Examining the Internet in Everyday Life¹

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Keynote address (given by Barry Wellman) to the Euricom Conference on e-Democracy, Nijmegen, Netherlands, October 2002

Introduction

As the Internet evolves, its users and uses grow and diversify globally. Internet use dramatically increased worldwide between 1995 and 2000. Today, approximately 55 percent of the North American population is online (Howard, Rainie, & Jones, 2002; Reddick, Boucher, & Groseillers, 2000). For a large proportion of the population of Internet users, Internet access has become a daily activity (Howard et al., 2002)².

There is less agreement, however, about *how* the internet has influenced different aspects of society. It is important to understand what the consequences of the diffusion and high use of the Internet are for people's lives. We present evidence about how people use the Internet, how it fits into their everyday lives, and how it is influencing other aspects of community. Our special concern here is the impact of the Internet on the change in society away from groups and towards individualized networking. This change is not only occurring at the interpersonal level but at the organizational, interorganizational and even the world-systems levels. It is the move from densely-knit and tightly-bounded groups to move sparsely-knit and loosely-bounded networks. This more to networked societies has profound implications for how people mobilize and how people and governments relate to each other – in all forms of societies – but especially in democracies.

Our Toronto-based *NetLab* has been especially interested in how the Internet has influenced people's interactions:

• Do people communicate more because the Internet offers them with the capability to contact people at a distance?

¹ Kristine Klement, Monica Prijatelj, Uyen Quach and Carlton Thorne gave fine research assistance on the projects reported here, and Uyen Quach also helped with the final preparation of this paper. The Social Science and Humanities Research Council of Canada, Communications and Information Technology Ontario, and IBM's Institute of Knowledge Management provided financial support for our research projects.

² In the Pew survey, 53percent of Internet users report having been online yesterday. Also see: http://www.pewinternet.org/reports.

• Do they primarily communicate via the Internet or are face-to-face meetings, phone calls, and gatherings still important in creating closeness and providing emotional support?

We also ask how the Internet is influencing community life with regards to how often people participate in community activities:

- Are people reaching out to neighbors and to their communities?
- Are they getting involved in neighborhood associations and in public activities?
- Does the Internet reduce the time we have available to dedicate to community life?
- How do people use their networks, social communication, and computer to access information at home, work, and leisure?
- What sense of self and belonging do networked people have?

We draw from previous research done by *NetLab*. This research includes:

- An ethnographic study of a wired suburb (see Hampton & Wellman, 1999).
- A web-survey hosted at the website of National Geographic Society. The North American data focuses on 20,075 adults: 17,711 Americans (88 percent) and 2,364 Canadians (12 percent).³
- International data from the same with respondents from 178 countries (Boase, Chen, and Wellman, 2002 for the worldwide data).
- A study of Catalans and their uses of the Internet (see Wellman, 2002b; as well as Castells, et al., 2002).

We also incorporate into our discussion results from similar surveys, such as the Pew studies of the Internet and American Life, and the American component of the World Internet Project, based at UCLA(collected in Wellman and Haythornthwaite 2002; see also Kraut, et al. 2002).

Rethinking Sociability, Neighborhood, and Community

Many definitions of community treat it, explicitly or implicitly, as occurring within rather small territorial limits, such as would be found in a rural village or a distinct neighborhood. As "community" is partially defined by social interactions among a set of persons who know each other, the composite definition of a "neighborhood community" is of a bounded geographical area in which many of the residents know each other. This

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³ For details on the survey and previous publications see (Quan-Haase, Wellman, with, Witte, & Hampton, 2002; Wellman, Quan-Haase, Witte, & Hampton, 2001). "Survey2000" is available at http://survey2000.nationalgeographic.com. Supplementary tables are available at www.chass.utoronto.ca/~wellman/publications. For other descriptions of these data, see Witte, Amoroso, & Howard (2000); and Chmielewski and Wellman (1999).

approach has been the traditional one in the past, arising out of the pastoralist assumption of happy rural villagers as being the paragon of community life, with urban communities struggling vainly to approach this pastoral ideal (Wellman and Leighton, 1979; Wellman, 1999).

