision and the corporate use of information technology to manage internal production and private financial transactions so far considerably outstrip insurgent and activist uses of the new technologies. This doesn't make the latter unimportant, but it should encourage a certain realism. As with other technologies, the ability to use IT varies not just with the potential of the technology but with the resources different users can invest.

The very ubiquity of IT has another curious effect on the global public sphere. It is part of a construction of globalization as an inevitable result of technological progress. From different national vantage points, the question is commonly posed not as whether to join in this globalization but how to adapt to it. Challenges to the dominant Western—indeed American—neoliberal, capitalist forms appear simply as backward-looking traditionalism. This was perhaps especially true during the economic boom of the late 1990s; how visions of the future and struggle over capitalism will fare in less soaring economic times is unclear. But IT continues to play a double role—as the visible face of high technology and as part of the technical underpinning of a greater awareness of global trends.

In many countries around the world, the response is to try to adopt new technology as rapidly as possible, while simultaneously trying to protect “traditional” culture. Contemporary Indian politicians thus project their country as a potential information technology superpower at the same time that they encourage a renewal of studying the Vedas and a more or less fundamentalist embrace of Hinduism. It is precisely the most culturally conservative party to lead the country in its modern history that announces the most high tech economic plans—as part of its “Vision 2020” proposals. The very phrase “Vision 2020” is not uniquely Indian, however, having been employed in Malaysia and elsewhere. The common rhetoric pairs technology-grounded progress with protection or renewal of cultural traditions. The formula is old, being something of an update of the 19th century Chinese response to the West: “Western learning for material progress, Eastern learning for spiritual values” (a phrase commonly summarized by the syllables *ti-yong*). But as the Qing emperors learned, it was hard to import railways and telegraphs without bringing Western values along. China's communist leaders worried about the same issue in the 1980s, and both their successors and some contributors to China's popular websites worry about the same thing today.⁵ Even Canadian politicians echo the same theme, showing that anxiety about local identity has as much to do with American—that is, United States--power as with a clash between the West and the rest. As government officials told *Financial Times* reporters, “the country wants to become a lean global competitor while maintaining traditional local values” (Morrison and Warn 2001: 1).

⁵ For more on China's Internet-based public discourse and especially the interpenetration of domestic and international themes, see Yang (2002).

Politicians presenting globalization as an irresistible force commonly embrace neoliberal policies as the necessary response. Global economic competition demands, citizens are told, that public sector jobs be cut, taxes lowered, state-owned resources be privatized. The same information technology that potentially makes possible a more vigorous public sphere is cited as an example of global pressures before which public opinion should bow down; it is used to squelch dissent. Ironically perhaps, the IT industry itself often backs this neoliberal rhetoric, focusing on the image of freedom and seeing states and bureaucracies only as possible fetters on innovation (rather than also embodiments of social achievements such as public education or health care). The result is to reduce the chances of the socially transformative and publicly engaged use of IT, while encouraging its domination and domestication by commercial interests.

Nonetheless, IT use does escape being harnessed entirely by capitalism. Some of this depends on slipping out of the net of property rights in order to enter the World Wide Web. In India, by some estimates, the majority of people make access to the Internet illegally, from informal sector Internet vendors who establish hidden or black market access to the system's backbone or trunk lines.⁶ Without this—and a variety of other shady but creative adaptations around the world—IT access would be even more asymmetrically distributed than it is. But the solution is only partial. It enables email and bulletin boards and access to public information. But it does not speak to the extent to which the provision of content on the Web is itself ever more commercialized.

Both the flow of information and the financial value of Internet communications put IT on the agenda of government and multilateral regulators. Information flows on the Internet raise concerns about security, manipulation and crises of unintended consequences (such as the financial flows that were central to the East Asian fiscal crisis of 1997). So far, there has been relatively little public discourse about the nature of this regulation. Indeed, nongovernmental advocates for the public interest have largely been excluded from the discussion. When the G-7 powers established a working group on Internet policies in 2000, for example, they determined that each government would have one representative and that there would be a representative of each national private business establishment. Only under pressure did they agree to “observers” from less developed countries. Efforts to secure representation for the nonprofit sectors in the different countries failed. This brings up the basic issue of whether there is an effective way for non-business civil society interests to be heard. The open source software movement has made remarkable strides, but advocates for this sort of vision of large-scale cooperation in the creative process, and of a more democratic approach to developing a technological infrastructure are not significantly represented in core discussions of legal and political regulation. National public spheres and the nascent international public sphere alike are sharply challenged by the partnership of corporate powers and national governments, backed up by international agencies serving that partnership and a global culture heavily shaped by neoliberalism.

