

**A Question of Empowerment: Information Technology
and Civic Engagement in New Haven, Connecticut**

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ABSTRACT

Extravagant claims have been made for the capacity of IT (information technology) to empower citizens and to enhance the capacity of civic organizations. This study of IT use by organizations and agencies in New Haven, Connecticut, 1998-2004, tests these claims, finding that the use of IT by nonprofits is selective, tending to serve agencies patronized by community elites rather than populations in need. In addition, the study finds that single interest groups are far more effective in using IT than more diverse civic and neighborhood groups.

Since the advent of the internet, techno-romantic visionaries have proclaimed the capacity of information and communications technologies to empower citizens. “The technology that makes virtual communities possible,” cyber-guru Howard Rheingold writes, “has the potential to bring enormous leverage to ordinary citizens at relatively little cost – intellectual leverage, social leverage, commercial leverage, and most important, political leverage” (Rheingold 1993; see also Rheingold 2002).

In an era in which, by all measures, civic engagement and political participation are declining this is a bold claim (Putnam, 2000). While anecdotes may cite instances of technological empowerment, only case studies focused on the impact of technology on public life can address the question of whether information technology (IT) can actually vitalize communities and mobilize social movements, enhance citizens efforts to join with others who share their views, and increased their ability to access and disseminate information within communities.

This essay engages these issues by examining the impact of IT on New Haven, Connecticut over a five year period (1998-2004) through two surveys of technology utilization by public and private agencies and through participant-observer accounts of my own efforts to use IT for neighborhood and community mobilization.

The surveys examine two aspects of technology utilization: *access* (the number and type of agencies with web and e-mail capacity) and *linkage* (the ways in which agencies were linked to one another through their webpages). My operating hypothesis is that the major criterion of empowerment consists of broadly decentralized access to community leaders, services, and other resources. One measure of decentralized access is internet links between community agencies and service providers, enabling citizens to move easily from one internet resource to another. In contrast ,the concentration of links in elite-serving agencies -- colleges and universities, hospitals, cultural organizations, foundations, government -- serves to to affirm the power of traditional elites and elite institutions by limiting the range of ways in which citizens can access information and services they need, as well as curtailing their ability to create effective social and political counter cultures.

New Haven Public Culture: Egalitarian or Elitist?

The United States has a variety of public cultures (Hall 1992, 135-206). Those west of the Mississippi tend to be more egalitarian and democratic, relying on government rather than the private sector to carry out public tasks. Governments and corporation in these areas have made substantial and well-publicized investments in bandwidth and connectivity in order to maximize access to technology by public and private agencies and citizens groups (see, for example, Rheingold, 1996).

The Northeast, in contrast, has historically entrusted important public responsibilities of policy making, governance, and service provision to nonprofit organizations. We know little, however, about how the region's civil privatist public cultures have deployed these technologies and their impact on public life.

The question of whether New Haven's public culture is egalitarian and pluralistic or elitist has been extensively debated. Robert Dahl's classic study, *Who Governs? Democracy and Power in an American City* (1961) argued that political, economic, and social power in New Haven, once concentrated in a unitary elite, had become distributed through a plurality of often competing elites. G. William Domhoff's response to Dahl, *Who Really Rules? New Haven and Community Power Reexamined* (1978) showed the concentration of economic and political power in the hands of elites (see also Miller, 1963; Wolfinger, 1973; Humphrey, 1992). Other studies have explored New Haven's one-party government and the domination of its economic life by a large private university which, along with three other nonprofits, employs more people than all the other enterprises in the city combined (Hall, 1999, 2002; Rae, 2003). Journalists and scholars have also called attention to the fact that -- despite the wealth of a world-class institution like Yale and its constellation of libraries, museums, and hospitals -- New Haven is one of the poorest cities of its size in the United States: a city where nearly a quarter of its general population and half of its children live below the poverty line, where the infant mortality rate is a third higher than the state average, which has lowest rate of owner-occupied housing in the state, and the state's highest school drop out rate (for New Haven social indicators, see Data Haven and U.S. Census Bureau Quick Facts).

Whether or not they agree on the extent to which power in New Haven is concentrated in the hands of elites, virtually all commentators acknowledge the city's its historic dependence on the private sectors to accomplish public tasks. As political scientist Douglas W. Rae notes, for most of the twentieth century, "New Haven did not rely on government for the decisions that mattered most." Choices made by "nongovernment actors, businessmen, family heads, civic leaders, churchmen, schoolwomen, and customers in distant places were all implicitly part of the city's governance, and the role of government could remain modest without jeopardizing the interests of the city and its people" (Rae, 2003, 185). Even when, in the decades following the second World War, New Haven became the model for liberal urban renewal programs, its vast federally-funded initiatives were carried out through nonprofit agencies guided by private advisory groups.

New Haven at the turn of the nineteenth century depended on its business corporations and voluntary agencies to get the public's work done. Although the city's thriving mixed industrial-commercial economy had disappeared by the 1950s, it remained dependent depend on the private sector as nonprofit enterprises became New Haven's most powerful economic actors. Unlike the voluntary agencies of the pre-World War II period, which were donatively financed mutual benefit/membership organizations run by volunteers, the postwar nonprofits were government-funded service providers organizations run by professionals, many of whom were non-residents (Hall, 1999, 211-248). These were unlikely to serve as vehicles for forging bonds of community and shared identity or mobilizing civic engagement (Putnam, 1998; Skocpol, 2003).

In 1950s and 1960s, when the city's white middle class fled to the suburbs to avoid crime, rising taxes, and declining municipal services, management and leadership of New Haven's nonprofits shifted into the hands of non-residents. This trend is reflected in the physical location of agencies: today, only 23% of the city's nonprofits are located the five neighborhoods with 50% or more black population (presumably the areas most in need of the services they provide); 40% are located in the five neighborhoods with the smallest minority population (ranging from

.05 to 28%) (Hall, 1998, 229-239). Control of community-serving agencies by suburban-dwelling affluent whites is hardly a formula for empowerment.

The contemporary fact of elite control of the city's nonprofits was nothing new: it reinforced older patterns of hierarchy and centralization. Fearing the rising political power of its immigrant and largely Roman Catholic working class, the New Haven's nineteenth century Protestant elite had pioneered measures to assure the continuing power of the wealthy, learned, and respectable. Leaders were quick to embrace charity organization, the movement that centralized control of poor relief -- ostensibly to eliminate sentimentality, duplication, waste, and fraud by placing charity in the hands of disinterested experts. New Haven was among the first cities in the Northeast to organize a Community Chest (a successor to charity organization) and to establish a community foundation, which helped to centralize administration of charitable endowments (King, 1928; Tran, 1997). In the 1920s, a newly organized Council of Social Agencies took over the coordinating role of the Community Chest, which was in turn replaced by the United Fund -- later United Way -- in the 1950s (Council of Social Agencies, 1924, 1932). After the turn of the nineteenth century, public policy in the city was guided by voluntary groups which brought together academic experts, business executives, and professionals.

Thanks to the generosity of its initial donors, New Haven's community foundation was among the largest in the United States (today it is the twelfth largest). Its size and the domination of its governing boards by the city's elite assured it a preeminent role both as funder and policymaker for the city's other nonprofits. Unlike midwestern community foundations, where members of governing boards have often been *ex officio* public officials or appointed by elected officials or government bodies, the distribution committee of the Community Foundation for Greater New Haven (CFGNH) has always been self-perpetuating, giving the foundation a more elite character than its counterparts in other places (on this, see Hall, 1989 and Magat, 1989).