Since the 1960s social scientists have vigorously contested the one time orthodoxy about the nature of sociability, community and domestic life. The debate about the nature of community under contemporary conditions has been called the "Community Question" by Wellman (1979), building upon Manuel Castells' *The Urban Question*, (1972a, 1972b). The Community Question wonders how:

- Societal changes such as informatization, computerization, bureaucratization, industrialization, and urbanization have affected community.
- Reciprocally, how the changing nature of community affects society.

The Community Question has evolved as community scholars changed their ideas about what constituted community and where to find it. Given its importance to human kind and accessibility to public discourse, it is a safe guess that the Community Question in some form will remain open to the end of time. Yet, important transformations have taken place in analyses of the Community Question:

- The zeitgeist of community optimism born with the student and civil rights movements (Fellman 1973; Castells 1982; Gitlin 1987);
- A turning away from armchair speculation to ethnographic and survey techniques that has demonstrated the persistence of communities whenever social scientists bothered to actually look for them (Wellman and Leighton 1979; Wellman 1988);
- The discovery by social scientists that violent political conflicts arose more out of the clash of connected communities of shared interests than out of the *cri de coeur* of the disconnected and alienated (Feagin 1973; Feagin and Hahn 1973; Tilly 1979; Castells 1983).
- A view of the past that emphasizes the strength of community in the transition from the pre-modern to the modern world (Wrightson and Levine 1979; Kertzer and Hogan 1989; Sabean 1990).
- A renewed emphasis on the importance of family, kinship and community relationships in history (Hareven 1977, 2000; Laslett 1965, 1988).
- An interest in communities defined by shared subcultures, rather than by shared locality (Fischer 1975).
- An interest in communities of practice, defined by shared interests in work and learning.

Both fieldwork and survey research show that sociable community relations continue to be abundant and strong. Large institutions have neither destroyed nor withered communal relations. To the contrary: the larger and more inflexible the institutions, the more people seem to depend on their informal ties to deal with them. Research shows that while communities may have changed in response to the pressures, opportunities and constraints of large-scale forces, they have not withered away. They

buffer households against large-scale forces, provide mutual aid, provide partial identity and a sense of belonging, and serve as secure bases to engage with the outside world (see reviews in Choldin 1985; Fischer 1976; Gordon 1978; Keller 1968; Warren 1978).

In North America, neighborhood ties remain important, but usually only as a minority of relationships in personal networks. For example, although ties with neighbors and workmates comprise only a minority of Torontonians' active and intimate ties, the easy accessibility of such local relationships means that they comprise nearly half of all encounters with community members: face-to-face, by telephone, and by the Internet (Wellman 1996). In the inner streets of Chicago (Sampson, Morenoff and Earls 1999) and the orderly *buurts* of the Netherlands (Thomése 1998; Zamir, Volker and Flap 2001), companionship, support and social control by neighbors remains important.

One way of engaging in such community is for people to interact in semi-public spaces such as pubs or cafés (Scorsese 1973; Oldenberg 1989). This is community as a public activity, one that is visibly alive and well on the streets of Catalonia (Wellman, 2002; see also Castells, et al., 2002). In North America, much sociable community is private activity, based on interactions in people's homes. This is a situation more feasible in contemporary North America because the large size of homes facilitates entertaining community members (Warren 1978; Michelson 1976). Thus in suburban Levittown, NJ (Gans 1967) and exurban southern Ontario (Clark 1966), analysts documented little community interaction in public spaces but a fair amount of in-home visiting among neighbors. There are many indicators in the United States "of an increase in private activity at the expense of public activity" (Lofland 1989, p. 92). At the same time, the emancipation of women has meant that women's community, which often had been private in the past, is becoming more public.