To the extent that there is a direct response to self-organized public communication, it comes mostly from nation-states. Though businesses are susceptible to campaigns focused on their public image (famously pioneered by the Nestle boycott), they are much less directly attentive to public opinion when it is expressed in non-

⁶ I am informed here by the work of Ravi Sundaram and colleagues in Serai, a research institute on information technology at the Center for the Study of Developing Societies in New Delhi.

financial terms. It is the translation of opinion into either consumer purchasing patterns or capital investment patterns or occasionally the willingness of other firms to work cooperatively that matters. Likewise, multilateral organizations like the World Bank, the IMF, and the WTO can be challenged by public outcry, but are governed largely by states and operated along technocratic lines, with expertise conceived mainly within the terms of neoliberal ideology. Accordingly, it is a mistake for democrats to accept too readily the idea that the growth of a global civil society makes states unimportant. States still matter, they still wield considerable power, and this is at least in part a good thing, not least because they are the main locus for democracy.

It is common to speak of globalization as though the fact of worldwide interconnections meant that there was really a single, seamless whole.⁷ I have done this to some extent here, but it can be misleading. Globalization looks different from different regions and localities in the world. It is both an opportunity for the EU and a pressure behind European unification. The implications are more ambiguous in much of Africa, where access to the benefits of globalization has been minimal and the legacy of colonialism and other ills have in some cases been exacerbated by it. Instead of wondering whether states will lose their familiar power, for example, many Africans must wonder instead whether states will become strong enough to manage public services and unite countries. Likewise, senders and receivers of migrants must view migration differently. And while unequal access to information technology is an issue everywhere, the inequality is between countries and regions as well as within them. And the term ‘access’ can be misleading, since even countries that are in a good position to make access to the web may not be in a strong position to become suppliers of global information resources.

To a large extent, the notion of a single, uniform global culture or economy is an illusion encouraged by the way dominant Western media present information about the world. From other vantage points, the divergences are readily visible. Globalization is made up of a variety of different projects that clash with each other in varying degree and combine in different ways in different places. Western dominance is contested. This is not to say that what happens elsewhere is simply survival or response to Western initiated trends; it is rather other the creative development of alternative modernities (Gaonkar, ed. 2001). This is something of what has been at stake in clashes between Islamists and the West in recent years—not tradition vs. modernity so much as struggle over whether Western trends can control the whole of the modern. Is the freedom to make pornography predominate in the content available on the Web inherent to modernity, or a contingent choice the West has made in constructing modernity—not only in terms of sex but in terms of minimally restricted commercialization. Moreover, Western-dominated globalization is not all of a piece—the WTO and the anti-WTO protests have both been Western-dominated. Neither is there simply a tension between the West and the rest, as though the latter were uniform. Regional and local differences still matter, along with religious, cultural, class, and other differences that cross-cut regions. Even nationalism is commonly a response to globalization, not its other, something old and passing.

⁷ Interestingly, it is an illusion that informs critics as well as celebrants. In their influential book, *Empire*, Michael Hardt and Antonio Negri (2000) present a picture of a fully sutured and self-sufficient dominant world order, one that lacks the internal contradictions to generate immanent transformation.

Globalization is a heterogeneous process, in short, which produces multiple and overlapping layers of interconnection. It is a matter of enmities and rivalries as well as interdependence. Moreover, the other side of connectivity is exclusion. The more densely certain networks are woven together, the more difficult it is for outliers to find a way in.

International civil society has grown as part of globalization, but its enthusiasts must be careful not to overstate its strength. It is sometimes suggested that IT is a great equalizer, but as we have noted IT is used by corporations at least as effectively as protesters (if not a good deal more so). Describing the surge of global protest over capitalist hegemony, unequal development, and the environment some writers seem almost to imply that the protesters outside the WTO meeting in Seattle came close to overpowering the global elite within. In fact, of course, they were able to get a message heard and to create a disruption but not to assume significant organizational power.

IT plays an important role, finally, in making it possible for globalization to combine decentralization and dispersal of activity with concentration of power (Calhoun 1992b). As Saskia Sassen (1996) notes, much of what official statistics present as global trade among seemingly independent nations is in fact coordinated production within individual global corporations. Carburetors may seem to be sold from Mexico to the US, but this is just one link in Ford's new global assembly line, with computer assisted control systems and financial management as important as computer assisted design or robotics.