The continuing influence of the community foundation has been due in part to the fact that it has had no rivals for preeminence. None of the fortunes made in nineteenth century New Haven ended up being devoted to philanthropy and, when they were, it was on a relatively small scale and for specialized purposes. Today, only four major grant makers are active in the city: the

community foundation (founded in 1928, with current assets of \$202 million); the William Caspar Graustein Memorial Fund (founded in 1994, with \$94.7 million in current assets); and the Minneapolis-based Carolyn Foundation (founded in 1964, with \$34.8 million in current assets); the Annie E. Casey Foundation, established in 1996, though a major player in the city, devotes only a small portion of its \$3.1 billion in assets to New Haven (Guidestar, 2005). Of all of New Haven's nonprofit institutions, only the community foundations had the discretionary resources to significantly empower – or disempower – other organizations in the city.

Yale University, though not a grant maker, exercises a powerful influence in New Haven's nonprofit community and in city government. It is the city's largest employer, economic enterprise, real estate owner, and tax payer. Yale administrators, faculty, and alumni dominate the boards and staffs of the city's nonprofits. New Haven's celebrated era of urban renewal in the 1960s was led by former Yale public relations chief, Mayor Richard Lee, and abetted by university-based social planners (Wolfinger 1974). Since the 1990s, as the university has endeavored to improve its tattered community relations, Yale has taken on a leading role in administrators took on leading roles both in the city's nonprofits and its public agencies.

While, as individuals, the leaders of New Haven's foundations and major nonprofit service providers undoubtedly represent a variety of viewpoints, the city's institutional architecture is highly centralized and hierarchical. Without major commercial and manufacturing enterprises to counterbalance the concentrated power and resources of its large nonprofits and without a viable two party system to advance political alternatives, New Haven's citizens have few opportunities to influence public decision making.

Technology, Empowerment, and Institutional Ambivalence

New Haven's major nonprofits have been ambivalent about supporting increased access to IT. On the one hand, the city's leaders may have been well aware of the hazards of disseminating technologies that might disrupt their secure hold on public affairs. On the other, imperatives of efficiency, effectiveness, and accountability originating in the state and federal agencies that had become the major sources of revenue for the city's public and private agencies required broader use of these technologies. Because by 1990, 80% of municipal revenues came

from the state and federal governments (Hall, 2002, 287) and a third of Yale's revenues came from federal grants and contracts (Yale University, 2004), these expectations could not be ignored. Inevitably, institutional anxieties about citizen empowerment were counterbalanced by the large nonprofits' own administrative imperatives -- including the recognition that grantee accountability required greater technological capacity.

The stance of the community foundation on technology utilization is representative of the elite nonprofits' ambivalence regarding IT.

In 1998, I interviewed Nancy Hadley, president of the CFGNH, about how the foundations expected to respond to the challenges posed by welfare reform. In posing the question, I touched on the role of technology in the city's nonprofit community. My linking welfare reform and technology was no accident: as Congress sought to "end welfare as we know it," it shifted the burdens of policy making and implementation to state and local agencies; this shift highlighted technologies that could enhance the ability of these groups to address public needs by improving their access to information and to one another (Tuhus, 1997).

When I asked Ms. Hadley whether the foundation intended to invest any of its resources in building area nonprofits' information and communications technology capacities, she emphatically dismissed the notion. As she would write in the Foundation's 1998 annual report,

The world of philanthropy has changed dramatically in the past five years.

The emergence of the Internet now provides a means for "electronic giving," the creation of e-charities, and other ways of philanthropic giving. Yet, while the Internet connects people to information and to each other, it does not contribute to building community because it cannot bring people face-to-face. The Community Foundation is unique in its potential to bring the community's people together in relationships of reciprocity – face-to-face, child-to-adult, old-to-young – this is the foundation of community building (Community Foundation, 1998, 3).

Quite clearly, the foundation's vision of "community building" did not include the "virtual communities" that were already transforming urban life elsewhere in the United States (Rheingold, 1996). On the other hand, the foundation was not completely resistant to IT. By 1998, it had a sophisticated website that served, through its links, as a major point of access to other New Haven organizations. But it did not – as far as the annual reports during Hadley's tenure reveal – provide specific support for internet capacity or technological literacy in the agencies to which it made grants.

In 2000, former city economic development administrator and U.S. Assistant Secretary of Commerce William W. Ginsburg succeeded Nancy Hadley as head of the foundation. Ginsburg was not hostile to information technology, but neither did he regard investing in the communications capacity of nonprofits to be a high priority. Under his leadership, the foundation has launched no specific initiatives to build information technology capacity in the community and its organizations. On the other hand, it has, according to grantees, been willing to underwrite technology enhancement as part of its support for local agencies. For some inner city social service agencies, this support has been crucial to efforts to acquire state of the art equipment and training.

As the foundation became more comfortable with IT, its website changed. In 1998, the CFGNH site was one of the two major internet portals for community organizations, featuring dozens of links to other agencies and programs. It was, along with the website maintained by the New Haven Free Public Library, the major point of access for citizens seeking on-line access to local nonprofits and public agencies. By 2004, the foundation's webpage had ceased to serve this function. While it contained a wealth of information about the foundation and its programs, it no longer carried links to other agencies (Community Foundation, 2004a, 2004b).

Other grantmakers have tended to follow the CFGNF's lead. In the mid-1990s, New Haven philanthropist William C. Graustein established the William Caspar Graustein Memorial Fund. Graustein had a deep commitment to the vitality of New Haven's nonprofit organizations and, to that end, had long supported a variety of efforts to build institutional capacity. In 1998, his foundation underwrote – through the United Way – the production of *A Directory of*

Technical Assistance Resources for Nonprofit and Grassroots Groups in Greater New Haven.

The publication gives a good sense both of IT utilization in the city's nonprofits community and the extent to which building IT capacity was a priority for the nonprofits community. Of the 111 government agencies, nonprofits, and businesses listed in the 140 page booklet 38 (34%) were accessible via the internet -- the majority of which were advocacy and arts organizations or state agencies. Of the 111 technical assistance resources, only 7 (6%) listed "computer and media services" among the types of technical assistance offered. Significantly, even the agency that produced the volume -- United Way of Greater New Haven -- had neither a website nor an e-mail address. Though the Graustein Fund has not made technology a programmatic priority, its website in 2004 featured links to fourteen of its grantees -- all human services and child advocacy organizations.

The Carolyn Foundation, a family foundation based in Minnesota but dividing its largesse between the Twin Cities and New Haven, focuses its grant making on youth and environmental issues (Carolyn Foundation, 2005). While its program guidelines highlight building organizational and community capacities, they give no indication that technology is one of its priorities. Of more than one hundred grants made between 2002 and 2004, only one supported a technology-related project in New Haven -- a library and media center (including computers) for one of the city's magnet schools. While the foundation maintains a website, only in 2004 did it begin providing links to its grantees (a fair indication of its low estimate of the significance of IT as a community resource). Carolyn's lack of interest in IT is probably a product of its board, members of which occupy leading roles on the boards of New Haven's technology-shy elite nonprofits.

Although based in Baltimore, Maryland, the \$3.1 billion Annie E. Casey Foundation (AECF) has become an important presence in New Haven's philanthropic community through its support of community organizations via its New Haven Direct Grants Services Program and through Casey Family Services' support of youth-serving programs like Leadership, Education, and Athletics in Partnership (LEAP), the city's Americorps initiative. Among the efforts supported by AECF is the Technology Cascade and Training Program of Adaptive Learning, Inc., which makes equipment and training available to grassroots organizations (Tablos, 2004).

Because AECF has made a major institutional commitment to IT as an aspect of its own administrative system, its leaders recognize the importance of technology to the organizations it funds (Schwartz 2005). Accordingly -- to a far greater extent than any New Haven-based foundation --, it supports technological literacy and IT development in its grantees (Wilhelm, Carmen, & Reynolds, 2005). The high priority AECF assigns IT access and education contrasts sharply with the half-hearted technology commitment of New Haven-based funders. This may reflect the fact that, unlike the New Haven foundations, Casey, as a national institution, is more comfortable with IT's the empowering potential.