The Internet in Everyday Life

The Internet is expected to lead to changes in how people communicate, how they work, and how they spent their leisure. The evidence suggests that the Internet has blended into the rhythms of every day life: the Internet is used at work, in schools, in universities, and hospitals. It is used for a wide variety of purposes, such as surfing for information, playing online games, and chatting (Howard et al., 2002; Quan-Haase et al., 2002).

An analysis of the impact of the Internet needs to consider how the Internet may be contributing to new forms of interaction and community that cannot be measured using standard indicators of social capital. The fact that people are not interacting in visible public spaces does not mean that they are in isolation. They may be going online to chat with friends on instant messenger, visiting online communities by playing multi-user games such as MUDs or MOOs, or exchanging short text messages through "list serves" or "newsgroups" (Smith, 1999; Kraut, Patterson, Lundmark, Kiesler, Mukopadhay, & Scherlis, 1998; Matei and Ball-Rokeach, 2001). The Internet makes it necessary to redefine our understanding of what social capital is and hence, to introduce new ways to measure it.

Technological Changes Create Social Affordances

The Internet is not a one-dimensional technology. Rather, it merges several media into one medium. Nor is it static. A set of current and imminent changes creates possibilities – social affordances – for how the Internet can influence everyday life:

- Broader Bandwidth: Broadband communication facilitates the rapid exchange of large amounts of data, instant messaging, feedback, attached text, picture, voice, and telepresence.
- *Always Connected*: If you have to put effort into connecting to the web, people tend to avoid it. In our Netville study, people valued 24/7/365 connectivity more than sheer speed.
- *Personalization:* Computer mediated communications are developing towards personalization, with more control over who we want to get messages from, when, and about what? This form of communication and the ensuing interactions are more tailored to individual preferences and needs. Personalization and portability are not the same. Personalization recognizes anywhere who you are. With portability, you take your device with you.
- Wireless Portability: Wireless connectivity enables telephone and Internet access anywhere and on the go. Randall (2001) has identified the everywhere-nowhere phenomenon: "Communication will be everywhere, but because it is independent of place, it will be situated nowhere." (p. 5). This facilitates personalized communication. The person becomes the target of communication. We call a person and not a place. The person is the node to which communication is directed. Person-to-person communication is supplanting door-to-door and place-to-place communication.
- *Globalized Connectivity*: The digital divide -- the socio-economic gap between those who use computer mediated communication and those who do not -- is shrinking in the Western world. This may mean an increase in the small world phenomenon, with potential connectivity over the web to all, either directly or through short chains of indirect ties. This can reduce the danger of "technological apartheid at the dawn of the Information Age" (Castells, 1998: 93-94).

Documenting the Current Situation of the Internet

To further understand the Internet's place in society, it helps to understand exactly how it is being used. Current research indicates that it is being used more: by more people, in more countries, in many different ways:

- Internet use has diffused from white, young North American men to the rest of the world. Gender and age have ceased being barriers. Although few poor people, less-educated people and non-whites use the Internet, the digital divide between such groups and traditional Internet users is closing (Wellman, et al. 2003).
- Most Internet users send and receive email, with email becoming more widely used than the telephone.
- Most Internet users web surf. Moreover, Web surfers are spending more time online and using the Internet more often. In September 2001, Internet users spent

- an average of 10 hours and 19 minutes online, up 7 percent from the nine hours and 14 minutes recorded a year earlier (Macaluso 2001).
- Usenet members participated in more than 80,000 topic-oriented collective discussion groups in 2000. More than eight million participants posted 151 million messages (Smith, personal communication, August 10, 2001; see also Smith 1999). This is more than three times the number identified on January 27, 1996 (Southwick 1996).
- Although reliable data are hard to come by, Internet telephone accounted for 5.5 percent of international traffic in 2001 (ITU 2001). New forms of computer mediated connectivity, not using the Internet, are developing over smart mobile phones and personal digital assistants (such as *Palms*). Countries such as Japan and Finland are leading in this, with North America lagging behind.

