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New media and democracy

The civic networking movement

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Abstract

This article describes and evaluates civic networks in Europe and the USA. These are seen as attempts to use new media technology, particularly the internet, to improve participation in local democratic processes. Various aspects of democratic communication are examined, including information access, preference measurement, deliberation and group mobilization. A wide variety of city-based experiments are described, which have all faced problems of low take-up and problems of inequality of access. It is argued that new media will have a significant and positive impact upon the processes of democratic communication within the appropriate regulatory and economic context, particularly regarding access to communications technologies.

Key words

access • citizenship • civic networks • democracy • government • internet • media • new media

A convergence of opinion from both left and right asserts that newspapers, radio and television distort and trivialize democratic communication.¹ Others have made the small step from this prognosis to the assertion that new media of communication – the internet, multimedia and

computer-mediated communication (CMC) - can be used to encourage active political citizenship. This heralding of the internet as the new 'third sphere' of free public deliberation, untainted by state or commerce has been accompanied by a boom in experiments using CMC to encourage democratic participation. These projects have attempted to use such 'new media' to offer new channels of access to the main transactions of democracy: information provision, preference measurement (voting), deliberation, and will formation/group organization. Many informationbased services are also being delivered via new media. Initiatives range from using city hall web pages as a more efficient means to make political information available to those who use the internet, to experiments in electronic voting, to encouraging all citizens to use interactive media to organize interest groups and neighbourhood alliances. Although national states have experimented with new media (for example the White House, which offers direct email to the President's office and extensive information on the government programme), it is the local experiments - the so-called 'civic networks' - that are most advanced, and offer the clearest insights into emerging patterns of political communication.

But civic networks have been subject to criticism. Many claim that government, local or otherwise, has no remit to be involved in a leisure/entertainment activity already provided for by private enterprise. Others claim that tinkering with communications can do nothing to touch the real problems for political citizenship such as globalization and social exclusion, and could exacerbate problems of information exclusion. Surely, critics claim, the only beneficiaries of these new forms of electronic democracy are the media and computer firms who seek to create new dependencies on their products, and who will simply monopolize control of new media as they did the old.

In this paper I do not aim to evaluate civic networking in general. The phenomenon is too new for that. Rather, drawing on a longer piece of research in which six city networking experiments were compared (Tsagarousianou et al., 1998), this paper examines civic networks as experiments in the use of CMC to encourage democratic citizenship, and draws out some of the general implications for understanding the new media and democratic communication.² I argue that a very broad notion of democracy and participation is necessary to come to terms with the implications of new media for democracy: CMC has implications not only for information provision, voting and polling, but for the very formation and organization of political identities. As long as access to the new media is restricted, however, it will be impossible to realize their democratic potential.

THE CIVIC NETWORKING MOVEMENT

Already by 1996 more than 200 towns in the USA had pages on the world wide web (Dutton, 1996). Although some of these were simply advertisements for regional tourism or business, more than 50 had some kind of civic networking project underway.³ These projects range enormously in their origins and in their basic architecture and aims, but share the civic republican premise that political citizenship can be reactivated by rewiring the machinery of democracy. In Santa Monica, a plan to allow town officials to work from home via modem was extended to give all citizens the right to access debate and information about city politics via their home PCs, and then further extended into PEN, the Public Electronic Network, one of the first civic networks of online discussion groups in 1990 (Dutton, 1996). In Philadelphia, Neighborhoods Online was set up by community activists with the aim of 'making it easy for groups and concerned citizens to access information about issues relevant to neighbourhood empowerment'; to 'help civic organisations access the internet' and 'create networks of neighbourhood activists' (Schwarz, 1998). The Seattle Community Network, in collaboration with local libraries, used CMC to provide the local community with access to information, fora for discussion, and email (see Schuler, 1996). Although they were influenced by previous forms of electronic democracy and calls for public information utilities and rights to information (see Arterton, 1987; Etzioni, 1972; Sackman and Nie, 1970), the projects owe their salience to new technological and socio-economic conditions. Dozens of think tanks and institutes have emerged to 'network the networks' (see Schuler, 1996) reflecting the consolidation of this new civic networking movement.

Civic networking became a key trend of the 1990s because of the interplay of various strategies in a range of political contexts: the expansionist plans of government information departments; pressure from new communitarian/civil society think tanks; lobbying by telecommunications providers; EU initiatives; and the aims of accountability, transparency and efficiency associated with 'New Public Management' in local government.

This diversity of origins is reflected in a range of network designs. In some cases town governments made central investments in networks administered by local government employees, and in others networks have been set up by voluntary or commercial organizations. In the Netherlands alone, more than 60 towns have web pages. Amsterdam's *Digital City*, with its anarchic, unregulated 'Underworld' of discussion groups is the biggest civic network in Europe, and was organized by veteran civic education enthusiasts within the city government together with volunteer groups of tame hackers (Brants et al., 1996). By 1997, over 45,000 Amsterdammers

had registered, visiting the 'virtual city' on average once a week (Francissen and Brants, 1998). The organizers of Athens' *Network Pericles* saw civic networks based on home PC access as elitist and agoraphobic, and therefore introduced a network of information and voting terminals in public places (Tsagarousianou, 1998). The reluctance of Berlin's city government to organize a civic network left a vacuum, which was, however, filled by students and other enthusiasts who set up their own grassroots discussion groups on city issues (Schmidtke, 1998). Around the same time, intellectuals and city officials in Bologna, Italy, offered all citizens free access to *IperBolE*: a network of information pages, email links and discussion groups designed and operated by the local authority; and in Manchester, England, a project to improve computer literacy spawned an *Electronic Village Hall* as a sideproduct (Bryan, 1996; Tambini, 1998). And these are merely examples from a global trend. New information systems and civic networks are opened by local authorities every week.

