Broadening Access:

SeniorNet and the Case for Diverse Network Communities

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ABSTRACT

Studies of online communication and communities are a growing area of ethnographic research, but this work largely occurs in a separate analytic space from discussions of the digital divide. This paper brings ethnographic studies of network communities into conversation with debates about the digital divide, through a case study of culture and identity issues in SeniorNet, a US-based network of computer-using seniors. The SeniorNet case enables an analysis of communal and cultural factors in access such as cultural identity, discursive style, and online representation. SeniorNet participants connect and identify with a unique online context that is culturally and socially differentiated from other parts of the net. Rather than only working to bridge and erase differences, as suggested by metaphors such as the digital divide, communities like SeniorNet also demonstrate the importance of maintaining social boundaries and cultural difference in order to support access for diverse groups.

KEYWORDS: network communities, digital divide, seniors, ethnography
CULTURAL CONTEXTS OF ACCESS

Research on the digital divide has focused on economic and infrastructural barriers to access and broad-based surveys of telephone, computer and Internet use. These approaches have been crucial in querying the basic preconditions for access to computational resources, and in providing an overview of the access landscape. There is still, however, relatively little work that describes the qualitative content of what it means to “have access” to the complex resources available via computer networking, and the concrete interventions that would promote broadened access for diverse social groups. What motivates people to use computers and the Internet? What do people find meaningful when they do gain access? How do people affiliate and identify with online content and groups? What sustains and deepens participation in online activity?

Studies of online communication and communities are a growing area of ethnographic research, but this work largely occurs in a separate analytic space from discussions of the digital divide. This paper brings ethnographic studies of network communities into conversation with debates about the digital divide, through a case study of culture and identity issues in SeniorNet, a US-based network of computer-using seniors. The SeniorNet case enables an analysis of communal and cultural factors in access such as cultural identity, discursive style, and online representation. SeniorNet participants connect and identify with a unique online context that is culturally and socially differentiated from other parts of the net. Rather than only working to bridge and erase differences, as suggested by metaphors such as the digital divide, communities like
SeniorNet also demonstrate the importance of maintaining social boundaries and cultural
difference in order to support access for diverse groups.

After providing background on the fieldwork and analytic framework of our study,
this paper delves into the ethnographic details of what defines and sustains a network
community designed to meet the needs of a population that is not well-represented on the
Internet. We describe the social practices and cultural norms that define SeniorNet, and
what motivates people to participate in the community. We then analyze this
ethnographic material in relation to access issues, by looking at the three areas of
discourse, identity, and community empowerment. The paper concludes with
suggestions for how this work could apply to other social groups.

OUR STUDY OF SENIORNET

Methods, Data, and Fieldwork

This work grows out of an interdisciplinary collaboration which has looked at
technical, social, and cultural aspects of network communities (Mynatt et al. 1997a;
Mynatt et al. 1997b).¹ Our team has focused on the experiences of a diverse set of
network communities, which we feel provide a window into various technology and
policy questions. Based on this general interest, we focused in this project on the

¹ By network communities, we mean places on the Internet that provide distinctive locations for sustained
social interaction among repeat participants. They can be developed using different technologies, including
email lists and Web sites. Key characteristics of network communities are that they involve a regular set of
participants, who have multi-layered relationships, ongoing engagement, recognizable social rhythms, and
a sense of “localness” or social proximity (Mynatt et al. 1997b). In addition to basic connectivity and
information retrieval, network community participants are also involved in producing and sharing
information and creating social ties.
question of how a network community might contribute to successful experiences with technology for a stereotypically un-technological population. Our prior work (Dourish et al. 1996; Ito 1997; Mynatt et al. 1997a; Mynatt et al. 1997b; O'Day, Bobrow, and Shirley 1996) also provides a broader base of research upon which we base our analysis of SeniorNet.

SeniorNet is a nonprofit organization that was founded in 1987 with the mission to “provide older adults education for and access to computer technology to enhance their lives and enable them to share their knowledge and wisdom” (SeniorNet 1999). SeniorNet activities have included the support of “learning centers,” which are places that seniors can go to take basic computing classes, as well as support of online communities for seniors.