What Are the Internet's Effects on Community?

Analysts have proposed three basic ways in which the Internet may affect community:

- *The Internet decreases community*: The Internet through its entertainment and information capabilities draws people away from family and friends. Further, by facilitating global communication and involvement, it reduces interest in the local community and its politics (Nie, 2001; Nie, Hillygus, & Erbring, 2002).
- *The Internet transforms community*: The Internet provides the means for inexpensive and convenient communication with far-flung communities of shared interest (Barlow, 1995; Wellman 2001b). Through its low costs and asynchronous nature it increases communication among friends and family, especially contact with those who are far away.
- The Internet supplements community: A third perspective sees the Internet as another means of communication to facilitate existing social relationships and follow patterns of civic engagement and socialization. The Internet blends into people's life. People will use the Internet to maintain existing social contacts by adding electronic contact on to telephone and face-to-face contact. Further, they continue their hobbies and political interests online.

Evidence to address the debate about the impact of the Internet on community is thundering in. This paper reports on three studies done at NetLab, that are congruent with the broad base of findings about the nature of the Internet.

Netville: Neighboring and Long-Distance Community in a Highly-Wired Suburb⁴

To obtain insight into how the evolution of the Internet in the near future might affect community, one NetLab study analyzed "Netville". It is an experimental "wired suburb" that was a new mid-price housing development near Toronto. The study shed little light on the social implications of transition away from "dial-up" to "broadband". "Dial-up", using traditional modems is a relatively slow-speed service (30-50 kilobit) that competes with telephone use and hence can rarely be left on 24 hours per day, 7 days per week. By contrast, "broadband" connections (either by cable or telephone company ADSL) currently have speeds that are at least ten times as fast (500 kilobit – 1 megabit), do not compete with telephone use, and can be left on 24/7 at no extra cost. The experimental Internet development in Netville went even further: installing a much higher speed (10 megabit) "asynchronous transfer mode" system in most of the homes.

This research has focused on how access to some of the most advanced new communication technologies available affects the amount of contact and support exchanged with members of their distant social networks. How does living in "Netville" affect people's community relations, online and offline: in the neighborhood and further away? Our findings suggest that high-speed Internet access supports neighboring rather than weakening it (Details are in Hampton 1999, 2001; Hampton and Wellman 1999, 2002a, 2002b):

- "Wired" residents with high-speed Internet connections have much more informal contact with neighbors than did the "non-wired" residents who had moved into the same development but had not yet received their high-speed access. Wired residents know the names of 25 neighbors, while non-wired residents knew only 8. Wired residents make 50 percent more visits to each others' homes, and their contacts with neighbors were more widely dispersed in the development.
- At the same time, wired Netville residents maintained more long distance contact
 with friends and relatives than non-wired residents did. All Netville residents had
 left friends and relatives behind when they moved into the new development, but
 only the wired residents were able to use the Internet to maintain their pre-move
 levels of contact with non-local friends and relatives.
- The Internet also helped provide social support for wired Netville residents. There is an interplay between Internet contact and face-to-face contact. Distant friends and relatives were especially apt to provide support when they lived close enough for occasional face-to-face get-togethers.
- Wired residents have become "glocalized": They are involved in both local and long-distance relationships (Hampton and Wellman 1999). They both neighbor and connect with far-flung friends and relatives. Moreover, the wired nature of the contemporary Internet means that the more people are online, the more they must stay physically rooted to fixed personal computers and Internet connections at home, work, school, or public places. The paradox is that even as they are

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⁴ Keith Hampton and Barry Wellman led this study.

connecting globally, they are well-placed to be aware of what is happening in their immediate surroundings.