Networks and Knowledge

Information technology is powerful, but not all powerful. It is introduced into a world of existing social relations, culture, capitalism, and inequalities. These shape what will be made of it. So does the creativity of engineers, designers, and users. So too, potentially, can the creative work of artists and others for whom the Internet provides a new medium for both production and circulation of work. Indeed, the aesthetic potential of information technology is both important in itself, and potentially part of the contribution of IT to the public sphere. The latter is never simply a matter of rational-critical argument but also of cultural creativity, the reimagining of the nature of social relations can be as important as debate in the life of the public sphere. Through most of the 20th century, for example, the public sphere joined an aesthetic and a distributive critique of capitalism, a bohemian discourse with the socialist, hopes for a more beautiful world with hopes for a more egalitarian world. To a considerable extent this combination came unstuck in the 1990s (see the useful discussion in Luc Boltanski and Ève Chapiello 1999). Egalitarian ideals were tarred with the brush of defunct Soviet-style bureaucratization and notions that government regulation was excessive even in the West. Conversely, capitalism appeared often in the aesthetically appealing guise of the high-tech corporate campus rather than the polluting factory. For a time, at least, its paradigmatic occupation became website designer and not only its economic but its aesthetic potentials seemed unlimited. There was more artistic freedom offered by the dot coms than by government (and even universities looked awfully stodgy). How much of the changed attitude will survive the dot com crash is unclear, but the example nonetheless illustrates the ways in which the revision of cultural images is important to the construction of public opinion. And of course, it was not an accident. The

hybridization of Madison Avenue and Bellevue, Washington was central to the dot com era, and focused precisely on the revision of public opinion by aesthetic means.

Attempts by states and others to regulate the Internet and similar technologies may reflect purely bureaucratic concerns or may respond to such public discourse. A significant gap in this process, so far, is that information technology has been the object of a great deal of speculation—often utopian but sometimes dystopian—and not much serious social research. Such research will advance best if there are more researchers with serious knowledge of both information technology and social science. Such “cross-training” is not encouraged in contemporary universities, but is not impossible. In any case, for the public to make informed choices about the development and deployment of information technology—and perhaps about remedying inequalities in access or impacts—knowledge is crucial.

Perhaps ironically, at the same time that more and better knowledge is needed about the social changes in which information technology plays a central role, the traditional institutions of knowledge production, storage, and distribution—like universities—are undergoing an unannounced structural transformation partly based on IT. This can serve as an example for issues in the study of IT. Various commentators have wondered what the implications of new technologies might be. Optimists have pointed to the capacity to reach new students in dispersed settings, to bring currently centralized resources like libraries to learners and researchers in remote places, to put give students more chances to control their own pace and directions of study, and to make institutions more efficient. Pessimists have worried that ‘efficiency’ will be used only to cut costs not to expand offerings, that personal contact will be reduced, that knowledge work (and curricula) will become more standardized, that this might be linked to more reliance on standardized testing, or that social benefits associated with campus communities will be lost if students are isolated from each other. All of these good and bad possibilities are realistic. Two problems stand between speculation and useful knowledge, however. First, there is little research, especially researching showing not just whether any of these things are happening someplace, but which of them are happening where and in association with what else. Second, we must overcome the tendency to try to figure out the impact of IT in isolation from broader social patterns of which it is part. In this case, the role of IT is currently secondary, but growing, within large-scale structural transformation of higher education that has gone largely unannounced and unexamined—at least within the United States.

Sticking only to the American example (though versions of this process are widespread), several different changes are intertwined and are fundamentally changing the character of higher education. The changes are not evenly distributed, to be sure. Most especially, wealthy institutions have more capacity to shape their own futures—and to maintain attractive features of their current character. Thus it is not likely that Harvard University or Williams College will employ IT simply to cut costs, reduce faculty, or teach students online. They may use their “brand names” to offer profitable distance education programs, but their endowments and social status will enable them to continue to serve a privileged segment of the student population with residential programs that reach far beyond the formal curricula and that include face-to-face relations among students and between them and the faculty. The options open to less well-endowed institutions are different, and so too the pressures shaping them. One reason we know less

about the overall transformation of higher education is that researchers tend to be drawn from the upper tier of schools and reflect mainly on what has gone on in the institutions in which they were educated or work. But higher education in the United States is a highly differentiated system in which schools have different missions, student bodies, places in academic labor markets, and resources.

Some of the most noticed innovations in higher education have come with the rise of for-profit schools. These are disproportionately (but not exclusively) distributed in the less selective segments of the higher education market. It is no surprise that DeVry Institute of Technology competes more with community colleges than with Stanford (or that the institutions acquired worldwide by Sylvan International Universities are primarily in the market for first generation university students wanting to study applied fields). It is also significant that providing technical education—much related to IT—has been a mainstay of the new institutions. The older higher education system has been slower to develop needed offerings. But if this is partly simply conservatism, it is partly a question about the nature of education. Colleges and universities have commonly maintained that even technical education was best pursued in the context of broader liberal arts and sciences, that it was important to train citizens as well as technicians, and that students needed to develop critical thinking skills for both roles. In relation to IT, many have pointed out the difference between mastering a specific software package or hardware configuration, both of which are likely to change quickly, and mastering the underlying principles that will enable students and workers to learn about new systems in the future. Absent a much greater social investment, though, this broader vision of higher education is inevitably somewhat elitist; it speaks less well to students worried about the fastest, surest course to a good job.