SeniorNet’s online sites, which are the focus of this study, provide chat capabilities and a multitude of roundtables (bulletin board style discussion groups) on topics ranging from book clubs to WWII memories, including a Café for casual socializing as well as roundtables to support grieving. Currently, there are nearly twenty thousand members comprising thriving online communities on both America Online (AOL) and the World Wide Web. Its history spans over twelve years and four different online services (Furlong and Lipson 1996; Furlong 1989a; Furlong 1989b; Schwarz and Schwarz 1991; SeniorNet 1995).

In 1998, we conducted a year-long ethnographic study of SeniorNet. We interviewed SeniorNet staff members, observed online activity in discussion roundtables, both on the Web and AOL over a period of months, participated in chat regularly on the Web for a week, and interviewed twenty members drawn from both network communities.
Interviews were semi-structured, focusing on how members gained access to computers, the Internet, and SeniorNet, and what they found compelling about computer and online use. They were conducted primarily via phone, though we interviewed three members in person, and one via online chat. We observed sixteen classes and conducted nine follow-up phone interviews with students at the SeniorNet Learning Centers. We also posted questions and research themes on an online roundtable to generate discussion among members on topics relevant to the research project.

Our study focuses on the benefits and requirements of committed and long-term participation in the SeniorNet online communities and the cultural context of SeniorNet. While our analysis here is informed by our work with new users of computers at the SeniorNet Learning Centers, our discussion of access is specifically based on what we observed of SeniorNet members who were either in leadership roles or visible members of the online communities. We do not see the individuals on SeniorNet necessarily as a representative sample of seniors or of users facing the digital divide. The community context, rather than the individual, is our main unit of analysis. Our primary focus is not to generalize across individuals (i.e., what individual characteristics correlate with different dimensions of access), but across communities and social practices (i.e., what communal contexts and social practices support access for different social groups).

**Analytic Framework**

Our analytic frameworks are tied to our objectives of understanding communal and cultural factors in access to online resources. The first goal of our research has been to
arrive at an ethnographic description of SeniorNet which accounts for its success in maintaining membership growth and a lively, long-standing community, and for its unique social and cultural characteristics, defined in distinction to other online groups. Secondly, our goal has been to analyze how these features of SeniorNet relate to issues of online access for seniors and other social groups that are not well-represented on the Internet.

Our first research goal, of ethnographic description, is served by recent anthropological approaches to studying communities and identities in relation to media technology and modern society (e.g., Appadurai 1996; Marcus 1998). SeniorNet exemplifies how people can be members of multiple, often spatially dispersed communities, catering to different identities and social needs. In particular, we draw from approaches that look at the processes and politics through which local social identities are formed in the face of spatially distributed technologies such as the Internet. For example, in their study of Trinidadian use of the Internet, Daniel Miller and Don Slater have argued that, contrary to the rhetoric of cyberspace as a place to depart from local identities and contexts, “We found utterly the opposite. Trinidadians – particularly those living away – invest much energy in trying to make online life as Trinidadian as they can make it, to see the Internet as a place to perform Trini-ness.” (Miller and Slater 2000, 7). We found similar dynamics at work in the SeniorNet case.

We argue that ethnographic description and cultural analysis are important tools in understanding the varied terrain of the Internet, and the ways in which people encounter and it and make it their own. As Miller and Slater put it, “What we were observing was not so much people’s use of ‘the Internet’ but rather how they assembled various
technical possibilities that added up to *their* Internet” (Miller and Slater 2000, 14). This is our entry point into our analysis of access issues for diverse social groups. It is not sufficient to examine binary variables of whether individuals do or don’t have access to online resources; we must additionally investigate the ways in which people form affinities and identifications to particular aspects of online life, defined by communal and cultural context. This kind of analysis complements broad-based and quantitative studies of rates of access by providing concrete examples of social practices and cultural content.

In analyzing access issues, we draw additionally from Jean Lave and Etienne Wenger's theory of learning which frames learning as an act of participation in a community of practice (Lave and Wenger 1991). In this framework, failure to learn is not necessarily an individual deficit in relation to a culture-free content domain, but can be seen as a relational problem of identity with a social group. Translated into terms of Internet access, we can consider access as a problem of social inclusion and identification with culturally and socially distinctive communal contexts, rather than an issue only of material resources and technical skills necessary in accessing a generic informational resource.