Community Networks in North America

To understand the relationship between online and offline community ties, NetLab collaborated in the National Geographic Survey 2000. The *National Geographic* magazine and society publicized this worldwide web-survey and featured it on their popular website, September - November 1998. Visitors to the site were encouraged to answer the survey on the spot (Witte, Amoroso and Howard, 2000). Most respondents were North American, reflecting the predominant clientele at that time of the web (and of the *National Geographic* magazine and website). North American results are presented separately because the demographic profile of North American Internet users is appreciably different from the profiles of users from other developed and less-developed countries (Chen, Boase and Wellman 2002).

- Experience counts: The longer that people have been online, the more they use the Internet.
- The effects of experience are confounded with the different demographic and cultural characteristics of early Internet users as compared to relative latecomers. The demographic characteristics of the Internet population are rapidly becoming similar to the characteristics of the general population. Gender and age composition are quite similar. The digital divide is real but diminishing for people who have less money, have less education, and are less fluent in English.
- Rather than weakening community, the Internet supplements existing face-to-face and telephone contact. Heavy Internet users have a greater overall volume of contact with community members (for more details on these findings, see Quan-Haase and Wellman 2002).
- The more the more: Frequent contact via the Internet is associated with frequent contact via other means. The Internet is not replacing face-to-face or telephone contact. It is probable that people not only have more relationships than in pre-Internet times, they are in more frequent contact with community members.
- Frequent users of the Internet have a more positive sense of *online* community with friends and family. However, frequent Internet users have neither a higher nor a lower sense of overall community.
- The strengthening of community ties through more frequent contact on and offline means that community members can be more readily mobilized for aid.

⁶ A cautionary note: These are exploratory results based on what we can tell from cross-sectional survey data that has limited measures of the amount of contact with friends and relatives.

⁵ James Witte (Clemson University) led the data collection with Barry Wellman as co-investigator and Keith Hampton as research associate. Anabel Quan-Haase and Barry Wellman were principally responsible for data analysis.

International Users and Uses of the Internet

Taking advantage of Survey 2000's data from 178 countries, NetLab has also compared the users and uses of the Internet in North America with users in other developed (OECD) countries and in less-developed counties (for details, see Chen, Boase and Wellman 2002). In addition to the cautions noted above, the sample was further affected by the availability of the survey only in the English language. Nevertheless, this first comparative international study shows:

- The Internet is used in similar ways around the world. Throughout the world, frequent users tend to use the Internet in multiple ways – socially, instrumentally and recreationally – and to combine it with face-to-face and telephone contact.
- The users of the Internet around the world vary more than the uses of Internet. The profile of respondents outside North America is similar to that of North American Internet users a half-decade earlier. They tend to be male, well-educated, and younger adults. Where North American Internet use has become broadly based, international use is more restricted to elites and students (who are elites in training), especially in developing countries.
- North Americans usually have been online longer, use the Internet more
 frequently, and do more kinds of activities online. North America has continued
 to be the primate region of the Internet whose influence and activity outweighs
 the rest of the world combined.
- As in North America, experience counts around the world. The longer that people have been online, the more they use the Internet.

As with the case for out North American research, our global research suggests that the Internet is not a self-contained online world. Rather than operating at the expense of the "real" face-to-face world, it is a part of it, with people using all means of communication to connect with friends and relatives. The Internet is another means of communication, which is being integrated into the regular patterns of social life. Other NetLab research suggests that this integration of online and offline life is also true for "communities of practice" at work (Haythornthwaite and Wellman 1998; Koku, Nazer and Wellman 2001; Koku and Wellman 2003).

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⁷ James Witte (Clemson University) led the data collection with Barry Wellman as co-investigator and Keith Hampton as research associate. Jeffrey Boase, Wenhong Chen and Barry Wellman were primarily responsible for data analysis.