Traditional colleges and universities are expensive—and are under challenge from “rationalizers”—not only because they are inefficient, but because they bundle together a number of different activities and functions. They house libraries and sometimes publishing companies, counseling services and sports teams, computer centers and hospitals. They provide entertainment, housing, and at least implicitly dating services. One of the basic questions today is which can—or should—maintain this bundling together of disparate activities. Perhaps most basically, the ideal of the university has combined the production and dissemination of knowledge, research and teaching. Some efficiencies are available by unbundling these, and this is happening. Like many of the changes, it is happening within traditional institutions as well as in a redistribution of activities among institutions. Some faculty are able to negotiate privileged reductions in their teaching loads because of their research productivity; others make up the difference. The most extreme dimension of this is the rise in employment of temporary and part-time teachers, usually with low salaries, minimal benefits, and marginal status within the institutions. Though transformations in higher education are often described in terms of “privatization”, this shift appears in public institutions as well, and market pressures are felt throughout the system.⁸

⁸ Privatization may be a more precise term for discussing changes in higher education in some other countries. In many of these cases, it is more closely correlated with a for-profit orientation than in the US which has a long history of private, but not-for-profit higher education. And in many of these cases, neoliberal states policies are leading to efforts not just to found new private institutions but to reduce public support for existing institutions.

Indeed, profit and non-profit orientations are being intermingled. Not-for-profit universities have established for-profit corporations to try to make money from online offerings. University presses long-subsidized because the academic value of their publications are being asked to pay their way as businesses. Charges for some library resources, especially those provided electronically, are becoming more widespread. The primary products of scholarly research—journal articles and books—are increasingly accessible only for a price. The institutions most immune from pressure are in fact not the public universities but the very well-endowed private ones. MIT and Princeton, thus, have made their online offerings free—both seeing them as more valuable for public relations and alumni loyalty than as profit centers, and suggesting that there may not be as much profit in this kind of offering as is sometimes thought. On the other hand, such well-endowed institutions are also operated partly as for-profit businesses, not least when they get into joint ventures based on the inventions and innovations of their faculty.

In this as in other areas where IT is part of a larger change, inequalities are growing but masked. Not only individuals but institutions are unequal when facing technological innovation. Around the world, privatization of higher education is part of the more general process of reducing state support of social goods. This is encouraged by the neoliberal ideology dominant in contemporary globalization (Bourdieu 1998, 2001).⁹ But it means that states--the institutions best placed to defend the gains workers and other popular forces have made in previous struggles—are instead abandoning them. Some of those struggles—such as for low-cost, equitably or perhaps meritocratically distributed public education—have been waged in part through the public sphere, with material pressures complemented by shifts in public opinion. The supporters of neoliberal capitalism have effectively dominated elite public opinion, including the ways in which the most powerful states perceive the implications of globalization. This means that debate in the broader public sphere is an important test for the capacity of civil society to resist the imperatives of capitalism. The debate influences not only current state actions but the availability of knowledge for future public discourse.

The Internet will always be a supplement to not a replacement for other connections. Those who already have power can make more effective immediate use of the technology—so those with less power have to work harder to make it effective on their side. The Internet makes it easier to find things out, thus, but often harder to find out what we don't know. I don't mean simply that it adds to volume and creates new demands for ability to discriminate and evaluate sources, though this is certainly true. I mean also that it makes new forms of surveillance possible that are inherently hard for ordinary people to observe and which may nonetheless dramatically enhance the control others have over their lives. Despite the fact that privacy issues have received more research and public attention than almost any other dimension of information technology, surprisingly little public outcry has greeted US government proposals--and actions--to reduce restrictions on such surveillance. People still seem to think mainly in terms of new information being gathered rather than recognizing the immense detail of information already produced as byproducts of computer use but (usually) not linked across data sets. The label privacy is partly misleading, thus, since the issues involve not just “exposure” but control.

⁹ A translation of the first essay in *Contre-feux II* appears in *Items and Issues* vol. 1 #3, Winter 2002 available at www.ssrc.org).

Control is also important in another way. It is usually obscure to users who is editorially shaping the content available on seemingly open public websites. China, for example, has a range of extremely lively web-based discussions about issues from international affairs to government corruption. Content that offends the government usually disappears quickly, however, and there is presumably also a good deal of self-censorship. The result is that sites apparently offering a glimpse of public opinion are skewed representations. Unlike a newspaper that can be read in certain ways based on the assumption that it is censored and its content controlled, websites give the impression of consisting simply of the spontaneous postings of the public. This doesn't mean that the web doesn't bring a gain in sharing information. Indeed, journalists on official Chinese newspapers have been known to anonymously post to the web stories censors would stop them from publishing—and these get some airing even if they are quickly censored. And, to complicate the matter further, the government sometimes tolerates web content that it would censor from print publication. The reason seems to be that it assumes that the Internet reaches a relatively elite part of the population within which it is willing to see issues aired. This may offer a kind of safety valve; it may be monitored by the government to see what its more publicly informed and vocal citizens think; it has the advantage that it doesn't seem as official as what appears in government-owned publications. Perhaps most basically, the government may simply recognize that it cannot effectively restrict all information from reaching this elite—but still wish to restrict what reaches the broader population. In the information age, it may be all but impossible to stop information flows—including across borders—but it may be more possible to keep them relatively elite. In other settings, censorship may ultimately be less of a factor in determining the accessibility of information on the web than invisibility (because of the limits of search engines, the extent to which commercial sites push public ones to the margin, and the costs of advertising or maintaining links).