Given its dependence on the private sector, It is hardly surprising to find that city government's reluctant embrace of IT has mirrored that of New Haven's major nonprofits. At a time when cities all over the country had made agencies, departments, and officials available on-line -- and when Connecticut counted among the most wired states in the country (Say Goodbye, 2000) -- New Haven's city government remained almost entirely off-line. In 1998, the only city agency on-line was the New Haven Free Library -- which, to its credit, maintained a fairly sophisticated website that served as a portal to many nonprofit and public agencies.

By 2004, the situation had improved. City government maintains its own website, although connectivity varies by department. Certain departments -- Elderly Services, the Board of Education, the Housing Authority, and Public Works -- maintain informative webpages with e-mail contact information and links to state and nonprofit agencies. Some departments, notably Economic Development and City Plan, use their webpages to make available key documents relating to public hearings. Most city departments, however, have minimal web presence and remain inaccessible by e-mail.

In contrast to the city's other major elite institutions, Yale University embraced the new technology early and with enthusiasm. By the mid-1980s, PCs had largely replaced typewriters in most schools, departments, and programs and the university encouraged the conversion by creating a units which sold hardware and software at well below cost and which provided first-rate technical assistance on repair services to students, faculty, and staff. By the early 1990s, most members of the university community were on-line through modems -- and, as soon as the

technology for high-speed connections became available, the university installed them. The advent of competitively priced commercial high-speed internet service in January 2000 made it convenient for internet users outside the university to access Yale's library catalogues and other rich on-line resources. Interestingly, few of the university's thousands of webpages offer links to local agencies -- or, indeed, to non-university websites of any kind. Thus, despite its leadership as an IT adapter, Yale's use of technology continues to reflect the elite's uncomfortable relationship to the community.

Who Has Access and Connectivity in New Haven?

To assess the impact of IT on New Haven's public culture, this study asks four questions:

- What kinds of organizations have Internet access?
- As a measure of eliteness and egalitarianism, to what extent are community organizations linked directly to one another through their websites?
- Has the use of and access to the new technology changed over the past five years, as connectivity has become more universal and the technology more user friendly?
- How have connectivity and linkage changed over the past five years?

The first question is easily, if laboriously answered, by running the names of community organizations through search engines. For the purposes of this study, two lists have been used: the social services agencies, public and private, indexed in *Infoline*, a social services directory published by the state United Way; and the SNET Yellow Pages listings of advocacy, arts, community, economic development, educational, health care, social welfare, and other service-provider organizations. The hypothesis to be tested was that the wide use of the new technologies, especially by organizations providing services to the "have-nots" in the community, would point to an egalitarian and empowering deployment of the new technology.

The second measure of eliteness versus egalitarian empowerment addresses links between organizational websites. A large number of links between local organizations (horizontal linkages) are taken as a measure of empowerment, because they enable users to locate community-level organizations without going through official intermediaries like city government or the community foundation. Links can be interpreted as indicators of how organizations define themselves as members of virtual communities: to the extent that virtual communities are defined by elite portals, they may be said to replicate the hierarchical and centralized characteristics of the underlying institutional culture; to the extent that organizations define their own communities through the links they feature, they may be seen to be empowering.

Figure 1: Percent New Haven agencies with internet access (e-mail and/or web), 1998-2004.

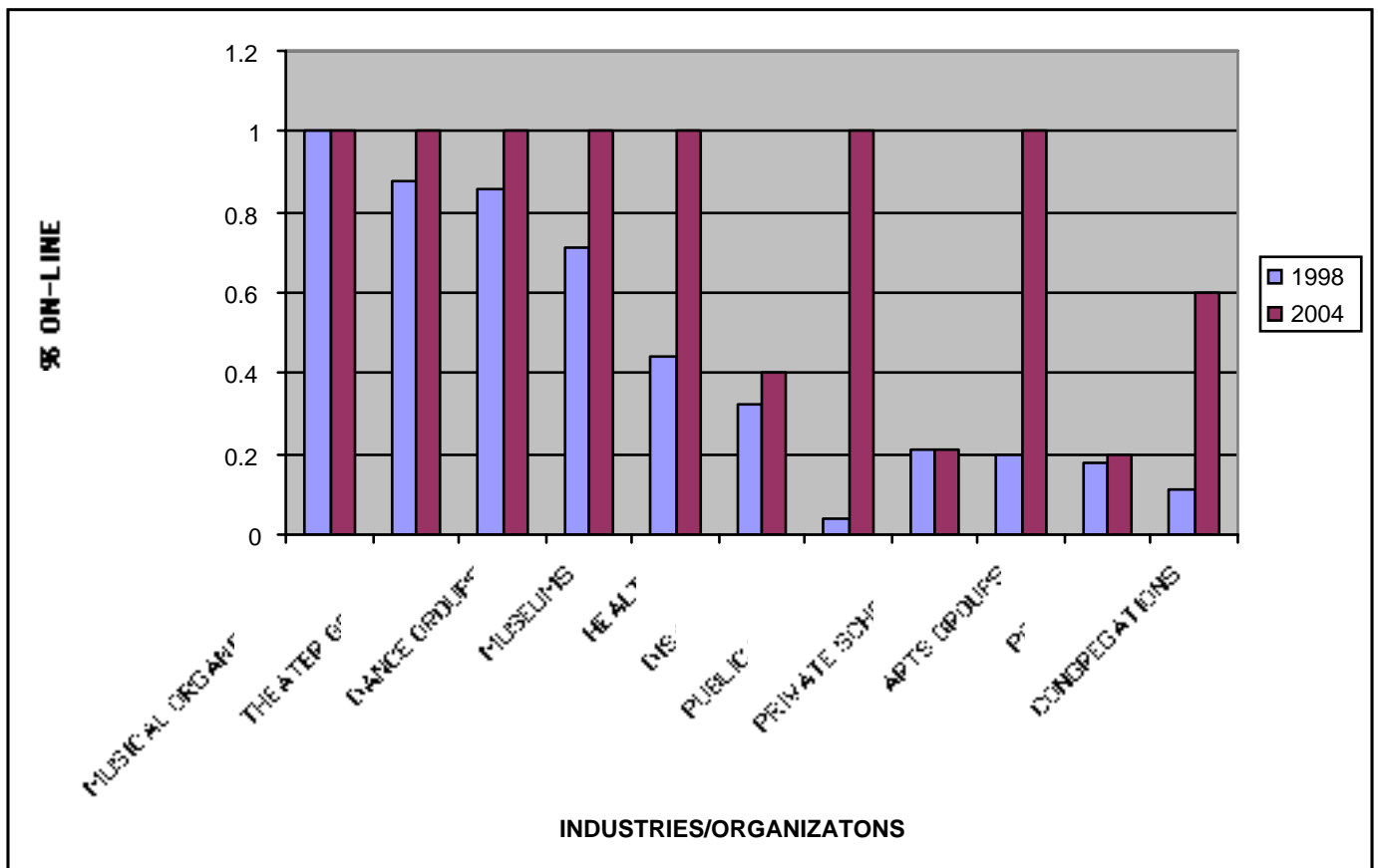


Figure 1 shows the percentage of agencies in key areas of activity with internet access in 1998 and 2004. In 1998, the organizations with access to IT were those serving the elite: arts and culture organizations, foundations, and colleges and universities. Between seventy and one hundred percent of organizations in these industries had e-mail and web capacity. In sharp contrast, few of the agencies – between 2% and 20% -- serving the providing human services had access to IT.

By 2004, these inegalitarian patterns had changed significantly, if selectively. Certainly the most important change was the establishment of Infoline as an on-line resource. Infoline is a statewide directory of human services maintained by United Way of Connecticut. As of 1998 it was a multi-volume hard copy publication intended as a reference work for social service professionals -- although copies could be found in the reference collections of public libraries. In 2000, United Way put Infoline on the web. It is a hyperlinked resource, through which users can directly access service providers. While the fact that Infoline is produced by United Way -- an elite organization -- may be seen to replicate older institutional hierarchies, its inclusiveness and hyperlink features, which facilitate direct contacts between users and agencies are significantly empowering. Most importantly, unlike the hard copy version, which had very limited circulation, the on-line version of Infoline is available to anyone with access to a computer.