Catalans and the Internet

In 2002, the Open University of Catalonia surveyed (in person) approximately 1000 residents of this autonomous region of Spain. A major part of this study looked at the relationship of Internet use to social networks and computer use. The survey shows:

- Catalans' personal networks contain more friends and neighbors than they do kin. By contrast, North American networks are typically evenly balanced between kin and non-kin. With a median size of 21.8, these personal networks are slightly larger than those typically observed in North America. The number of kin, friends and neighbors are all higher in Catalonia.
- Catalan networks are more local than their North American counterparts. Nearly two-thirds (63.7percent) of Catalan network members live within the same municipality. These 13.5 local network members comprise parents, including those living in the same house (0.8), kin (4.5), friends (5.5) and neighbors (2.7).
- A higher percentage of friends than kin live in the same municipality despite the tendency of many adult Catalans to live with their parents. At the same time, kin are more likely than friends to live elsewhere in Spain or in a foreign country. The greater localism of Catalan friendship as compared to kinship suggests the better ability of the kinship system to withstand the strain of living in different localities. When network members move apart, active friendship ties are less apt to continue than kinship ties.
- Personal encounters are the predominant mode of communication, especially
 among the great majority of network members who live within the same
 municipality or elsewhere in Catalonia. Telephoning is of secondary importance.
 The Internet is hardly ever used except to communicate with those few friends
 who live in other countries.
- The closer together Catalans live, the more they communicate in person. The small distances within Catalonia keep most network members within short travel distance. Personal network contact with the rest of Spain is less intense; contact with the rest of the world is minimal.
- Although one-third of Catalans are on the Internet to some extent, few Catalans
 use the Internet to communicate with relatives or friends. Indeed, only a minority
 of Catalans who use the Internet and have relatives and friends living at an
 appreciable distance -- in another country use the Internet to communicate with
 them.
- Catalans put a premium on the multidimensional communication of face-to-face, high touch personal encounters. When this is not possible, they resort to the less rich medium of telephone contact. Those Catalans who are Internet users rarely use it to communicate with friends and kin, even when such network members live in foreign countries.

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⁸ Manuel Castells and Imma Tubella (Open University) led the entire study, with Barry Wellman doing analysis of this section in cooperation with Isabel Diaz de Isla.

- The interaction of physical proximity and face-to-face contact makes Catalonia a
 different place than North America where people stay home at night and drive,
 phone, or use the Internet to communicate. They are satisfied with their
 interpersonal lives, and if anything, some friends and many kin are clamoring for
 more personal encounters. The Internet is used more for acquiring information
 and making information than for communication with relatives and friends.
- Although some Internet users are more likely to feel dissatisfaction and psychological upset in their relationships, this should not be overemphasized. The majority report satisfaction rather than upsets.
- By and large, Internet users resemble other Catalans in their sociability. However, Internet users have larger networks outside of Catalonia than do non-users.
 Moreover, the coming of age of the "Internet Generation" suggests that the sociability of Internet users may come to be more widespread in Catalan society.

Catalan use of the Internet is quite different than the extensive American and Canadian use of the Internet to keep in touch with relatives and friends. North American network members are more dispersed than those in compact Catalonia. The North American mode of the Internet has been wrongly seen as a norm differing around the world.

Yet, Catalans have taken a different route to building social capital in a modern society than have North Americans. How do Catalans accomplish so many personal encounters where there is no custom of frequent visits with friends and relatives at home? Look to the streets: No wonder Catalan bars and cafes are so crowded and vibrant.

The Rise of Individualized Networking*

The research just summarized suggests that the Internet is not a self-contained world. Rather than operating at the expense of the "real" face-to-face world, it is an extension, with people using all means of communication to connect with friends and relatives. The Internet is another means of communication that is being integrated into the regular patterns of social life. Other NetLab research suggests that this integration of online and offline life is also true for communities of practice at work (Haythornthwaite and Wellman, 1998; Koku, Nazer and Wellman, 2001; Koku and Wellman, 2003).