THE CONTEXT: NEW MEDIA AND THE PUBLIC

The new civic networking trend occurs at a moment of particular historical opportunity for reform of communications institutions in the industrialized democracies. Many established media institutions are being redesigned or replaced. Current transformations in the communications infrastructure have a political element, in the privatization and deregulation of broadcasting and telecommunications, and a technological/economic aspect which consists in the end of bandwidth scarcity, convergence between telecommunications and broadcasting, and growing access to computers. This transformation occurs at a time when many of the institutions of democratic communication, and the clear sense of national interest and homogeneous culture, come into question because of migration and multiculturalism, and civic republican and communitarian ideals - both critical of the 'old media' - become the new normative anchors in the policy debate. It has been claimed that there is an opportunity here to move away from the previous structuring of political communication around a broadcast model of communication within national public spheres (Poster, 1998).

Although CMC is not itself new, mass access and user-friendliness are, and they mark a turning point in media development. It is not only new communications protocols, which render possible our email and internet facilities, but browsers, message routing, and intelligent agents make information provision much more flexible and interactive than were previous broadcasting and print-based media. Although mass access is not yet a reality, internet cafes and the connection of public libraries, schools and hospitals help ensure that those who do not own hardware are able, in principle at least, to have access to online communication and information facilities. Moreover, as information industries become more central to

economies in advanced countries, more people have access to CMC in the workplace, which further spurs education and leisure use. Even if we leave aside CMC and the internet, video on demand, web TV, and browser viewing guides are closing the gap between the structure of broadcast and print communication (one to many) and that of the net (many to many). These current trends are not to be dismissed as fads as were 'citizen band' radio and community radio. There has been massive investment in information infrastructure, and the numbers of citizens who use online communications continue to grow. Icon-based and menu-driven interfaces render literacy a lower hurdle: CMC no longer demands knowledge of specialist programming languages by most users, and even webcasting creating web pages - has become a cottage industry, with minimal capital and skill outlay (though getting people to visit your site is more difficult). Infrastructurally, new alternatives to old-fashioned twisted-pair telephone wires - satellite and fibre-optic technology - are in the process of ending bandwidth scarcity and cheapening communication and information provision. Even where the wires are not being changed, digital compression is finding ways of sending much larger amounts of information down them faster.

The interaction between questions of (de)regulation and this rapidly changing mediascape throw many post-war certainties into question. Suddenly the fact that our democratic institutions (not only the 'free press' but also government information provision, voting, propaganda, and political organization) are built around a carefully regulated communications infrastructure becomes visible: Blumler, Garnham, and others raise alarm about the decline of public broadcasting, which they see as an imperfect 20th-century equivalent of Habermas's public sphere (Garnham, 1990: 16, 111–14). The regulatory ideals of freedom of speech, impartiality, public service, and universality of access, they argue, are not safe, especially given the current crisis of public service media caused by fiscal, legitimation and technological squeezes (Keane, 1991: 7) and a corresponding expansion of commercial media in most European countries.

The problem of regulating media in the public interest, however, does not stop with the question of public service broadcasting. It must be understood in relation to the broader problems of social, political and technological change, and in particular the idea of a 'national public' and its relationship with the new technologies. The previous regulatory framework emerged in the context of industrializing, democratizing, nation-building states, and a broadcast (one-to-many) model appropriate to the communications technologies then available. This led to the institutionalization of ideals such as public service, impartiality, universal access, and national interest/national security for broadcasting and telecommunications.

Whereas in the past the idea of a national 'public', reflected in the print and broadcast mediascape was the focus both of democratic deliberation and of communications regulation, this conception is ever-more deeply questioned. Trans-national communication and loyalties are increasing (Morley and Robbins, 1995; Soysal, 1994) and the firm grasp which national public broadcasters once had on their publics has already been loosened by satellite, video and deregulation (Blumler, 1992; Morley and Robbins, 1995). Multiculturalism and globalization have also been problems for public and universal ideals in broadcasting. Such processes have been both cause and consequence of the delegitimation of the old elitist idea of the public based on a cultural canon which could be broadcast to other class, ethnic, gender and regional groupings. The response to this, and to the funding and technological changes all over Europe and beyond, has been marketization of media. An ever-greater proportion of information for citizenship is carried by for-profit broadcasters, which only compounds the critique of society and politics as a sport or a spectacle for sale: what Garnham (1989: 48) calls the 'politics of consumerism'⁷ and others have called the society of the spectacle, or soundbite politics (Fishkin, 1991). It is with the rise of new, interactive, and high-capacity media that these problems are being reassessed, and the relationship between public, nation and state (local and national) is being renegotiated.

Just how new media can be used and regulated in the service of democratic citizenship, then, remains to be seen. Whereas broadcasting and print media (and also book publishing, telephones, and libraries) were institutionalized around the idea of the national public, or active citizenry, the particular democratic role of new media is only now being explored in practice.