The SeniorNet case is particularly appropriate for analyzing cultural factors in access. Although the SeniorNet population is diverse, prior surveys of participants, and our smaller sample of interviewees indicate online members to be typically Caucasian, well-educated, suburban and middle-class (Schwarz and Schwarz 1991; SeniorNet 1995). SeniorNetters do not suffer from many of the factors that generally characterize populations considered at risk in the digital divide debates. At the same time, seniors—and SeniorNet participants are no exception—suffer from stereotypes that characterize
thm as technophobic and technically incompetent. Age identity probably trumps other cultural categories such as gender and race in characterizing affinity with information technology. Children are thought to take naturally to computers and the Internet, and seniors are thought to lie at the opposite pole. Simple technology is often described as something that “even my grandmother could use.” Leslie Regan Shade, in her exploration of gender and access issues, has argued that “masculine values” are pervasive on the net, and may deter access for women (Shade 1998, 38). Similarly, we might consider the dominant (though probably not majority) culture of Internet groups to be centered around cultural references and rhetorical styles that are oriented toward the youth-oriented imagination of the baby boom generation, much like the hip countercultural attitude of Wired magazine.²

These stereotypes of computer use do have a basis in the historical trajectories of current seniors, in the sense that they are a generation that did not grow up with computer technology. Age does not contribute to as broad a disparity in access as economic or regional factors, but the disparity is still significant (Bikson and Panis 1995; Kiesler et al. 1997; McConnaughey et al. 1997; Starch 1998). Seniors above the age of 65, in particular, have much lower rates of computer and online access (Starch 1998). The trend, however, is for seniors to be adopting computers in large numbers (Adler 1996; Starch 1998), attesting to a shift in the age basis of computer users. Greater numbers of seniors going online does not necessarily translate, however to their representation in the online universe. Representation means more than the means to access a particular context; it also entails having a voice and cultural content that one identifies with. While

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² It is beyond the scope of this paper to provide a cultural analysis of Internet culture at large. See (White 1997) for a critique of the technology elite represented in Wired.
it is important to recognize the unique generational experiences of seniors, it is also important to combat the cultural logic that states that computers are not appropriate for seniors and to create online spaces that are amenable to styles of an older generation of cybernauts. SeniorNet, together with a handful of other nonprofit efforts, provides one of the few cases of a network community committed to this kind of cultural change and to community-based support of computer use for a population that is not well-represented on the Internet.

THE SENIORNET COMMUNITY

In this section, we describe the features of the SeniorNet community that are relevant to our analysis of access issues. First we describe the cultural context of SeniorNet that defines it as a unique online site distinguished from other aspects of the Internet. We then describe the social practices on SeniorNet that were described as the primary benefits of participation in the community.

The Cultural Context of SeniorNet

You ask, why SeniorNet? You ask why...we stay and grow larger in numbers? For me that is an easy one to answer. Like attracts like...seniors attract seniors. That is not to say I don’t mingle or socialize with younger people, I do.. However my comfort zone is with people I can relate to and with...Some of the youth of today do not understand us. They categorize us in one lump image. Not so, and we as seniors know it. Each day is the day I again start to live.
Network communities are uniquely suited to drawing people together around bonds of affinity that are not primarily geographically based. "Seniorness" in SeniorNet is a good example of this. On first examination, age seems to be the most defining boundary of the community and the one most easily at hand when considering how membership is constructed. However, like any other social category that is not necessarily of an individual’s choosing, this age-based identity is cause for contestation, resistance, and appropriation. The boundary of "over fifty" obscures an amazing diversity of experience as well as over forty years in age range, which is a much larger range than other age cohorts (children, teens, twenty somethings, thirty somethings, boomers, etc.).

Participants in SeniorNet include people who are working full time or part time or are completely retired, who may be travelling to remote parts of the world or are largely homebound, who may be taking care of children, grandchildren, or their own aging parents. Feminists have battled over the complexities of what it might mean to demand solidarity based on the shared category of "women," as it obscures the diversities of women’s experiences across different cultures, races, and classes (eg. Butler 1990; hooks 1993). Similarly, the category of "senior" can be considered a particular kind of social production of identity that is at once a source of solidarity and shared identity and something to be resisted as a "box" that incompletely defines the self.