Elite serving agencies -- arts groups, musical organizations, dance groups, and museums --, already well connected in 1998, were all on-line by 2004. While the major health care organizations -- Yale-New Haven and St. Raphael hospitals -- were all on---line in 1998, the most important inner city clinic, the Hill Health Center, was not. By 2004, all were connected.

While community-serving organizations were better served by IT in 2004 than in 1998, the improvement was selective. Of the city's 55 public schools, only two were on-line in 1998. By 2004, all were on-line -- thanks to major assistance from the state and from corporations (Beach, 2002; Kita, 2002). Significantly more religious congregations were on-line by 2004. The congregations using IT are overwhelmingly Protestant bodies, most of which host websites and can be contacted by e-mail. In addition, all are accessible through denominational websites,

which host hyperlinked state and locality congregational directories. While evangelical congregations are generally unwired, since 1998 a number of the larger congregations -- aspiring mega-churches -- have come on-line

The fact that religious congregations are not better represented on-line may be an artifact of New Haven's religious demography. The majority of congregations in the city are African-American and Hispanic bodies, many of them relatively small -- so it is hardly surprising that they are not on-line (most do not have telephones either).

Theological orientation may play a role in the relatively low IT utilization by religious groups (Berlinger & Te'eni, 1999). Although sufficiently prosperous to support web and e-mail capacity, none of New Haven's oldest and most established black congregations -- Dixwell Avenue UCC, St. Luke's Episcopal. and Varick AME -- are on-line. Similarly, although Roman Catholicism is the dominant religious denomination in New Haven in terms of numbers of adherents and congregations, only one --Yale's Catholic religious center -- hosts a website or uses e-mail as a point of contact. (All, however are listed on the diocesan website, which provides snailmail addresses, phone numbers, and driving directions).

The reasons for Catholic resistance to congregational empowerment are self-evident, in view of the on-going power struggle between the hierarchy and laity in the American church. Indeed view of this, it is hardly surprising that the single on-line Catholic congregation is also the city's most theologically liberal.

The low connectivity of private schools is due to the fact that most are Catholic institutions and, in line with the parishes, eschew IT. All of the city's secular private schools are on-line.

The reasons for resistance to adopting IT by the black middle class congregations may be rooted in theologically-mediated preferences favoring personal over institutional charity. Historically, African American philanthropy has emphasized giving and serving to family, neighbors, and needy strangers over more formally institutionalized or abstract forms of charity

(Hall-Russell & Kasberg, 1997). This view is borne out by Rachel Kleinfeld's 1999 case study of Varick A.M.E., for example, describes congregational resistance to a new pastors' efforts to initiate an ambitious series of faith-based social service and outreach initiatives. A comprehensive study New Haven's African American congregations found that, rather than providing services, the primary role of the black church involved linking parishioners to the broader secular network of service agencies. The study found that "social service agencies often relied upon local churches to provide assistance to clients that they can not legally or procedurally provide" -- usually such personal services as helping with heating bills, visiting shut-ins, and other "small acts of charity and kindness" (Chang, Williams, Griffith, & Young, 1998, 347). Technology is clearly unlikely to fit comfortably within such frameworks of personal charity.

Overall, human services agencies continue to be underrepresented as users of IT. Organizing serving the disabled, the elderly, and the poor have barely increased their connectivity since 1998. Notable exceptions are organizations serving the homeless. Columbus House, the city's major shelter, hosts a website which is a model of accessibility for clients seeking health, housing, and social services and rich with links to state, municipal, and nonprofit agencies and programs. Christian Community Action, an ecumenical faith-based agency offering a variety of shelter and emergency services has a sophisticated website with a full range of links. Life Haven, an emergency shelter for women with children is similarly well connected.

Why are the homeless agencies so fully wired when so few other social services agencies are? A number of factors may explain this seeming anomaly. First, unlike most of New Haven's social service agencies, progressive civic activists are a notable presence on the boards of directors of organizations serving the homeless. It is not surprising to find the activists who so ably use IT to promote progressive political crusades (i.e., the Howard Dean campaign and opposition to the Iraq War) should be willing to encourage its use by agencies on whose boards they serve.

Another factor is the changing demography of homelessness (Mattison, Benedict, & Twobears, 2000). Today's homeless are a surprisingly heterogeneous group: Many are high

school and college graduates, fallen on hard times because of unemployment, mental illness, or substance abuse problems. Many spend their days in the city's public library, using its on-line resources. Many have their own e-mail addresses. It seems likely that shelter staffs, aware of this, have endeavored to turn their agencies' websites into resources for clients seeking health care, jobs, housing, and other services (Villers 2003)..

The IT capacity of Christian Community Action (CCA) offers a representative profile of how service providers are acquiring IT capacity. CCA originated in the late 1960s in a series of suburban "living room dialogues" between members of socially concerned Catholic and Protestant congregations concerned about inner city problems. The present composition of its board suggests that it continues to maintain its base of suburban middle class executives and professionals -- people familiar with IT in the home and workplace. According to one CCA board member, the agency went on-line through the efforts of a director who was an executive in one of the nation's largest insurance companies. He encouraged CCA to adopt IT both for its administrative systems and for program management. As the agency's director of development, he raised money from foundations and corporations to purchase equipment, train staff, and, beginning in 2000, to open a computer learning center for clients. Another supportive board member, a Yale-trained inner city pastor, operates a "computer ministry," salvaging hardware and software for children in her congregation and conducting classes to teach neighborhood children computer skills. A key figure in the wiring of Life Haven, another homeless shelter, was a staff member who belonged to this congregation.

Although the overall trend in IT utilization by New Haven agencies is positive, with connectivity spreading to more industries as clients and practitioners acquire technological literacy and access to the internet, the most needy populations remain underserved, despite the efforts of foundations like Annie E. Casey and corporations like SBC -- the region's largest telecommunications firm -- to underwrite nonprofits' efforts to build technological capacity.

Is connectivity necessarily empowering? My survey of linkage between websites and webpages addresses this question. As noted, the survey views direct interagency links (horizontality) as indicators of empowerment and vertical links, which mediate interagency connections through elite institutions, as indicators of hierarchy.

Figure 2: Number of webpage links between New Haven's nonprofit agencies, 1998-2004.