COMPUTER-MEDIATED COMMUNICATION AND DEMOCRACY

Are email, interactive CMC and the internet qualitatively different from TV and the traditional media? What do the new media offer that old media cannot provide? What difference does it make if I talk about politics in a computer discussion group instead of the local coffee shop? A great deal if you believe the new gurus of electronic democracy. Amitai Etzioni was calling for 'electronic town halls' to provide fora for deliberation on local policy issues long before the internet (Etzioni, 1972). Ben Barber identified electronic democracy – then thinking more about the interactive potential of cable TV – as one means to achieve 'Strong Democracy' in 1984. Stefano Bonaga, university professor and local government officer in Bologna was even more expansive:

all over the world a new dimension is evolving with unbridled momentum and making a major impact on democracy and development, stretching the

horizons of citizenship: this is the world of new communication and information technologies, destined to revolutionise democracy and the economy. (Bonaga, 1994)

Although they could be criticized for neglecting the realities of the political context that will govern our use of new media, all three writers have noticed the potential, in abstract terms, of new media to democratize political communication. The claims for new media and political citizenship centre on the efficiency of new media, their capacity, their interactivity, and on their freedom from time-space constraints (see Poster, 1998). As new media are interactive they institutionalize citizens' right to reply, to select information, and to communicate directly with one another or their representatives without the gatekeeping influence of editors. Further, as civic networkers argue, rather than receiving a diet of what journalists and editors deem to be important information, citizens can seek the information that interests them and serves their interests. New are more efficient than old media because by exploiting the growing availability of bandwidth they can offer faster access to more information and immensely improved search and storage functions. In terms of democratic communication all the improved efficiency functions apparently remove potential barriers to participation because they reduce the costs - in time and money – of taking part.

In the next sections I investigate the various ways in which civic networks seek to use CMC to rejuvenate active citizenship. Since very different visions of democratic participation lie behind each of the civic networking projects, I will use a simple framework, which distinguishes four key transactions of democracy, and for each ask how new media are being used to reform them.

1. Information provision/access to information

Citizens need information in order to participate in decision making, organize interest groups, and make propaganda. New media, according to civic networkers, not only make it cheaper to access and provide more information, but reduce the problems of selectivity and bias, since they overcome problems of space-scarcity that are endemic to print and broadcast media. Technologies also permit new ways of sorting and searching the increasing volume of information which is received, and provide more potential for self-editing of media diet. Indeed, as societies become more complex, and individuals' definitions of their own interests more fragmented and various, existing information infrastructures encounter increasing problems of complexity and overload, which some argue is the key problem of contemporary democracies (Zolo, 1992). Whereas conventional media have always involved a process of selection of the information that gatekeepers deemed interesting or important for citizenship, new media, as

they offer direct access to the information being used by decision-makers themselves, and means to quickly search through it, can potentially ease such problems. They may do so through introducing more immediate and efficient forms of consultation and many-to-many communication, and preventing a situation arising in which local governments are remote and unaware of the needs and wants of their citizens. Such problems of complexity are clearly linked to the current renegotiation of public service which we mentioned above. The 'public' was defined in terms of universally held, homogeneous preferences which were in turn defined in terms of an authority which could decide questions of taste and representation on behalf of the audience. That uniformity is challenged in multicultural, affluent consumer societies which resist any 'public' cultural policy. An interactive, rather than broadcast media system offers some hope of bypassing these problems, avoiding ever-thornier questions of deciding what information citizens need, and letting them decide themselves.

Bologna's civic network, like most, aims to improve information access. Information is provided on the organization and work of local government on world wide web pages with several layers of hypertext links and also email links to the relevant city officials. Citizens can access the city statutes, planning documents, information on the workings of local government including lists of departmental competencies and some meeting agendas. The organizers of the network also prepare and update a list of some 200 voluntary organizations and pressure groups operating in Bologna. There are some direct email links from the information pages to responsible officers. Costs are reduced, and the volume and quantity of information is greatly increased in comparison with printed material. Hypertext, high-quality graphics, virtual reality maps of the city, and other interactive presentation methods facilitate information provision and form of civic education.

This has, however, raised questions of bias. In strict terms, of course, no information is politically neutral, and therefore a degree of power is concentrated in the hands of those that select it (e.g. web-page designers). The response to criticisms of agenda setting on the web is that given the nature of web-based information provision, the agenda-setting power of designers is diminished in comparison to conventional media. Because space is no longer scarce, the reader rather than the editor selects what to read, and information is provided raw, rather than half-digested by a journalist. In Bologna, the long-term goal was to open as much as possible of Bologna's intranet of local government databases directly to the internet. These plans have so far met technical and legal problems and the information that is available is all selected by the system administrators.

The argument that civic networks provide selective, agenda-setting information has led to an argument in favour of grassroots, voluntarily

organized networks, like for instance that in Berlin. The obvious problems with grassroots initiatives, however, are the status and reliability of online information. Information on grassroots networks does not have the signature of city authorities, and, as with so much information on the internet, its providers are less accountable for content and there is a resultant cheapening of information and potential for citizen overload. Further, when content is not provided by the city authorities directly, it is more likely that several competing networks will be set up alongside one another. The online citizen is then confronted with a confusing array of discussion groups, information, and lists, and few institutionalized mechanisms for quality control, right of reply, redress and consumer protection.

2. Preference measurement⁸: referenda, polls and representation

Civic networkers not only argue that new media make voting, opinion polling and referenda easier for the citizen and cheaper to administer; they further posit that the real-time interactive communication and measurement made possible by CMC can transform a procedure in which a citizen's response is moulded by a pre-set framework, into a process through which citizens design the very categories in which their choices are measured. Some seek therefore to incorporate elements of direct democracy into civic networks, in the process transforming conventional forms such as referenda into new 'interactive' measurements of opinion. One problem with paperbased referenda, they argue, is that those who set the question hold too much power. The wording of the question and pre-selection of a limited range of responses have, through suggestion, such an influence on respondents that referenda can amount to the 'capture', rather than consultation, of citizens. Such instruments of direct democracy often serve merely to legitimize decisions already taken. (Papadopoulos, forthcoming). One response to this problem is to give citizens the right to set up referenda themselves. Citizens in Italy and California, for instance, have the right to referenda if they can raise large petitions. Such referenda petitions, to be successful, need armies of volunteers with clipboards to bother shoppers for signatures. The staging of a referendum often therefore depends on mobilization resources more than preferences in the population, hence the all-purpose referendum parties, e.g. the Referendum Party in Italy. These organizations concentrate resources in order to use popular referenda to set the political agenda. In the case of the Referendum Party there is evidence that the overuse of referenda has resulted in their decline. Through online listing of questions, and more widespread access to communications resources, a more genuinely popular, interactive referendum system could be achieved. Thus civic networkers, despite objections made in the name of security, are experimenting with interactive referenda, and polls. (For a

discussion of criticisms of electronic democracy in these terms, see McLean, 1989.)