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3 People interviewed and quoted for this study have been given the option of using their real-life names, screen names, or pseudonyms.
In the course of explaining our research and on-line presence to SeniorNet participants, we received a handful of challenges to our research because that there are no seniors on our research team. Some questioned whether we could understand what it meant to be a senior on SeniorNet because of our ages and ranges of experience. Clearly, the category did matter in some important ways. On the other hand, some participants challenged the category of “senior,” working to contest and complicate any simple notion we might have had of this category. Participants reminded us that seniors show up all over the Net, not just in SeniorNet, and that their interests are varied. They particularly objected to the tendency of younger people to stereotype them and attach the “senior” label: “I don’t fit in anyone’s boxes and never thought anyone else did either.” The main theme of the discussion was that members felt a strong value in associating with people of similar age, but at the same time they objected to it as a totalizing category which could entirely specify a member’s identity, which is comprised of much more than age cohort identification.

While people generally rejected stereotypes attached to seniors, they all valued SeniorNet as a place with unique characteristics, defined in opposition to Internet culture at large. One member notes, “A lot of people come on SeniorNet and other places and say, ‘I just got so tired of the youngsters out there doing all the dumb things they're doing on chat and so forth.’” Another SeniorNet member, D. Pat Cooper, objected to some of the language found on the Net at large: ”As soon as I see a bad word or a cuss word in a chat room or filthy talk—and there is a lot of that—I just leave.”

Many members of SeniorNet explain that one thing they particularly value about a community of seniors is a shared sense of courtesy and civility. The words “warm” and
“friendly” were frequent descriptors for the particular characteristics that drew people to SeniorNet. One member notes:

One of the reasons people like SeniorNet is that there's a high degree of courtesy and common concern and camaraderie in some of the forums and throughout that's generally recognized, and the disputes that occur are often very much stated in very polite language... You know, people are supposed to get old and cranky, but no, they generally tend to get old and mellow, more than old and cranky. It's the young people who are uptight all the time. A lot of time, let's say.

SeniorNet has provided the space for its members to define a community that is grounded in but not reducible to their age-based affiliation. Certainly some of the topics discussed relate specifically to age, such as World War II memories or arthritis support groups. But many other topics (such as political issues or book discussions) are of general interest and are not specifically related to age.

A common thread is that SeniorNet provides avenues for positive appropriation and redefinition of an identity that is often stereotyped or marginalized. Seniors on SeniorNet are not content to be “categorized in one lump image,” rendered socially inactive, or relegated to the margins of new technical advances. They find strength in their shared association with each other and are able to create a space which draws other interested seniors into this sense of solidarity and a rich and diverse sense of what it means to be a senior. This benefit extends beyond the active membership of SeniorNet Online—people who are lurkers in SeniorNet or who hear about SeniorNet in the press or other contexts
can change their of who they see as a computer user. In other words, SeniorNet contributes to positive cultural change by challenging stereotypes and reducing cultural barriers to access for seniors as a whole.

**Social Practices on SeniorNet**

In our ethnographic study of SeniorNet, we analyzed various dimensions of the online sites which contributed to success as a long-standing and growing network community (Mynatt et al. 1999). Here we report on the social benefits of participating in SeniorNet that we feel are most relevant to a discussion of what sustains and motivates access. The most frequently reported benefit of participating in SeniorNet Online is social support. We distinguish two main types of social support: the development of friendships and relations with diverse but compatible peers, and more specifically, help in crisis. Additionally, we have found technical support to be a crucial by-product of participation.

**Friendships**

*Being a member on SeniorNet gives you entree into someone’s house, the way that being a fraternity or sorority member might be. It’s just amazing that, here we are, all older people, all with our own lives pretty well behind us, and yet open and caring and appreciative of each other. . . And it has expanded—friends—and I don’t mean just acquaintances—caring, dear friends—exponentially. I never could have expected that this would happen, you know. When I retired, I figured, well, little by little, my friends*
will die off, and maybe I’ll die and that will be the end of it. And instead, it’s just like a lotus blossom opening. It’s just burgeoning.