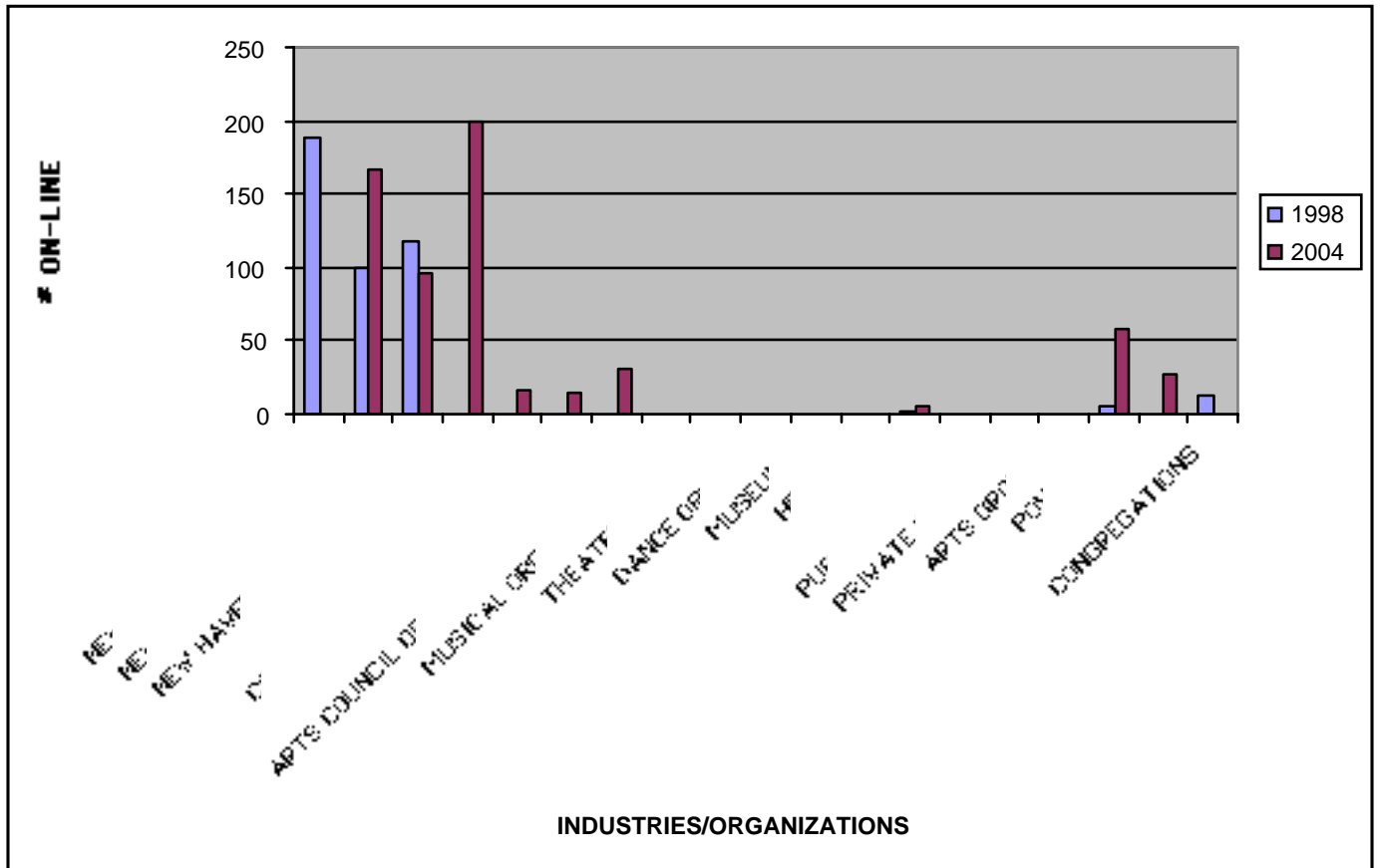


Figure 2 tracks the number of links among New Haven nonprofits possessing IT capacity. In 1998, as the figure shows, there were few if any horizontal links among community-serving organizations, but an extraordinary number of vertical ties from elite to community organizations: the city (via the public library website and New Haven On-Line) and the community foundation.

While Yale University and its affiliated hospital had an extraordinary number of websites and pages, almost none were linked to resources outside the Yale complex. This suggests that Yale's IT architecture mirrored its physical architecture: turned away from the city and built around inwardly-looking quadrangles (Pinnell, 1999). "By the late nineteenth century," writes architectural historian Vincent Scully, "Yale's campus had become consciously elite, separate from the town, a special community whose unique qualities were proclaimed by its monumental

portals. . . (Scully, Lynn, Vogt, & Goldberger, 2004, 19). Though only a single program, the Yale Macintosh Users Group (Directory of Technical Assistance Resources, 1998, 117), offered IT training to city residents, the ubiquity of computers in university offices undoubtedly helped to spread computer literacy to employees who, in turn, were likely to use IT at home and to promote its use in community organizations.

The 2004 linkage survey shows significant shifts. The community foundation no longer served as a portal to the city's nonprofits community. This task had been assumed by Infoline and the two city-run websites, New Haven On-Line and the Public Library pages. The arts and culture organizations and the private schools, all of which were on line, were not linked to one another (all links were through the Arts Council and city-run sites), perhaps reflecting their competitiveness. Agencies serving the poor, which were conspicuously unconnected in 1998, had begun to form a cyber community, with the sites for the Community Action Agency, Christian Community Action, and antipoverty and homeless groups linked to one another. By 2004, residents in need could use search engines to directly access agencies and programs serving their needs. In the past, these would have been in accessible, embedded in the websites of elite organizations like the community foundation.

Accompanying increased IT utilization by community serving agencies and link architecture enhancing community access to organizations and programs serving community needs has been a notable spread of computer literacy and ownership of the necessary hardware. While there is no survey data offering insights into this trend, the anecdotal evidence is persuasive.

A 1998 interview with a clergywoman who, as part of her parish ministry, had endeavored to make IT available to her inner-city neighborhood, suggested why this might be so. This clergywoman had spent the past five years in what she called a computer “gleaning ministry” as part of her pastoral commitment, soliciting gifts of obsolete computers from local families and businesses, which she rehabilitated and give to members of her congregation – first to the college-bound, next to high school students, and finally, when enough equipment was available, to families in the community.

About a month after giving a computer to a family (along with basic training in using it), she asked how they were getting along with it. They replied that they hadn't yet set it up. On asking why not, she was told that the family had no table suitable to put it on – and no grounded outlets into which it could be plugged. As to internet access, they pointed out that they – like most families in the neighborhood – didn't have a telephone.

This anecdote belies the common assumption that the “digital divide” is primarily due to technological illiteracy and lack of equipment – pointing to the more fundamental and concrete characteristics of urban poverty which deprive citizens of access to the utilities infrastructure necessary for using and accessing the new technology. National census data indicate that: 31% of all families on food stamps have no telephones; 5% of households on state public assistance lack telephones; 28% of households dependent on federal welfare lack telephones; 44% of households completely dependent on public assistance lack telephones; 40% of Americans living in hotel rooms and boarding houses lack telephones; 50% households headed by women with children living at or below the poverty line lack telephones (McDermott, 2001, 3-4).

According to the city's own Board of Education, New Haven is home to 130,474 residents, of whom 49% are Caucasian, 35% African-Americans and 13.2% Hispanic. New Haven's poverty rate is three times that of the statewide rate, and one-third of all families feature single mothers. The New Haven Public School system serves 19,385 students grades K-12. The district has 26 elementary schools, seven middle schools, seven transitional centers, and seven high schools (including five alternative high schools). The percentage of 4th, 6th, and 8th grade students who met the Connecticut Mastery Test goals for reading, writing and mathematics is 9.2%, 5.6% and 6.1%, respectively. The annual drop-out rate for grades 9-12 is 9.7%, as compared to 3.9% statewide. Rates for juvenile crime are high, with 2,055 per 100,000 youth being arrested in 1995. This figure is 306% higher than the state average. While the city does have some after school programs and mental health services to address these problems, they are limited in number and cannot meet the need for services (“Safe Schools/Healthy Students, 2001).

21.3% of the city's households live below the poverty line (compared to 6.6% statewide). *Per Capita* income is half the state average. Given the high number of New Haven residents living in poverty and dependent on public assistance, it seems likely that the family in the pastors' tale was typical of the inner city population. Even with computer literacy and equipment, it appeared that IT's impact was bound to be limited for most poor New Haven residents.

A recent follow-up interview with the clergywoman conducting the computer ministry suggests that the situation may be less bleak than it appeared to be in 1998. She described a family in her congregation that recently proudly presented her with a beautiful computer-crafted greeting card. This family had initially been unenthusiastic about the computer she had given them and had complained about the difficulties of using it. But, she said, a combination of influences had brought about a change of attitude. The children, initially exposed to computers in school, became enthusiastic about them in the computer camp run by her congregation. The children's interests led the parents to participate in the computer learning center program operated by Christian Community Action. Eventually, this combination of influences made computer literacy a family affair.

The pastor speculated that increasing number of venues in which New Haven's inner city residents were exposed to IT, were offered opportunities to receive training, and could obtain hardware, software, and connectivity, might well make the technology empowering -- not only for individuals, but for the community as a whole -- in ways we hadn't seen before.