Just as the process of setting questions could be democratized by new interactive media, so could answering them, argue civic networkers. Interactivity, particularly coupled with message routing and language recognition, could enable the measurement of natural language responses, and more complex question structures. In Amsterdam, the City Consultations project experimented with interactive, computer-assisted polling using 'choice trees' which led telephone voters through a series of choices permitting responses in matters of degree and qualified (if . . . then) answers (Brants et al., 1996: 240).

Networkers also hope to transform elections. Citizens are more likely to stay at home when there is bad weather on polling day. The homebound, such as single parents and the very elderly, tend to vote less than other groups (Jennings, 1979; Jennings and Markus, 1998). Attendance at elections and referenda tends to decline with increased frequency of polls. These facts suggest that participation could be improved by making voting easier, and ideally by making it possible to vote from the home. The claim that new media can end apathy by making voting easier has been made not only for computer-mediated communication, but also in relation to other media such as interactive television and even telephone voting (Arterton, 1987; Becker, 1981).

There is a prior assumption that needs to be addressed, however. Are citizens politically apathetic because of barriers to participation in civil society? Many civic networking projects seek to remove the costs of participation, assuming that when citizens participate they do so in order to serve their own interests and in pursuit of their own visions of the future, calculated against the costs of participation such as walking to a polling booth or writing a letter. The 'active participation' so dear to civil society theorists, however, may have more complex, multiple motivations (see Whitely, 1995; and Leighley, 1995 for detailed discussion). People use civic networks, for example, for entertainment and education, and few of them are directly concerned with the 'political ends' which network enthusiasts claim motivate citizens.

A large part of the funding of Bologna's civic network, provided by the ESPRIT project of the European Commission, was given on the condition that the city would develop and experiment with software for electronic polling and referenda. Although a Bologna software company is working on the software, the IperBolE management have no plans to use any form of polling on their network. They argue that it will be justified to do so only when certain conditions are fulfilled: namely when interactivity is a reality and conditional responses can be measured; when natural language responses and matters of degree can be measured; when citizens have the right to

petition to annul a referenda if they feel unrepresented, and when universal access to the technology is a reality.

Computer-mediated preference measurement faces even larger obstacles in voluntary, unofficial networks than it does in state-led initiatives. Grassroots civic networks would not be used for polling and preference measurement because their ad hoc organization discourages universal access, or even representativity of sampling. In fact, at the time of writing, despite calls for use of electronic voting (notably for the new London Authority), no civic network has held even an experimental vote on a local issue, and binding referenda or elections seem far off. The obvious problems of user identity and security are yet to be overcome. If the same problems can be convincingly overcome in the service of Ecommerce, however, electronic preference measurement will be closer to becoming a reality.

3. Deliberation

Eschewing the idea of democracy as measurement of preferences, public space theorists suggest that we focus on opinion/will formation, and deliberation as problem solving, thus revealing the links between democratic communication and social learning. As citizens' political preferences do not precede political competition but to a certain extent result from the debates and compromises which occur when citizens and policymakers puzzle their way through problems, we should focus analysis on these processes of deliberation if we wish to achieve ideals of active political citizenship (Cohen, 1989; Fishkin, 1991; Habermas, 1989; and for a discussion see Miller, 1993). Clearly, within such a view, CMC holds much promise for opening new arenas of debate and discussion.

Discussion groups, familiar to any user of the internet, offer a new arena of deliberation, freer from constraints of time and space, and very efficient. A citizen worried about plans for a new car park would not have to sit through discussions of planned tree pruning and school closures while waiting to make her point. She could merely follow some menus through lists of discussion subjects until she finds her debate on car parking and then type in her contribution, which can be considered at leisure by the other interested parties. It is this kind of scenario, and the fact that the technology is already cheap and well known that has driven many civic networkers to base their city networks around discussion groups.

The Bologna project used standard email, bulletin boards and list servers to provide a system of discussion groups and email links. Individuals and local organizations can contribute to discussions on local issues such as education, planning, roads and so forth. The Bologna project illustrates some of the problems of centrally planned networks, such as problems of control and agenda setting. In IperBolE, an unelected official has the right to censor discussion groups, the themes of the great majority of which she

had herself decided on. The 'editors' exclude party-political propaganda, material considered obscene, and advertising. This situation, however, should be viewed as a possible but not necessary problem with state-led initiatives. City officials of the PEN project, in contrast to the Bolognese, were reluctant to curtail freedom of expression in any way. As a result, the Santa Monica project ran into deep trouble. A minority that used the PEN network for 'flaming' (online attacks and insults) caused many committed users to cease using the network (Docter and Dutton, 1998; Dutton 1996).