One argument has been that web-based “communities” are effective organizational counterparts to corporations, governments, and other more formally organized structures of power and action. There is some truth to this—organization is always crucial to making otherwise dispersed popular voices heard. Electronic communication is extremely effective at facilitating links among strangers—for example facilitating both widely distributed protests and participation from widely distributed groups in demonstrations or other shared events. It is a useful vehicle for sharing information which can either motivate or inform action. At the same time, we need to note the ambiguity of the language of community in this regard. Writers seem to refer without clear distinction to (a) dense networks of personal ties, (b) broad but loosely linked categories of people linked by shared information, and (c) IT users who derive their social connections from some other basis (say, trade union membership) but then communicate partly online. If we mean the first of these, the most sociologically specific use of ‘community’, then communities are effective only on relatively small scales; density of connections—everyone knowing (and potentially trusting) everyone else necessarily declines with scale. Precisely because social life began to be organized on ever-larger scales in the modern era, community could organize proportionately less of it. States, markets, and other kinds of connections among people came to organize more—even when people still valued community a great deal. Much of what IT facilitates is linkage among relative strangers—the second and third usages above, though I would

hesitate to use the term community with its connotations of dense social networks. The term community is misleading, moreover, because it implies that collectivities formed in web-based discourse are somehow equivalent to local communities grounded in face-to-face relationships (Calhoun 1998). Here too the reality is that the Internet is most effective as a complement to face-to-face communication not a replacement for it. It empowers local activists who would otherwise find it harder to reach others with similar concerns in remote locations. It enables both lateral sharing of information and better access to information controlled by centralized providers (including government agencies). Here it is worth noting that how effective the technology is in this regard depends a great deal on institutional arrangements over which there can be political struggle. Are government agencies required to make all their data effectively accessible, for example? What laws and regulations govern public provision of data by other actors?

More generally, “community” is a misleading term for thinking about the Internet’s role in social solidarity. It may be true, as William Mitchell (1998) puts it, that his keyboard is his café. Internet communications provide many of the functions that coffee houses (and newspapers) played in Habermas’s model of the 18th century public sphere. At the same time, neither is necessarily best understood through the notion of community. Part of what Habermas described as important to coffee house society was precisely that it provided a setting for interactions among strangers, for discussions among those who were not knit to each other by communal ties. The same goes for various sorts of multi-user domains and is part of the basis for the creative identity-work that Sherry Turkle (1997) has described. MUDs may evoke a sense of community for participants, and may be given metaphorical topographies complete with “neighborhoods”. But it is also misleading to apply the warm, fuzzy language of the local without regard to scale. There is a crucial difference among MUDs that provide occasions for strangers to fantasize, LISTSERVs and websites that enable political organization among strangers, and web-resources that provide supplemental communication channels for people also joined in directly interpersonal relationships. The three (and other variants) can shade into each other, but are distinct not just in conception but in implications. A particularly important part of the distinction comes with the difference between categorical identifications (categories of people with similar interests or identities) and network ties (more or less dense webs of actual relationships, especially multiplex ones) (White 1992; Calhoun 1992b, 2002). The latter join more or less “whole” people; the former tend to join people one issue or identity at a time. The former, however, transcend locality much more easily.

The point is not that one mode of interconnection is better or worse than the other, but that they have different implications. The Internet can make local community less isolated or it can lead people to substitute on-line ties to relative strangers for interaction with neighbors. It can promote both enclaves and connectivity, nations and cosmopolitanism. Heavy reliance on the term ‘community’ to describe computer-mediated groupings borrows from the warm and fuzzy connotations that the idea of community has in everyday life and especially in nostalgia. But it also obscures one of the most important potential roles for electronic communication which is enhancing public discourse—a form of discourse that joins strangers and enables large collectivities to make informed choices about their institutions and their future.

The Idea of the Public Sphere

To say that a public exists is mainly to say that there is more or less open, self-organized communication among strangers. There are settings in which such public communication is minimal, in which strangers feel sharply constrained in what they can or should say to each other, or in which external regimentation of who may speak to whom or what may be the topics of communication prohibits self-organization of publics. So this minimal sense of publicness says a good deal.¹⁰ It does not, however, give an adequate sense of the stakes of the idea of the public sphere. These focus not simply on the general existence of public communication, but on its capacity to guide social life.