This community level view suggests that efforts by corporations, foundations, the state, and the city's school system to promote computer literacy, ownership, and connectivity are having a positive impact. As early as 2000, an A.C. Nielsen survey, reported on Forbes.com, showed 53% of Hartford and New Haven, two of the nation's poorest cities, to be on-line -- and rated sixteenth nationally in terms of internet penetration ("Say Goodbye to the Geographic Divide," 2000). The level of penetration has undoubtedly increased dramatically, as the region's major telephone company, SBC, and cable monopoly, Comcast, and a host of internet service providers that operate through the lines of these big companies, have made significant

commitments to putting city homes on-line (Turmelle, 2000a, 2000b). Competition has, inevitably, lowered the cost of connectivity.

In addition to reaching the young through school IT programs, nonprofits like LEAP, Concepts for Adaptive Learning, and Empower New Haven (operated by the Community Action Agency), are targeting parents for computer education, recognizing not only the extent to which parental involvement enhances student learning, but also the importance of computer literacy in making inner city residents more employable (Missakian, 2000; "No Parent Should Be Left Behind," 2003; Taber, 2004). These efforts have not been without critics. Initially, in the flush of enthusiasm accompanying abundant funding and high expectations for the possibilities of the technology, students were given computers -- but little was invested in training teachers to use them. Once officials recognized the problem, they acted quickly to remedy it. By 2004, press releases from IT-oriented nonprofits were proclaiming "a home without a PC does not compute," as they sought to publicize their efforts.

While evidence for the increasing availability of hardware and connectivity for inner city residents is undeniable -- though anecdotal --, it remains to be seen whether these positive trends are empowering. By the measures used we assess civic vitality, they are not: voter registration and turn out remain unaffected; no significant challenges to the city's one-party government have been mounted; there is no surge in the establishment of local blogs and websites offering alternatives to New Haven's monopoly media. The concluding section of this study offers a participant-observer's perspective on the ways in which IT have impacted New Haven's public life and the dynamics that have limited its empowering capacity.

Technology and "Grassroots" Organizations -- A View from the Trenches

Over the past five years, a remarkable number of single-issue groups have sprung up around the city, mobilizing to oppose a proposed regional mall, to protest polluting power plants, to demonstrate against the demolition of historic buildings, and to address a variety of other community issues. In association with these, the Green Party -- which often allies itself with such causes -- experienced a revival: in 2000, it ran an energetic local campaign for presidential

candidate Ralph Nader and elected two candidates to the city's board of aldermen (displacing the Republicans as the official minority party).

Membership in these groups is heterogeneous, including students, university faculty, young professionals, and small business people who grew up in the activist 1960s and who are comfortable with the new technology. Technological literacy, connectivity, and civic commitment have, with varying degrees of success, enabled these citizens to challenge large institutions – city and state governments and Yale – and to leverage extensive media coverage of their activities.

Is the emergence of these technologically adept groups an indicator of empowerment? Is it genuine community mobilization -- or selective empowerment special interest groups? In a 1999 essay on the "dark side of civic engagement," political scientist Morris Fiorina, assessing a land use controversy in his home town of Concord, Massachusetts, wondered whether citizen activism illustrated "grassroots democracy: concerned citizens [who] actively participated in the affairs of their community" or an illustration of the opposite, in which "a few 'true believers' were able to hijack the democratic process" (Fiorina, 1999, 402). The activities of New Haven's technologically empowered single interest citizen's groups raises similar questions.

In considering the role of technology, Robert Putnam pondered whether the virtual communities created by internet users strengthened real world civic engagement. "Real world interactions," he writes,

force us to deal with diversity, whereas the virtual world may be more homogeneous, not in demographic terms, but in terms of interest and outlook. Place-based communities may be supplanted by interest-based communities. . . . Interaction in cyberspace is typically single stranded. . . . Local heterogeneity may give way to more focused virtual homogeneity as communities coalesce across space. Internet technology allows and encourages infrared astronomers, oenophiles, Trekkies, and white supremacists to narrow their circle to like-minded intimates. . . . This tendency may increase productivity in a narrow sense, while decreasing social cohesion (Putnam, 1998, 178).

Interactions within virtual communities, Putnam points out, may be "more egalitarian, frank, and task oriented than face-to-face communication" (176). But this internal democracy among the like minded may come at the expense of deeper and more robust relationships and real world engagement in the process of public decision making.

Fiorina's concerns about the hijacking of the democratic process are pertinent to New Haven activists' battle against the city's effort to promote the construction of a large regional mall -- an initiative deemed vital to reviving its depressed economy, which had been by-passed by the national economic boom of the late 1990s.

Responses to the mall proposal must be seen against the background of New Haven's long and unhappy history of government subsidized economic redevelopment efforts. In the 1960s, Mayor Lee's massive urban renewal projects had gutted the city's central business district, replacing long-established businesses, large and small, with a massive downtown mall, civic center/coliseum, and hotel/convention center. By the late 1990s, the mall, the coliseum, and the hotel were all derelict: abandoned by the anchor stores and athletic teams that were supposed to generate the revenues that would repay bond holders. In the 1980s and 1990s, city efforts to subsidize revitalization through tax breaks and state economic bonding had likewise failed, leaving the city with crushing taxes and empty coffers. Under the circumstances, opposition to further government subsidized development initiatives was inevitable.

A small unincorporated nonprofit group, the Connecticut Cities Association (CCA), led opposition to the mall, arguing that it would devastate locally-owned businesses, cause massive traffic problems, and produce adverse environmental impacts. CCA's core members numbered no more than a dozen -- small business owners, academics, and professionals. Its outer circle included several hundred citizens sympathetic to the association's views. The inner circle maintained a well-crafted interactive website and used e-mail strategically to contact sympathetic legislators, leaders of other advocacy organizations, and print and broadcast reporters. They used the site's links to other organizations to feature pertinent information about such issues as the impact of increased pollution on pediatric asthma, toxic wastes on the mall's projected site, and impact of malls on locally-owned businesses. IT enabled the group to organize media events, to

identify and recruit experts who shared their concerns, and to muster sympathizers to attend and to testify at public hearings.

Although a tiny group, Connecticut Cities' imaginative and nimble use of technology enabled it to appear to be a much more consequential organization than it actually was. It orchestrated letter writing and fax campaigns directed at legislators and appointed officials. It maintained close relationships with broadcast and print reporters and editors. Articles, editorials, editorial cartoons, and op-eds -- as well as television news segments -- featuring their concerns appeared almost every day on New Haven's doorsteps and television screens.

Despite the considerable resources of the city's entrenched political machine and sympathetic state officials, CCA was able to dominate the public debate on the mall. This had no discernable impact on the political process: only three of thirty members of the board of aldermen were willing to oppose the mall; the city's legislative delegation was unanimous in its support of the initiative; if polled, the majority of New Haven's citizens very likely would have supported the mall.

Nonetheless, the proposal was defeated -- not by the electorate or elected officials but by on onslaught of litigation. How could this small unincorporated group afford to fight city hall in the courts? CCA's strategic use of IT to influence coverage of the mall issue attracted the attention of a rival mall developer -- a company which viewed a New Haven mall as a competitive threat to its own suburban shopping centers. The firm's offered to underwrite CCA's litigation against city and state agencies -- litigation that eventually defeated the proposal.

In the late twentieth century, litigation rather than popular or electoral mobilization has become the strategy of choice for advocacy organizations, thanks to changes in federal court rules that significantly expanded the range of parties considered to have standing to bring class action lawsuits. "Class-actions are group cases," writes legal historian Lawrence M. Friedman, but they are (paradoxically) fueled by the spirit of the age, a spirit of individualism and rights consciousness. Litigation in late-twentieth century America became a political and economic instrument, a tool, a locus for strategic behavior. The class action was an

important way to involve courts in battles over civil rights, corporate governance, protecting the environment, and consumer protection. And class action is central in the society of “local justice” (Friedman 2002, 203-207).