Discussion groups are operated in a range of ways and with very varied results. Philadelphia's Neighborhoods Online does receive some funding from local government, but it is designed and implemented mainly by one of many American organizations dedicated to civil society: The Institute for the Study of Civic Values (Schwarz, 1998). It is dedicated above all to networking between voluntary organizations rather than individuals. In Berlin, after discussions revealed the reluctance of the local authority to actively support a centrally organized civic network, city-oriented discussion groups made their way on to bulletin boards organized by grassroots computer enthusiasts. A set of discussion groups with subject headings similar to those in Bologna was set up by a group of students in the university. Here the stress is on providing a forum for debate and organization: there are no official connections with local government, and the debate is often much more critical than that on the 'tame' civic network of Bologna (Schmidtke, 1998). Discussions were just as radical on PEN, however, where anti-authority statements were common (Varney, 1991), and the degree to which participants criticized positions of authority was as likely to be due to cultural factors as to network management.

Although the editors use their considerable agenda-setting powers to encourage debate of local politics, surveys of content of discussion groups reveal that most users are interested in using the network to organize leisure and social activity, and political activity is secondary (Tambini, 1998). Pornography had to be banned in the Digital City of Amsterdam not because the authorities disapproved, but because they generated so much interest that 'traffic jams' disabled parts of the system (Francissen and Brants, 1998).

Direct email links between citizens and local government officers in the various departments are another innovation in deliberation. Networks in Bologna, Berlin and Amsterdam all offer this service, though rates of response by local government officers are low, and the legal and political status of this form of communication is unclear. One advantage of using email over letters is that citizens need less knowledge of the internal workings of city hall. With automatic message routing, all messages can be

sent to a central postbox, and then distributed on the basis of keyword recognition to the appropriate departments (this, argue the organizers, allows citizens who understand very little about local government to be heard since they need not know who to address messages to). In trials in Bologna a message-routing system achieved a success rate in placing messages of over 90 percent (Tambini, 1998).

Whereas organizers of centrally organized networks such as IperBolE in Bologna constantly pressurize city officials to follow the discussion groups relevant to their department, and the civic network provides direct email links to officers, 'unofficial' networks cannot be so proactive in forging citizen-representative communication. The status of such online communication, it could be argued, is no more significant than a passing comment in a cafe. No one is obliged to read discussion groups or email to officials, and although they are encouraged to do so, local government officers are – paradoxically – generally slower to respond to email in comparison to letters (Tambini, 1998). Again, the problem may be a misunderstanding of citizens' motivation to deliberate.

4. Will formation/organization

A shared interest does not automatically spawn a political organization to represent it. This applies to institutions such as parties, movements and interest groups and to the states and political systems that form their context. National interest, like any form of political partisanship, is the result of a complex process: in order to translate an identified interest into collective political action, individuals with similar interests must somehow find one another and discover that they share that common interest. They must further form, or reform, some kind of common will, organizational structure and identity (Eder, 1985; Melucci, 1989; Pizzorno, 1986; Touraine, 1978). For political parties and movements, propaganda has been a key to these organizational requirements: newspapers are set up and distributed, speeches are made in public places, and political groups seek to exploit the mass media by staging demonstrations and lobbying journalists. Communication resources become the key to mobilizing groups in this way, and meeting such 'publishing costs', broadly conceived is a key to success in forming and mobilizing political identities.

The impact of CMC on mobilization concerns three areas: (i) cost of mobilization (e.g. of propaganda); (ii) network logistics (i.e. finding those who share your interests); and (iii) stigma or illegality (the need to mobilize secretively).

Many have argued that interactive list servers and bulletin board discussion groups can dramatically reduce publishing costs (Myers, 1994; Schmidtke, 1998). If access to computer-mediated communication increases, this could

greatly democratize access to public attention, as 'desktop publishing' becomes a reality. Using interactive and non-edited media, and the powerful search engines of the internet, individuals with the most obscure common interests can find one another and communicate. In fact these media are most useful to the more obscure and isolated interest groups. This has been most commented upon with reference to the ease with which the organizational problems of covert groups, such as Neo Nazis and paedophiles have been overcome using interactive media, but the claim that new media ease the process of finding others with similar common interests, and contacting and mobilizing them appears to be applicable also to more conventional interest groups in civil society (see Myers, 1994; Schmidtke, 1998). That these media are less effective in constructing and maintaining the larger scale, aggregate collective identities such as 'nations' is clear. They may in fact contribute to the fragmentation of such national publics.

That the cheap, easy networking potential of the internet has succeeded in enabling many instances of voluntary co-operation is undisputed. The organizers of the PEN project cite a voluntary project which by 1980 had succeeded in providing the homeless of Santa Monica with showers and lockers to assist them in their search for work. The project was conceived and organized from some of the city-sponsored online discussion groups (Varney, 1991). In Bologna, with such successes in mind, voluntary and civil society organizations were invited to provide pages for the network, and were provided with free email access to other citizens and to one another, in order to 'weave a new fabric of civil society'. A total of over 300 associations, parties, pressure groups and unions have subscribed. In addition to cheap email, they receive assistance in providing web pages and sharing resources with one another.