The most famous study of the public sphere, Jurgen Habermas's (1989) *Structural Transformation of the Public Sphere*, focuses on the emergence in the 18th century of a widespread ideal--and partially successful actual practice--of open debate concerning questions about the public good and policies for pursuing it.¹¹ This debate was conducted by individuals with autonomous bases in civil society--i.e., with their own sources of income and identity--but the debate achieved rationality to the extent that the wealth and identities of the individuals did not intrude on argument itself. The public sphere was thus crucial to the capacity of civil society to influence the state; it was political, but not part of the state. Habermas describes the development of this political public sphere out of an earlier literary one, in which the formation of opinion about works of literature was elevated by rational-critical discourse. He also points to the importance of institutional supports for public communication, notably the newspaper and the coffee house.¹²

In Habermas's analysis, however, the ideal of the public sphere was shown to mask a contradiction. It aspired equally to openness--in manner of communication and in entrance to the discourse itself--and to the critical use of reason to form opinion. Its successive structural transformations, however, reflected the extent to which expanding the scale of the public sphere led to a degeneration in the processes of opinion formation. Instead of individuals debating, public communication became increasingly a matter of organized interest groups--corporations, trade unions, political parties--using the techniques of advertising and mass communications. Opinion was formed less rationally on the basis of manipulation. The advent of opinion polls did nothing to arrest this, since they simply asked the opinion of discrete individuals without providing an occasion for different individuals to inform each other through discussion. Such opinions were less likely, therefore, to be based on knowledge. Indeed, opinion polls simply gave better information on people to those who would seek to influence or control them--treating

¹⁰ Warner (2002) offers a more elaborated version of this minimal definition:

1. A public is self-organizing
2. A public is a relation among strangers
3. The address of public speech is both personal and impersonal
4. A public is the social space created by the circulation of discourse
5. Publics exist historically according to the temporality of their circulation

For more history of the concept see Calhoun (2001a, b).

¹¹ For several critical analyses of the issues Habermas raises, see Calhoun, ed. (1992).

¹² A website imaginatively devoted to coffee includes a discussion of "Habermas, the coffee houses and the public sphere" (<http://www.qmw.ac.uk/~english/personal/Coffeehome.html>).

them as “objects”—rather than enabling people to become better subjects of public discourse.

Behind both Habermas’s optimistic account of the 18th century and his pessimistic account of subsequent transformations lay the same issues. Can public communication be a means of forming opinions based on reason and improved by critical discourse? Can these opinions then inform the creation or operation of social institutions and more generally the constitution of social life.¹³ In other words, can ordinary people use their faculties for reason and communication to choose the nature of their lives together—even on a relatively large scale in which most are strangers to each other—rather than have this imposed on them by inherited tradition, political power, or economic wealth. For Habermas, the main issue was whether citizens could guide a state, which helps to explain why “the public sphere” appears as singular—it is the sum of the ways in which the open, rational-critical discourse of citizens at large can inform the (singular) state. The same broader questions can be asked of international public discourse, however, and with regard to influencing a multiplicity of states, of multilateral organizations, of quasi- or non-governmental bodies, and indeed, of business corporations.

Communication among strangers in the public sphere thus appears as one of the various mechanisms by which social integration is achieved and social institutions shaped and guided. Shared participation in public life, itself, can be a form of social solidarity, joining people in relations to each other and to the public projects they debate—even when they disagree about specifics. Among the various forms of social integration, public communication is distinctive because more than any of the others it offers the possibility of ordering collective life on the basis of reasoned choice. People are joined together by functional interdependence, as in markets, by subjection to political power, and by commonalties of culture. The public sphere has the potential to shape each of these other forms of connection, as well as offering a kind of connection of its own. It complements, the realms of directly interpersonal relationships—family, friendship, neighborhood. These are open in varying degree to choice and to construction through interpersonal communication. But they can join only modest numbers of people; they cannot organize relations among strangers. Moreover, when they steer affairs of state this is usually the illegitimate influence of one part of a polity over the rest. The public sphere distinctively offers the chance for the whole citizenry—or at least a large part of it—to participate in guiding the state, thus conferring legitimacy on it. This of course implies that legitimacy is based on the will of the people. While this is a predominant conception in the modern world, it is not the only possibility. Other approaches to legitimacy base it on divine will, on inheritance, or on the formal excellence of institutional arrangements. When legitimacy is based on the will of the people, though, a key question is how that will is formed. Is it a matter of inheritance or of a tradition that should be above question—as some proponents of ethnic nationalism would argue? Is it a matter of manipulation by those who can draw power from control over the media, or over jobs, or over the members of self-interested organizations? Or is this will of the people formed through discussion and debate among the people?