Because many of these rights and social justice issues would not be likely to receive public support, advocates and activists, usually acting through nonprofit organizations, increasingly resorted to them in preference to the expensive and time-consuming strategy of citizen mobilization. While it can be argued that establishing and defending the rights of minorities is as important an aspect of democracy as majority rule, it is nonetheless true that special interest litigation, however cloaked in public benefit rhetoric, is no substitute for citizen action. Indeed, as Fiorina suggests, it comes perilously close the hijacking of the democratic process that he characterizes as the “dark side of civic engagement.” In the case of the New Haven mall battle, the fact that the costs of litigation were borne by a business corporation that had a very special interest in the outcome, leveraged by a small group of technologically adept activists with their own environmental and economic development agenda, highlights the problematic aspects of a kind of empowerment, which aims to influence elites rather than the masses.

An interesting contrast to the CCA's successful defeat of the mall is the failure of another group, the New Haven Urban Design League (NHUDL), which eschewed the use of IT. NHUDL was formed in response to Yale's efforts to demolish a number of historic properties. Its mission later broadened to include a broad range of planning and land use issues, including the development of New Haven's waterfront, the expansion of Yale-New Haven Hospital, the destruction of inner city residential neighborhoods, the demolition of the New Haven Coliseum, and the construction of a community college on the site of the failed 1960s era downtown mall.

Although it possessed both the hardware and the software to pursue technology mediated strategies, NHUDL's leadership preferred more traditional forms of civic engagement -- letters to newspapers and elected officials, op-eds, petitions, and testimony at public hearings. While these strategies were effectively pursued, they ultimately lacked impact because of the inevitable time lags involved in written communications: letters and op-eds about city decisions would appear

days after the event; people notified of public hearings by mailed notices would be far less likely to turn out than people notified by e-mail -- perhaps because the latter had greater urgency and salience, if not timeliness. Generally the small NHUDL core group could be depended on to make itself heard, but it was never able to develop the extensive cadres of sympathizers that had made the CCA so successful and visible. The IT mediated strategies pursued by CCA were carefully targeted on key media actors, whereas the NHUDL media mediated strategies aimed to mobilize a more amorphous general public.

In discussing the impact of technology in American communities, Robert Putnam suggests that social capital -- dense relationships of trust, commitment, and reciprocity based on face-to-face relations -- may be "*a prerequisite for, rather than consequence of effective computer-mediated communication*" (Putnam, 2000, 177). CCA's battle against the mall may have succeeded because its leaders, intuitively understanding that social capital, to the extent that it existed at all in New Haven, inhered in small groups of like-minded citizens rather than in the general public, targeted its efforts to such groups. In contrast, NHUDL, perhaps naively believing that sufficient social capital survived to enable the community to recognize its common interests, tried to get its message across to a broad public that, functionally, no longer existed.

Civic Freeridership: Information Technology and Social Capital

My experiences as a member of the CCA core group and as an advisor to NHUDL, informed by my work with my Harvard colleagues, Robert Putnam and Theda Skocpol, led me as a participant observer to test their assertions about the limitations of IT as an instrument of community mobilization.

My test subject was my neighborhood, a ten block area of 220 households. It is the city's most affluent neighborhood, its streets, shaded by huge old oaks, are lined with magnificent houses built early in the twentieth century. Its residents are senior academics and successful professionals -- nearly all of whom regularly use the internet.

When I moved to Ronan-Edgehill two decades ago, it was an extraordinarily stable place: most families had resided there twenty years or more. Most knew one another well. Over the

years, residents had rallied together around zoning issues, held rummage and yard sales to raise funds to support a neighborhood security patrol, and held periodic neighborhood parties. Most of their children started school at Foote, a K-6 independent day school in the neighborhood -- then went on to Hopkins, a venerable institution that would see them through to college. Almost all belonged to the New Haven Lawn Club, a luxurious establishment two blocks beyond the neighborhood that boasted a fine restaurant, as well as a swimming pool and tennis and squash courts. Most shopped at the same little stores along nearby Orange Street. Virtually all the men worked in town, most of them at Yale. By any standard, until twenty years ago, it possessed the rich stock of social capital whose disappearance Putnam laments in Bowling Alone.

In the 1980s, this began to change, as long-established residents moved from their grand houses into assisted living facilities (or to the Great Beyond). The people who replaced them were a far less settled group. Half a century ago, a tenured appointment at Yale would have been sufficient to anchor a family permanently in the neighborhood. For the new residents, such an appointment was, more likely than not, just a stepping stone to something grander -- a high government appointment or a position in another elite university that paid more or carried more prestige. By the late 1990s, annual residential turn-over was nearly 10%.

The institutions which once held the neighborhood together were fraying. Households were increasingly likely to be headed by working couples -- some of whom commuted to work in New York, Hartford, Cambridge, or Washington. Admission of children to private schools like Foote and Hopkins, once a *rite de passage* for neighborhood families, became more difficult as neighborhood children had to compete against the offspring of affluent families from throughout the region who had become disenchanted with suburban public education. Increasing numbers of families sent their children to the local public school, whose active parents group worked to make it the best elementary school in the city. With less time for leisure and with increasingly diverse interests, the hard working residents of the 1990s were less likely than their predecessors to know one another. Their children were less likely to play with the kids next door than with schoolmates who might live in other neighborhoods or in suburbia.

My position as secretary of the neighborhood association positioned me well to see if IT could be used to reverse this decline in social capital. I established a listserv to enable residents to exchange information on topics of neighborhood interest. I set up a website which ran forums on topics of common concern like taxation and crime, offered information on neighborhood history and architecture, and featured guides rating artisans and services.

While I had abundant evidence that residents used the website and the listserv as a source of information (within a year, two-thirds of the households had subscribed), it appeared to be less than effective as a mobilizing tool. It became harder and harder to muster quorums for association board meetings. Annual meetings and special meetings of residents, called to address such issues as crime and rising taxes, were less well attended than in the past. Putnam argues that "anonymity and fluidity in the virtual world encourage 'easy in, easy out,' 'drive-by' relationships" that discourage the creation of social capital (177). The ease of entry and exit from cyber communities may, he suggests, discourage the creation of social capital based on interpersonal relationships. Could it be that residents, having fulfilled their responsibilities as informed citizens on-line, no longer felt it necessary to deal with one another face-to-face?

A neighborhood crisis involving the city's determination to expand and relocate a neighborhood public school offered an opportunity to test this hypothesis. The school had become increasingly popular among residents who could neither afford -- nor effect their children's admission to -- the private day schools. Originally a K-4 school, changes in state education policy requiring all such schools to serve a K-8 student body required an expansion of the existing facility. Because of residents' opposition to the razing of historic houses that would have been necessary to expand the existing facility, the city began seeking an alternate site for a new school building.

There was intense controversy about where the new school should be located. One proposal would have placed it in the middle of my neighborhood, on land the city hoped to purchase from Yale. This would have been convenient for residents sending their children to the school because their kids could walk to school without having to cross any major thoroughfares.

But this was unacceptable to empty-nesters and to private school parents, who expressed concern about the impact of the new enlarged school on traffic, parking, and property values.

Another proposal would have placed the new school outside the neighborhood in a location that would have required children to cross one of the city's busiest and most dangerous highways and to pass through a "transitional" (increasingly Latino) area. For obvious reasons, this location was vocally opposed by the public school parents.

A third proposal -- and the one ultimately favored by the city and the public school parents -- was on a heavily trafficked artery running along the east side of the neighborhood. Some parents worried because their children would have to cross a busy thoroughfare on which two neighborhood residents had been killed in the previous year. Some property owners worried that the small lot on which the city proposed to build would, because of insufficient off-street parking, cause major traffic problems for the neighborhood.

Debate over the school's location raged for more than two years in public school parents' groups convened by the city and at meetings of city boards and commissions whose permission was required to permit construction. Our neighborhood, recognizing the deep disagreements among residents, hesitated to hold a membership meeting on the subject, fearing that our failure to take a clearcut position on the school's location would further weaken the association.