- Bud Robb, SeniorNet Member

By far the most often reported benefit of participation is meeting new people and extending friendship networks. Almost without exception, the participants we interviewed named some form of friendship exchange as a primary benefit of participation. The forms of friendships and relations fostered on SeniorNet include acquaintances in online discussion groups, familiar friends who gather at regional or national “bashes,” close friends who enjoy frequent phone and real life contact, and romantic relations that have resulted in serious relationships and marriages. One participant, daphne, volunteered in her posting on our research forum: “The biggest attraction for me to the Internet in general and SeniorNet specifically is the social interaction and friendships that I enjoy, as a daily participant.”

Participants also point out that SeniorNet allows them to meet unusually articulate or stimulating people they would not have met otherwise. Respondents describe how they are able to “meet people from all over the country.” Eloise DePelteau, who posted to our research forum, states that “SeniorNet is interesting because it connects me with the most interesting and fascinating group of people I have ever met.” Some respondents describe how they preferred online interaction due to physical conditions such as heart problems or asthma that limit other forms of social interaction. Others note how SeniorNet “filled a definite void” after the break from work, or after moving to a new locale:
When I moved up here I left all of the friends that I've had for years and had no friends except for my daughter and friends up here. And the thing I miss the most was the give and take and the camaraderie of my fellow teachers at school. SeniorNet has filled that gap beautifully.

SeniorNet supports a spectrum of social relations in a way that is typical of any robust community, including network communities. These friendships and relations are, however, uniquely beneficial for the senior population in that, for many, they fill a social void that results from retirement, the passing on of older friends, or physical limitations that may limit their activity.

Support in Crisis

When my dad was dying I quickly moved into his house, about four months or five months before he died. ... And the continuity in my life was being able to talk with those folks in SeniorNet who had all been part of my life before. . . And everyday I would write in the death and dying folder about his dying and people would respond. And they responded with tremendous support and understanding. And they encouraged me to continue to verbalize, to put the whole experience into words, not at the end, but each day. Okay? I found my voice in terms of the expression of what I was going through, by telling it to all of them. And, after my dad died, what I did was I took down all of those posts. And I put them in a big album. And it was so much that I had to split it into two albums. One
album was for the posts that I had written while he was alive, and the other album was just for all the condolences that came in and the beautiful, supportive things that people said. It was quite an experience.

- SaJanina, SeniorNet Member

Many SeniorNet members shared vivid stories that illustrated the strength of the social bonds fostered through SeniorNet and the support that people find there. One participant recounts how, in the chat room, somebody noticed that a member had ceased responding, which prompted a phone call to check on him and then a call to 911 (an emergency service) when it was discovered that he was having a heart attack.

Many of the online discussion groups focus on support issues, such as illness or bereavement. When one of the online hosts’ husband died she received over a hundred messages, including poems, online “cards,” and pictures of flowers. Another host explains, “Whenever anything goes wrong for anybody, the rest are right there posting promise prayers and support and that sort of thing – cyberhugs.” The online context may actually facilitate this form of support. As one participant notes: “You don’t have to see each other face to face, so that if you are sitting at the computer with tears streaming down your face, nobody knows it.”

While SeniorNet is a particularly exemplary case of socially supportive group, network communities in general necessarily exhibit this focus on social exchange and support. One of the great benefits of network communities in general is the ready
availability of community support, whether it is for lightweight socializing or during times of intense social need.

*Technical Support*

Although social support and friendships were seen by SeniorNetters as the primary reasons for participation, they also described technical support as an important by-product of community involvement. With the rapid pace of change in both hardware and software, access must be continuously renegotiated, as one’s equipment must be updated or replaced, service providers must be re-evaluated, and habits of use must be modified to suit a changing computing environment. Technical support is an ongoing need in today’s computing environment.

SeniorNet provides technical support through classes and labs at community centers. It also provides online technical support keyed to the specific needs and learning styles of seniors. The technical support folders on SeniorNet Online are characterized by a uniquely open and helpful style, in sharp contrast to many other areas on the Net that demand a certain level of technical experience in order to participate even in getting help. For example, in the Newcomer’s Help forum on AOL, queries range from basic computing questions to questions about online privacy, and all questions are responded to with courtesy and encouragement. Queries may be as open-ended as the following call for help: “I am a senior just know how to do e mail trying to get web or internet appreciate any help dsmith4@aol.com.” In fact, many of the online volunteers try to anticipate the needs of networking novices even before they explicitly ask for help.
Volunteers on the web scan postings to detect new arrivals, and they follow up by sending welcome letters and information on how to navigate the site.