The proliferation of the Internet is facilitating changes that have been developing for decades in the ways that people contact, interact, and obtain resources with each other. This new person-to-person connectivity has been afforded both by:

- Social changes birth control and liberalized divorce laws and dual-career families
- Land-use changes zoning separation of residential from commercial and work uses

* We used to call this phenomena "networked individualism" until we realized that having "individualism" as the noun wrongly emphasized disconnection. It is the switch from groups to networks that is important. This is not disconnection but another form of connection.

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 Technological changes - the proliferation of expressways and affordable air transportation (Wellman 2001b).

Communities and societies have been changing towards "individualized networks". In networked societies, boundaries are more permeable, interactions are with diverse others, linkages switch between multiple networks, and hierarchies are flatter and more recursive (Wellman, 1997, 1999a, 1999b; Castells, 2000). Hence, many people and organizations communicate with others in ways that ramify across group boundaries. Rather than relating to one group, they cycle through interactions with a variety of others, at work or in the community. Their work and community networks are diffuse, sparsely knit, with vague, overlapping, social and spatial boundaries.

Changes in the nature of computer-mediated communication both reflect and foster the development of networked individualism in networked societies. Internet and mobile phone connectivity is to persons and not to jacked-in telephones that ring in a fixed place for anyone in the room or house to pick up. The developing personalization, wireless portability, and ubiquitous connectivity of the Internet all facilitate individualized networking as the basis of community. Because connections are to people and not to places, the technology affords shifting of work and community ties from linking people-in-places to linking people at any place. Computer-supported communication will be everywhere, but it will be situated nowhere. It is I-alone that is reachable wherever I am: at a home, hotel, office, highway, or shopping center. The person has become the portal (Wellman 2000, 2001b).

This shift facilitates *personal communities* that supply the essentials of community separately to each individual: support, sociability, information, social identities, and a sense of belonging. The person, rather than the household or group, is the primary unit of connectivity. Just as 24/7/365 Internet computing means the high availability of people in specific places, the proliferation of mobile phones and wireless computing increasingly is coming to mean an even higher availability of people without regard to place. Supportive convoys travel ethereally with each person (Ling and Ytrri 2002; Katz 2002).

The technological development of computer networks and the societal flourishing of social networks are affording the rise of individualized networking in a positive feedback loop. Just as the flexibility of less-bounded, spatially dispersed, social networks creates demand for collaborative communication and information sharing, the rapid development of computer-communications networks nourishes societal transitions from group-based societies to network-based societies (Castells 1996, 2000; Wellman, 2002).

Networked societies are themselves changing in character. Until quite recently, transportation and communication has fostered place-to-place community, with expressways and airplanes speeding people from one location to another (without much regard to what is in between). Telephone and postal communication have been delivered to specific, fixed locations. At present, communication is taking over many of the functions of transportation for the exchange of messages. Communication itself is becoming more mobile, with mobile phones and wireless computers proliferating.

Each person is a switchboard, between ties and networks. People remain connected, but as individuals, rather than being rooted in the home bases of work unit and household. Each person operates a separate personal community network, and switches rapidly among multiple sub-networks. In effect, the Internet and other new communication technology are helping each individual to personalize their own community. This is neither a *prima facie* loss nor gain in community, but rather a complex, fundamental transformation in the nature of community.

This move towards a networked society creates interesting possibilities for governments more used to dealing with hierarchies of local solidarities. No longer are communities local, all-encompassing, or stable. Instead, people have multiple, shifting sets of predominately long distance ties. The local becomes only one kind of "special interest". Moreover, social mobilization is more apt to develop over non-territorial issues, be it shared affect ('ecology", "Islam") or shared material interests ("globalization", perhaps a renascent class struggle).

To cope with and serve such a networked society, there will be a need for new, fluid forms of government and democracy. To date, such needs are scarcely met, online or offline. What is the means by which government bureaucracies can deal with a society fuzzily composed of computer supported social networks?

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