The city's zoning ordinance describes our neighborhood as being "of unique and irreplaceable value to the city as a whole" -- unique as an area of large historically and architecturally significant residences with a park-like streetscape that is used by residents from throughout the city for walking, jogging, bird watching, and other recreational activities. The central mission of our association has been to preserve its character by preventing the creation and expansion of non-conforming commercial and institutional uses. For that reason, I was able to persuade the board to take a stand against the proposal to locate the school in the midst of the neighborhood. This location would have required Yale to sell property to the city. Using our listserv, I was able to contact senior Yale faculty whose property values and quality of life would be affected by the school and to persuade them to write or e-mail Yale's president to oppose such a sale. Evidently, they did so in considerable numbers. Within a week of my intervention, the

the university announced was not contemplating selling any of its neighborhood properties. Once again, IT had demonstrated its capacity to mobilize elites!

Because of sharp divisions among neighborhood residents, preventing the city from selecting the third site proved to be a less simple matter. Although the association's board (itself divided on the matter) had hoped that time would cool residents' passions, our delay served instead to intensify them, as opposing groups became better organized. Those favoring the school mustered all the political resources the city could offer, bulldozing opponents (or so they charged) as the proposal made its way through the public approval process. School opponents from our neighborhood -- residents whose homes were most likely to be affected by the new facility -- joined with an association from an adjoining which had already initiated litigation against the city. Time gave them additional opportunities to consult traffic experts and lawyers in order to refine their arguments. Materials generated by both groups, as well as running debates, were disseminated through the association's listserv and website.

A significant number of residents, it should be noted, were indifferent to the matter because they neither were public school parents nor owned properties likely to be affected by the new school. While proponents and opponents of the school could be counted on to weigh in at any neighborhood meeting on the subject, it was far from clear whether the issues that so agitated those most directly affected could mobilize the disinterested majority around the more abstract question of preserving the character of the neighborhood.

Eventually, a membership meeting to determine the association's position on the school's location could no longer be delayed. The board carefully planned the meeting, taking care to invite not only all residents, but representatives of the city and experts on traffic and parking. The meeting was well publicized, both through the listserv and through a snail-mailed announcement. Given the intensity of professed concern, we expected a good turnout.

But when the meeting was finally held, only a quarter of the neighborhood's 220 households were showed up -- the households with members intensely concerned, on one side or the other, about the school's location. After protracted and heated debate, our effort to steer the

meeting towards common ground -- a request that the city more carefully evaluate the impact of the new school on traffic and parking in the neighborhood -- failed. In the end, those attending voted against the association taking a position on the school. In effect, the city and school proponents had won the battle, since the only group that could credibly represent the neighborhood had pledged itself to silence on the question.

The school fracas appeared to confirm the major components of the "dark side of civic engagement" hypothesis: IT, which was extensively used by all sides in the debate, had demonstrated its capacity to mobilize those most intensely committed to extreme views on the school question; it had failed to mobilize the residents as a whole around broader questions of neighborhood preservation; most seriously, it had failed to elicit higher levels of direct participation by residents in neighborhood decision making. Without preexisting social capital, more generalized conceptions of community benefit proved incapable of moving residents to participate; instead, IT seemed to have encouraged a kind of civic freeridership, "easy in, easy out," participation that empowered activists, but left the majority of residents unmoved and uninvolved.

CONCLUSION

Overall, the impact of IT on New Haven's public life offers a very mixed picture. For the blacks and Hispanics who constitute the majority of the city's population, the measurable growth in access and connectivity for individuals and families is impressive. The efforts of governments, foundations, and corporations, working through the schools and nonprofits, appear to be increasingly effective in eliminating the digital divide. While these trends are undoubtedly empowering individuals by making them more employable and improving their educational prospects, there is no evidence so far of community empowerment: the powerful institutions and political combinations that have dominated New Haven for the past half century remain unchallenged.

There is encouraging if selective evidence of institutional empowerment as measured by the capacity of the city's nonprofit organizations to use IT to define themselves as parts of larger virtual communities. The willingness of certain organizations, such as those serving the

homeless, to function as portals to programs and services needed by their clients may set an example for agencies serving other needy populations.

If anything, IT appears to have had a negative effect on the vitality of civic life as a whole. IT has had no impact on such indicators of civic engagement as voter turnout, voter registration, participation in public decision making, and involvement in membership associations (including religious congregations). In favoring the tactics of technologically adept single and special issue groups, IT appears to have empowered activists endeavoring to influence the media and elite decision makers without mobilizing the citizenry as a whole. IT in New Haven is encouraging civic freeridership: opportunistic low-intensity virtual involvement in public life without producing the enduring deep relationships of trust, commitment, and reciprocity that constitute social capital.

Could it be that the notions of community, civic engagement, and empowerment advanced by the social capital theorists of the past decade are based on nostalgia for a bygone political and social consensus that is no longer possible in our increasingly diverse society? My findings in regard to New Haveners' use of IT to form virtual communities of the like-minded resonate with management guru Peter Drucker's description of the civic preferences of today's "knowledge workers" who are creating new forms of citizenship through the third sector (Drucker 1989, 195). Knowledge workers, like New Haveners, find conventional forms of political and civic participation unrewarding: "In the political culture of mainstream society," Drucker writes, "individuals, no matter how well educated, how successful, how achieving, or how wealthy, can only vote, and pay taxes" (205). The third sector offers them opportunities to be "active citizens": to become leaders, learn skills, set examples, and gain recognition and status in ways no longer possible in politics and society.

Can Drucker's model of selective and segmented empowerment, as well as the individual economic and educational empowerment that IT enables inner city residents to become knowledge workers, can be considered an alternative to Putnam's and Skocpol's concepts of broadly inclusive civic engagement? Is it significantly different from De Tocqueville's

description of a civil society based on associations? "Americans of all ages, all conditions, and all dispositions constantly form associations," he wrote,

associations of a thousand . . . kinds, religious, moral, serious, futile, general or restricted, enormous or diminutive. . . to give entertainments, to found seminaries, to build inns, to construct churches, to diffuse books, to send missionaries to the antipodes; in this manner they found hospitals, prisons, and schools. If it is proposed to inculcate some truth or to foster some feeling by the encouragement of a great example, they form a society (De Tocqueville, 1945, II, 106).

Visiting America at the peak of the Age of Jackson, an era in which older forms of community were being rapidly supplanted by new more individualistic institutions, De Tocqueville nonetheless was able to conclude that "civil associations. . . facilitate civil association," while "political association singularly strengthens and improves associations for civil purposes" (II, 115).

History suggests that the decline of old forms of community and the rise of new ones, based on associations of self-interested individuals may be part of a natural process of institutional development. If this is the case, the techno-visionaries hopes for IT as a vehicle of empowerment may yet be borne out.

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6 Vital Signs: Organizational Population Trends and Civic Engagement in New Haven, Connecticut, 1850-1998. (pp. 211-248). Peter Dobkin Hall. Contemporary debate on civic engagement has directed attention to the associational life of communities as an indicator of the vitality of civil society. Some, like Robert Putnam, argue that declining membership in such traditional voluntary associations as bowling leagues, fraternal societies, and "mainline" religious congregations is symptomatic of diminished civic capacities.¹ Others, like Peter Drucker, say the remarkable growth in the population of A Question of Empowerment: Information Technology and Civic Engagement in New Haven, Connecticut, Peter Dobkin Hall Chapter 7: Do Information Technologies Influence the Operations of Community Development Corporations? Samuel Nunn PART 4: STRATEGIES FOR IMPROVING TECHNOLOGY USE Chapter 8: Designing Information Systems around Decision Making, Dale Fitch Chapter 9: Geeks for Good: Technology Evangelism and the Role of Circuit Riders in IT Adoption among Nonprofits, Paul-Brian McInerney Chapter 10: Organizational Strategies to Foster the Adaptation and Integration of Technology in Grassroots Soc