¹³ Habermas focuses mainly on political life and assumes the existence of a state to be influenced. Writing slightly earlier, Hannah Arendt (1958) emphasized the broader process of creating social institutions and also the moments of creation of states in acts of founding and revolutions.

This is not the place to pursue questions of political theory like how to balance unity and diversity, the sense of common commitment implied by the phrase “will of the people” and the need for tolerance and mutual engagement across lines of difference required by liberal democracy. But it is crucial to see that these questions are made pressing by any appeal to the public sphere as a basis for organizing life together. Take simply the relationship to nation as an example. Nationalist ideology commonly presents individuals as joined directly and identically to a common whole; differentiation appears as a threat to national unity. Such an ideology can have popular appeal and can be supported by masses of public communication—messages posted to both American and Chinese websites during the spyplane crisis of 2000 demonstrated this. But this sort of public demonstration of unity and identity is different from public discourse in which rational-critical debate improves the quality of opinions, educates the participants and forms a collective understanding of issues that advances beyond pre-existing definitions of interests or identities.¹⁴ Among other things, the mass version of popular nationalism is eminently open to manipulation by demagogues, the government, and other forces. Recall, indeed, that democracy can mean mass rule not protection for rights and that publicity and expansion of the media can be tactics in mobilizing such masses (and not just in Nazi Germany or Maoist China).

More or less open, self-organized public communication among strangers is evident in both mass nationalism and more rational-critical public discourse. The minimal definition of the public sphere does not adequately make the distinction (though to the extent that mass nationalism is manipulated by the state or others it is not ‘self-organized’). It is recognizing the deeper stakes of the question of the public sphere that makes the tension between these two “ideal types” of public communication evident and important. And yet, it should not be imagined that the realities to which they refer are completely distinct. There is no communication that is not also participation in the production or reproduction of culture. Even in the most rational-critical of public debates, thus, organized by the fairest rules of procedure and pursued in the least self-interested spirit, are thus conditioned by the cultural idioms in which they are conducted and contribute to the formation of common culture (as well as the recognition of cultural differences) among participants. Moreover, common culture is important to the commitment of participants to each other and to the process of public discourse. To recognize the difference between simple affirmation of commonalty and differentiated public debate should not lead us to imagine that the ideal of reasoned discourse is sufficient in itself to account for what goes on in any public sphere or how and why it survives and exerts its influence. Conversely, we should see also that popular nationalism (and other cultural or political traditions) is not immune from rational-critical discourse. It can be shaped and reshaped both by the culture-forming and the rational critical dimensions of public discourse. Even when ideologues assert that there is one true and correct way to be American or Chinese or anything else, they tend always to offer distinct visions of that one and true way. This opens the possibility of debate even in the midst of affirmations of unity. And different nationalisms may incorporate greater recognition of internal diversity, of the importance of reason, or of debate as part of the self-understanding of the nation.

¹⁴ For a recent study that addresses the interrelationships of the two dimensions, see Rajogopal (2001).

The existence of public communication, vital as it is, does not answer the questions we need to ask about public spheres. We need to know not only how active the communication is and how inclusive and open participation is, but what the qualities of the communication are. We need to attend to the processes by which culture is produced and reproduced in public, not treat it as mere inheritance or private product of individuals or small groups. We need to ask how responsive public opinion is to reasoned argument, how well any public sphere benefits from the potential for self-correction and collective education implicit in the possibilities of rational-critical discourse. And we need to inquire how committed participants are to the processes of public discourse and through it to each other. Finally, and not least of all, we need to ask how effectively the public opinion formed can in fact influence social institutions and wielders of economic, political, or indeed cultural power.

These questions should all be basic to inquiry into the implications of new information technology for public life and democracy. Various technologies have the potential to constrain or facilitate openness, reason, cultural creativity, self-organization, solidarity. This is as true internationally as domestically. Moreover, questions of unequal access, cultural diversity, and perhaps most basically, the multiplicity of agents of power and potential objects of public influence loom even larger in the global arena.

Conclusion

The implications of information technology for the global public sphere are still being determined. Whether it will be put to use in ways that open and encourage public communication as much as in ways that facilitate commerce and control is an open question. If not, then web-based resistance to power-- viruses, hacking, site-flooding, and other information technology and web-based strategies for attacking corporations, states, other users—may become more prominent. There is no perfect ‘firewall’ between systems of public communication and infrastructural systems. Accordingly, the stakes are high should cyberterrorism become more prominent. At the same time, opportunities for democratic choice about how sociotechnical systems are organized are limited. And it is often the sense of being excluded from choices about the future than fans the flames of discontent.