Centrally organized networks may, however, have a tendency to inhibit the emergence of centres of power outside government control or at least tend to ensure that the network reinforces the position of the local government apparatus as the key provider of information and arena of discussion and decision making. Independent resource centres such as that of Neighborhoods Online and LibertyNet in Philadephia show how a network which takes a grassroots approach can assist voluntary organizations. Provision of easy assess to political information (even such simple things as detailed census breakdowns) can be crucial to the organizations of civil society, as can the cheap and simple provision of access to and lists of other organizations which may face similar problems or work on similar issues. The Philadelphia projects offer subscriptions not to individual users (as did Santa Monica and Bologna) but to voluntary groups. According to Ed Schwarz, activist and civic network organizer:

With Congress and federal departments and even state and local governments starting to go online, the Internet could give us quick access to information about programs and legislation that we could use ourselves and share with one another. Most important, the Internet offered grassroots groups a new way of conveying our own views – first to our fellow citizens, and then to the politicians. In short, using the Internet, we could overcome the sense of isolation, ignorance, and impotence that was holding us back. Its major tools – email and the World Wide Web – were tailor made to deal with these problems. (Schwarz, 1998)

The very characteristics that are seen as positive in encouraging participation (cheapness, anonymity) are seen as a problem when they foster less appealing forms of online political organization. The so-called Thule-Netz in Germany was a system of mailboxes that enabled a degree of organization of German extreme right activists that would otherwise have been impossible due to expense and illegality (Maegerel and Mletzko, 1994). The legal status of inflammatory or libellous material posted in the semi-public worlds of discussion groups remains contested, and the links between the virtual identity of users and the real identity unclear.

ISSUES IN NETWORK DESIGN: BIAS, REGULATION AND ACCESS

Clearly the claims of the most naive civic networkers, for instance that the new media will erode existing political hierarchies and replace them with a new egalitarian and democratic fabric of civil society, are misleading. The degree to which new forms of democratic participation can be developed using the new media will depend upon how new media are regulated and who has access, and also on the design choices made. Before discussing regulation, I will focus on issues of design and particularly whether networks are centrally designed and administered, or grassroots-based.

Most of the networks I have mentioned are in fact a combination of local government design and grassroots initiative. Networks in Bologna, Santa Monica and Athens have been marked by a particularly strong role of local government, whilst Philadelphia and Amsterdam, for instance, combine limited state involvement with initiatives from the public and voluntary sector.

Central control of networks offers some practical advantages. Local government-sanctioned, centrally designed civic networks generally offer more accountable, reliable sources of local information and more direct links between online deliberation and political decision making. Further, networks operated by local government are more likely to have the resources to be proactive in developing universal access, which enables a broader range of democratic transactions to be legitimately provided for. Top-down networks, however, in which local government officers are

gatekeepers of content, are open to many of the criticisms previously levelled at public broadcasters. They can be accused of asserting a hegemony through control of information and agenda setting, of monoculturalism, or of protecting the interests of their political masters.

Political control has further implications when issues of bias, netiquette and content regulation arise. The damaging obscenity and flaming that occur in the unregulated discussion groups in the PEN system, for example, indicate that some regulation is necessary to ensure that networks survive. The tight control and (sometimes automated) censorship exercised by unelected officers over debate and information provision online in some networks may, however, warrant criticism since some networks - IperBolE, for example – are close to having a local monopoly in internet service provision. Whether local providers do need to be regulated in terms of balance and bias will depend not only on the future importance of the medium, but on future developments in bias and agenda setting in interactive media, phenomena that require further study. Administrators of discussion groups have agenda-setting power as they choose titles of discussion groups and prepare lists of FAQs (frequently asked questions), censor and edit messages (if that is allowed) and so forth. Even where, as in Bologna, the aim is for officers to eventually have no control over content (user-designed discussion groups will replace those selected by the managers), the original designers do have a key role in the development of the culture of the network, and the original design of discussion groups. If we assume that discussants are also heavily dependent on the information selected and formed in the city's web pages, debate seems likely to be further restricted.

As networks grow, however, the sheer volume of information and communication carried by these media may rule out administrator influence of discussion groups. In 1996 a judge in the Netherlands ruled that the Digital City as internet provider could not be expected to know what was posted in all its newsgroups and therefore was not responsible for regulation of content (Francissen and Brants, 1998). At the same time in Italy, however, administrators were puzzling over whether the new 'Par Condicio' laws regulating political use of media (designed to counter Berlusconi) would be applied to Bologna's civic network. They decided to delete party political contributions to discussion groups. The very notion of what constitutes balance, agenda setting, or impartiality in these media, however, remains to be defined.

Attention in this respect must be paid to the software. There appears to be a trade-off between access and agenda setting. The more accessible (user-friendly) an interface is, the more agenda-setting power it leaves to system designers and administrators. Menu-driven touch screen software for information provision, deliberation or preference measurement, such as

those trialled in Athens, clearly have a much stronger agenda-setting potential than do, for example natural language recognition software. Menu interfaces, however, especially the touch-screen variety, require less literacy and therefore exclude fewer from the network. Interfaces are further divided into those that favour a 'virtual city' approach (graphically representing buildings with various functions as in Amsterdam), and those that prefer text. Virtual cities are also more user-friendly, but have the disadvantage of structuring interaction into non-existent streets and buildings when there may be no need to do so, thus undermining the organizational advantages of non-graphical subject listings for civil society and will formation, such as that in use in Neighborhoods Online in Philadelphia.

Clearly access is a key, both for the civic networks which have to justify their budgets with evidence of hits, and for the democratic involvement of the inhabitants of the so-called 'Information Society' more generally. If nothing is done to guarantee access, and if the new media continue to increase in importance as arenas for democratic communication, society faces a new polarization between those citizens versed in information technology and able to access politically decisive information and expressive channels, and an uninformed underclass whose opinions and preferences are manipulated by decisions of advertising and PR companies. It is important to note here that access is a relative rather than an absolute issue. If all members of a democratic society have rights of access only to libraries and basic literacy, then these are the media which are necessary to performance as a fully functioning citizen. But when some have access to additional new media that empower and advantage them as political citizens, the basic ideals of democratic citizenship demand that those who are excluded from such communicative capacities should be provided with them to prevent the domination of one class of citizens by another (Murdock and Golding, 1989).