Unlike the SeniorNet learning centers, SeniorNet Online is not organized specifically for technical support, but provides technical support as one important part of its community practices. This support takes two forms: first, people who have had some resistance to technology are encouraged to make an identity shift toward becoming users of technology by being welcomed into the community by people they can identify with, and second, people can draw upon the expertise of experienced community members. We would expect to see the first form of technical support in any community that draws in new computer and Net users, and it is a key reason for encouraging the growth of culturally-diverse Net groups. The second form of technical support is a byproduct of any successful network community, and in many ways, it is the optimal form of “as needed,” individualized, technical support by peers (Grant and Nardi 1992). Classes, technical support lines, and manuals are viable sources of technical support, but pale in comparison to ready access to a group of peers who are engaged in similar technology-based activities and who can engage in a responsive, timely, and context-sensitive way to specific queries.

AN ANALYSIS OF ACCESS ISSUES

A focus of the digital divide debate has been on information access as the primary goal and benefit of online access. The notion that computer networking is an “information infrastructure” and that “information is one of the nation’s most critical
economic resources” (House 1993, 1) is the dominant model for understanding the value of the Net as a public resource. Those concerned with issues in differential access have rightly argued, based on this model, that we need to be concerned about “information haves and have-nots” (Civille 1995; Henderson and King 1995; Wresch 1996). Lee Sproull and Samer Faraj describe some of the implications of this model: “The pursuit of information – the cruise or the browse – is implicitly solitary; hundreds or thousands of people may search at the same time, but each is independent and unaware of others” (Sproull and Faraj 1995, 63). By contrast, they suggest that the Net can be considered a social as well as an information technology: “People on the net... are not only looking for information; they are also looking for affiliation, support, and affirmation.” (Sproull and Faraj 1995, 65).

Much of the recent attention around network communities grows out of this recognition of the interpersonal dimensions of Net access. The Carnegie Mellon University HomeNet study released some provocative and widely-publicized findings that suggested that Internet use causes depression and declines in social involvement, advocating for policy that supports interpersonal uses and uses that lead to strong social ties rather than only information access (Kraut et al. 1998a). This research project is one of the few to examine home-based access and to analyze the effects of using different kinds of Internet software. Specifically, this study uses email to exemplify interpersonal uses of the Internet, and it uses the Web to exemplify information or entertainment uses of the Internet. The HomeNet study found that email was the preferred application, that it was a more stable use than the Web, and that it predicted longer-term usage of the Internet, whereas the Web did not. They conclude that the Internet may have a primary
benefit as a tool for interpersonal communication, much like the telephone (Kraut et al. 1997; Kraut et al. 1998b; Mukhopadhyay et al. 1996).

Our study of SeniorNet is in alignment with the general HomeNet approach of differentiating between uses of the Net and stressing the value of interpersonal dimensions of Net access. However, we argue that it is crucial to differentiate usage not only by software applications and individuals, but by shared content and group activity. Communication between individuals results in strong social ties only when those communications are part of a shared social, cultural, and historical group context. In other words, we advocate analyzing Net usage along communal and qualitative variables such as communities and content areas, which can cross-cut different technologies such as the Web, email, Usenet newsgroups, chat, and bulletin boards. The HomeNet analysis specifically excludes communal uses of email (such as distribution lists), Usenet newsgroups, MUDs, and Internet Relay Chat, as these do not represent private person-to-person communication. These group experiences were excluded from analysis despite the fact that the researchers found that these groups represent the primary means for people to form new relationships through the Internet (Kraut et al. 1997).

We argue that we must attend to communal categories if we want to understand interpersonal uses of the Net. We must extend our view beyond a focus on individual benefits and communications to take into account communal affiliation, cultural context, and social practices. To understand sources of social alienation, a crucial variable is membership in an online group, which is tied to long term relationships and whether people identify culturally with the content of the Net. These kinds of factors may explain other aspects of the HomeNet study’s findings, such as why race is a resilient
variable despite the elimination of economic barriers to access. Other studies have also found that even with comparable incomes, Blacks and Hispanics lag behind Whites in PC ownership and online access (McConnaughey et al. 1997), pointing to resilient social and cultural barriers to access.