Prospects for democratization of the global order depend crucially on the development of a global public sphere, as well as on attention to global inequities within the public discourse of individual societies. There are opportunities for activism. This need not always involve a leap to the truly global, but may involve the building of transnational communications networks on a regional scale—as has happened to some extent around Latin America and South Asia. It will be important for those who would open up the public sphere to figure out how to work within organizations (including corporations and states) not just against them or in seemingly separate and autonomous “communities”. It may also be possible to *choose* at least some aspects of the transformation of colleges and universities instead of just letting it happen, and thus to choose to have stronger bases for producing and sharing knowledge to inform the public. In this regard, one of the most important actions may be to do real research to help replace the contest of anecdotes and speculations with a reasoned debate in the public sphere.

References

- Arendt, Hannah (1958) *The Human Condition*. Chicago: University of Chicago Press.
- Boltanski, Luc and Ève Chapiello (1999) *Le Nouvel Esprit du Capitalisme*. Paris: Gallimard.
- Bourdieu, Pierre (1998) *Acts of Resistance*. New York: New Press.
- Bourdieu, Pierre (2001) *Contre-feux II*. Paris: Raisons d'Agir.
- Calhoun, Craig (1992b) "The Infrastructure of Modernity: Indirect Relationships, Information Technology, and Social Integration," in H. Haferkamp and N. J. Smelser, eds., *Social Change and Modernity*. Berkeley: University of California Press.
- Calhoun, Craig (1998) "Community without Propinquity Revisited: Communications Technology and the Transformation of the Urban Public Sphere," *Sociological Inquiry*, vol. 68 #3, pp. 373-97.
- Calhoun, Craig (2001a) "Civil Society/Public Sphere: History of the Concepts," 1897-1903 in *International Encyclopedia of the Social and Behavioral Sciences*. Amsterdam: Elsevier.
- Calhoun, Craig (2001b) "Public Sphere: 19th and 20th Century History," pp. 12595-12599 in *International Encyclopedia of the Social and Behavioral Sciences*. Amsterdam: Elsevier.
- Calhoun, Craig (2002) "Imagining Solidarity: Cosmopolitanism, Constitutional Patriotism, and the Public Sphere," in *Public Culture*, vol. 14 #1, pp. 147-72.
- Calhoun, Craig, ed. (1992a) *Habermas and the Public Sphere*. Cambridge, MA: MIT Press.
- Castells, Manuel (1999) *The Network Society*. Cambridge, MA: Blackwell (3 vols.)
- Compaine, Benjamin M. and Doug Gomery (2000) *Who Owns the Media: Competition and Concentration in the Mass Media Industry*, 3d edition. Indianapolis: Erlbaum.
- Der Derian, James (2002) "9.11: Before, After, and In Between," in C. Calhoun, P. Price, and A. Timmer, eds.: *Understanding September 11*. New York: New Press.
- Dimaggio, Paul, Eszter Hargittai, W. Russell Neuman, and John P. Robinson (2001) "Social Implications of the Internet," *Annual Review of Sociology*, 27: 307-355.
- Gaonkar, Dilip P., ed. (2001) *Alternative Modernities*. Durham, NC: Duke University Press.
- Habermas, Jürgen (1989) *The Structural Transformation of the Public Sphere*. Cambridge, MA: MIT Press.
- Hardt, Michael and Antonio Negri (2000) *Empire*. Cambridge, MA: Harvard university Press.
- Kaldor, Mary (1999) *New Wars and Old*. Stanford: Stanford University Press.
- Kaldor, Mary (2002) "Beyond Militarism, Arms Races, and Arms Control," in C. Calhoun, P. Price, and A. Timmer, eds.: *Understanding September 11*. New York: New Press.
- McChesney, Robert (1999) *Rich Media, Poor Democracy*. Urbana: University of Illinois Press.
- Mitchell, William (1998) *City of Bits*. Cambridge, MA: MIT Press.

- Morrison, Scott and Ken Warn (2001) "Liberals strive to sharpen competitive edge," *Financial Times*, June 11, "Canada Survey," pp. 1-2.
- Rajogopal, Arvind (2001) *Politics after Television: Religious Nationalism and the Reshaping of the Indian Public*. Cambridge: Cambridge University Press.
- Sassen, Saskia (1996) *Losing Control?* New York: Columbia University Press.
- Turkle, Sherry (1997) *Life on the Screen*. New York: Touchstone.
- Warner, Michael (2002) *Publics and Counterpublics*. Cambridge, MA: Zone Books.
- Wellman, Barry, ed. (1999) *Networks in the Global Village*. Boulder, CO: Westview Press.
- Wellman, Barry and Catherine Haythornthwaite, eds. (2003) *The Internet in Everyday Life*. Cambridge, MA: Blackwell.
- White, Harrison (1992) *Identity and Control*. Princeton: Princeton University Press.
- Yang, Guobin. 2003. "The Internet and the Rise of a Transnational Chinese Cultural Sphere." *Media, Culture & Society* 25(4): 469-490.