For these reasons, many of the founders of civic networks, especially in Bologna, Manchester, Athens and Amsterdam, used civic networks to encourage access to the new media. From another point of view, however, these networks could be seen to compound the problem by offering yet another privileged medium of expression and information to those who have the time, money and skills to access it, and thereby contributing to an impoverishment of other media. One network in particular that has responded to this problem is Bologna's, which from its beginnings has referred to universal access to the network as a right (Tambini, 1998).

A key aspect of the IperBolE project was that the local government granted a right of access to the internet (via the civic network) to all citizens of Bologna. Since then the city has been attempting to make that right a reality, promoting access and offering computer literacy education. After three years, over 5,500 private individuals had accounts to use the

network, as did over 200 organizations. Since many of these accounts have multiple users, many more than this log on, although still only a small minority of Bologna's 390,000 population use the network. PEN, in Santa Monica, was founded in 1990. Since then the number of registered users (who use the network mainly via modem from home) has risen to over 7,000 (in a population of around 86,000), while the number who use the network at least once a week fluctuates around the 400 mark. Amsterdam's network, which is available not as a right, but for a price, has the highest rates of registration and use, with 45,000 (almost 5% of the adult population) registered to use the system. The slightly anarchic infotainment mix of the Amsterdam network may help account for its popularity, as do the particularly high rates of computer/modem market penetration in Amsterdam (Francissen and Brants, 1998).

Public terminals have been provided by some networks to ensure greater access for those who do not own PCs and modems. But the public purse has not come close to genuinely guaranteeing universal access. The three terminals in Bologna's IperBolE offices often have a queue of users waiting to log on, and the dozen or so terminals situated elsewhere in the city are only open a few hours per day, since an assistant is required to help novices. In Amsterdam, the Digital City's initial 'fleet' of 24 terminals was later cut to 10, because the budget was too small to provide assistance. In Athens, where all access to the network is to be via public terminals it was estimated that there should be one terminal for every 14,000 citizens (Tsagarousianou, 1998), obviously not an optimum for universal access.

Not only do registration patterns of civic networks reveal that access is not universal, they also support the claim that it is unrepresentative: participants in civic networks are overwhelmingly male, young, educated, and professional. Bologna's registration figures for 1996 were similar to the other networks: 19 percent students, 41 percent white collar workers, 18 percent professionals. Seventy-two percent were between 20 and 40 years of age and 86 percent were male.

CONCLUDING REMARKS

Civic networking is in its infancy and it remains to be seen if the political and regulatory context will permit networkers to realize their aims of rejuvenating political citizenship. In this last section I draw attention to three crucial keys to the future of civic networking. The first is access. Without universal access, civic networks will remain illegitimate and peripheral in the political process. Second is movivation. Civic networks are often designed with simplistic and often unfounded assumptions about why individuals participate in politics, which may result in design flaws and white elephant networks being set up. Thirdly, even if access can be generalized, and

barriers to participation removed, civic networks' notion of local communities as potential spheres of political interdependence and participation needs to be reviewed for a globalizing world.

Universal access to civic networks, and deliverable rights of access, are still a long way off. But much of the experimentation in civic networking currently being carried out concerns democratic transactions which require universal access (or at least that users better represent the wider population) if they are legitimately to have any teeth. Online voting and referenda, for example, to be legitimate, must assume that all citizens have suffrage. If information-based services are to be provided via such networks, then surely the infrastructure has to be provided to ensure equal access to them. Similarly, if discussion groups are to have any binding role – equivalent to that of citizens' juries or deliberative opinion polls now being trialled (Fishkin, 1991) - then they should be open to all. Where, however, access to CMC is restricted to an unrepresentative minority, there is a very strong argument to keep the key transactions of democracy offline. Civic networking without universal access could be regarded as a further advantage to the information, and is unlikely to be justified for the use of binding referenda, voting or opinion polling. Deliberations that occur in online media under conditions of unequal access should be ignored, rather than directed to the attention of local representatives. Only where universal access can be guaranteed is civic networking likely to move beyond its current status, which generally combines innovative information provision with inconsequential discussion groups. Genuine universal access probably requires some form of state intervention. Just as libraries and schools in the past were deemed necessary for the exercise of political citizenship, there is a growing lobby for similar intervention appropriate to the 'information age'.

Whether public authorities should be actively involved in the design and administration of civic networks, however, is another matter. We have mentioned the danger that they concentrate too much agenda-setting power in too few hands. Another problem with state-led initiatives is that they may be a waste of money. They could invest in infrastructure for local civic participation which no citizen is interested in using, because they misinterpret the motivations of political participation. Their basic assumption is that individuals participate in politics when it is in their rationally defined interests to participate. A growing body of research argues that this is not the case: that contextual factors, access to resources selective incentives and mobilization explain participation (Knocke, 1990; Leighley, 1995; Verba et al., 1993; Whitely, 1995). Although it is too soon to say if Athens' Network Pericles is to face the embarrassing prospect of low take-up, the PEN project in Santa Monica has seen a decline in usage between 1993 and 1996. In particular, whereas in the first years city officials and opinion

leaders were keen to contribute to discussion groups, most had ceased to do so by the time the project reached its sixth year (Docter and Dutton, 1998). Low take-up was the fate of civic initiatives using interactive TV (for Amsterdam, see Brants et al. 1996; for the Qube project see Fishkin, 1991: 21-3). Networkers thus tend to share a rather naive notion of the nature and rationality of political participation. The free-rider conundrum in action theory has made us more aware of the importance of participation benefits motivating political action, e.g. the social enjoyment, role and identity that result from taking part in civic action rather than its policy outcome. It is likely that many of those who participate in civic networks do so not because they seek to invest in an individual or collective good, but simply for amusement or to learn how to use the new medium. These forms of political participation are therefore likely to be unstable in the long term (see Whitely, 1995). The erratic individual patterns of PEN participation described, for example, by Dutton (1996) (obsessive use followed by boredom and neglect), suggest that individuals do not simply use civic networks to further their political interests. As many previous projects in electronic democracy have shown, citizens may simply not be interested in taking part, particularly once the initial novelty of the 'virtual world' has faded. Thus, the argument that making voting easier will make people more inclined to do it, and more likely to participate in frequent polls is likely to be mistaken. Electoral studies show that few vote on the basis of gains-losses calculations (Leighley, 1995).

Why should citizens of contemporary cities participate with one another? They certainly do not share the webs of interdependence that were shared by their ancestors in New England town meetings, the nostalgic reference point of many networkers. Not only do civic networkers often have an illconceived notion of the motivations of political participation, but many of the hopes held for the local, urban networks I have discussed here tend to reflect anachronistic, even nostalgic notions of local communities. Civic networks tend to overestimate the degree to which local communities are homogeneous and share common interests. Some networks, Neighborhoods Online in Philadelphia for example, have the explicit aim of serving existing communities rather than 'virtual communities' (Thompson, 1990). This is indeed one of the often-stated aims of the civic networking movement (Schuler, 1996), which is strongly influenced by mainstream communitarianism (Etzioni, 1995). But clearly there is a problem here. In their nostalgia for the community of the past, civic networkers neglect the fact that past sense of community responsibility was based on a material interdependence, kinship, homogeneity of preferences and economic ties that simply no longer exist (Friedland, 1996). The civic networking movement takes place in the context of a complex renegotiation of political interests and identities due to globalization and multiculturalism. The irony

of the fact that local urban actors have pioneered democratic use of these new technologies is precisely that their key potential – the freeing of communication from spatial constraints – remains unexploited. They are used in towns and neighbourhoods, units in which face-to-face communication is possible. Workers working for the same company in different countries – but being paid drastically different wages for the same work – in contrast, lack the resources to travel or communicate with one another. Access to cheap and efficient communications of this type could have a much greater value to such spatially dispersed political interests.

The key problem, therefore, may not be distortion of communication, or ease of access to information and voting, but the very problem of political organization in a period of globalization. Whereas the territoriality of modern states and citizenship was reinforced by the broadcast model of media, and national public spheres were relatively stable arenas for representation and deliberation, the new, potentially aspatial media are being introduced in a contemporary context where interdependencies are more difficult to define in territorial terms. The response by civic networks has generally been to act local but not, in general, to think global.

The history of nation building shows that print media, and in particular the novel and the newspaper, were necessary conditions in the emergence of the nation-state as the principle modern unit of collective action (Anderson, 1983). The structure of broadcasting and its coupling with the modern state and vernacular language continued that general process of nationalization of culture (Gellner, 1983). The movement away from broadcasting, however, and toward many-to-many, increasingly inter- and transnational communication, arguably bucks that trend since the mediascape no longer reifies geographical or political centres. Whether new media networks can actually be constitutive of interest and identity groups, however, is an open question. Community networkers face a choice: they can attempt to shoreup local communities whose members are no longer economically interdependent but merely share consumption spaces and the worst effects of social problems, or they can use the new media to seek to forge new forms of interdependence and will formation that fit contemporary economic realities.

Clearly, the nature of political citizenship in the information age is set to become a more pressing question, and civic networks will be important in experimenting forms and technologies of participation to reflect the functionalities offered by new media. It is perhaps less likely that networks alone can achieve their goal of a rejuvenation of civil society, at least as long as the problems of access, motivation and collective interest endure. It is not at all clear if public authorities will take the actions which are necessary to foster the civic, as well as economic potential of the new technology. If current debate is any guide, questions of competition and

competitivity of media and communications industries will be deemed more important than political citizenship in the development of public policy for the media.

Notes

- 1 See Barber, 1984; Fishkin, 1991; Garnham, 1986; Habermas, 1989; Thompson, 1995).
- 2 The author expresses thanks to all those who were involved in this collaborative project and to the CCIS at the University of Westminster who supported the research.
- 3 For listings of civic networking projects see the documents of the Center for Civic Networking (http://www.civic.net:2401/ccm.html); the listings of Community Computer Networks and Free-Net Web Sites. (http://www.freenet.victoria.bc.ca.freenets.html).
- 4 There is a growing interest in teledemocracy in the European movement. Bologna's civic network is half-funded by the EU under the ESPRIT programme with the remit to experiment in new forms of electronic democracy.
- 5 For an excellent analysis of the policy games behind the emergence of one civic networking project, see Dutton and Guthrie, 1991.
- I want to argue that . . . changes in media structure and media policy, whether these stem from economic developments or from public intervention, are properly political questions of as much importance as the question of whether or not to introduce proportional representation, of relations between local and national government . . . that the policy of western European governments towards cable TV and satellite broadcasting is as important as their attitude towards the development of a United Europe . . . that political scientists and citizens concerned with the health and future of democracy neglect these issues at their peril. (Garnham, 1990: 104)
- Politicians relate to potential voters not as rational beings concerned for the public good, but in the mode of advertising, as creatures of passing and largely irrational appetite, to whose self-interest they must appeal . . . the citizen is appealed to as a private individual rather than as a member of a public. (Garnham, 1990: 16)
- 8 David Miller (1993: 75) saw preference measurement as the key to liberal ideals of democracy, to be contrasted with deliberative views. In this view, 'Preferences are sacrosanct because they reflect the individuality of each member of the political community'.

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