We believe that the dissonance many Net users experienced upon hearing of the HomeNet results could be tied to the lack of qualitative, contextualized accounting. Unlike the new users that the HomeNet study tracks, long-term Net users are often embedded in communal contexts that are supported by the Net, whether these are network communities, professional networks, workgroups, or email correspondence that spans multiple years. We believe that a network community is a useful unit of analysis for understanding the meaningful context of online activity, as it provides a boundary for shared group activity and a sense of membership and identification. In contrast to information access or more lightweight forms of social interaction (such as anonymous chat or narrowly topical discussion groups), network communities exemplify the more socially and culturally demanding forms of online access and related sociocultural barriers to access.

In this section we describe the dimensions of access that emerged in the SeniorNet case: literacy and discourse, identity, and community empowerment. Our focus is on exploring what features of the community promote and deter access to the Net.

**Literacy and Discourse**
SeniorNet Online, like almost all Internet communities, relies primarily on the written word and a technologically complex infrastructure for its group communication. While this context is crucial for enabling the community to function, it also imposes a high overhead to participation in the form of various technical, social, cultural, and language literacies. These include the writing and reading competencies which are most commonly associated with the term "literacy," as well as technical and social literacies specific to network communities and SeniorNet in particular. One indication of these requirements for participation is the fact that about two thirds of those we interviewed were teachers, academics, or professional writers. Our sample, chosen from people who are relatively active participants in SeniorNet, indicates the levels of education and traditional forms of literacy that are represented in SeniorNet Online. The 1995 SeniorNet membership survey (which include those affiliated through learning centers as well as SeniorNet Online), documented that 68.9% of members have some college education, with 19.3% reporting education past the Master’s level (SeniorNet 1995).

A former SeniorNet staff member, Fran Middleton, notes that people don’t necessarily know such things as ethnicity or specific age—the written word is what people have access to.

You know, nobody knows your ethnic background, don't have to know your age if you don't want to tell it, whether you're a young fifty or an old ninety-seven. So you're known only from your words and your reactions to other people's words. Nobody's worked with you. You might not even know what kind of work they did. About the only thing people can see is if you can't spell and your grammar's poor.
Another person we interviewed, who is an active teacher in the SeniorNet classes, notes that these high literacy demands for online participation have deterred him:

SeniorNetter: When you say SeniorNet, you are talking about the Internet. That is probably why I have a lack of interest in it.
Interviewer: So you don’t experience it as a community?
SN: No. May be a little bit of elitism in there too.
I: How so?
SN: I am not the most educated person and so forth. So if after some dialog I may not be using the best of English. I might even have a misspelled word now and then, things like that.

In this type of online context, rhetorical style and discursive skill are the central in people’s self presentations and sense of affiliation with the online group. In SeniorNet, members are expected to respond in a timely way to posts, to respond personally when they are named personally in another’s post, and to maintain the general ethos of civility and friendliness that was described in our earlier section. These particular discursive qualities of SeniorNet are what create the distinctive social space of SeniorNet which makes it hospitable to and compelling for a particular social group. At the same time, these qualities are also what create barriers to entry for those who can’t keep up with the literacy demands of the community or who do not feel comfortable with the rhetorical style.
Identity

We see people’s sense of identity in relation to computers and other computer users as key factors in access. For SeniorNetters, this sense of identity is tied to their relations with family and friends, their immersion in contemporary American culture, as well as their age related identity.

In our interviews with SeniorNet participants, almost without exception, participants pointed to a family member or a close colleague who encouraged them to start using computers. Most of the online members learned how to use computers by practicing on their own and asking questions as needed. But the perceived relevance of computing, as urged by close relations who used computers, was clearly a key factor that drove computer usage. In fact, online participants tended to portray the learning as a relatively trivial matter after they were compelled to start using computers. Where there was a will, they found a way, even though if it was not always easy. Well over two thirds of interviewees described themselves as “self taught” with varying degrees of help from friends and family. The 1991 SeniorNet member surveys also support this description of autodidactic learning processes by SeniorNet members (Schwarz and Schwarz 1991). Of course, the people giving this account of the relative ease of learning are exactly the ones who learned enough to get online and participate. We have not been able to get accounts from people who were frustrated by the difficulty and gave up.

In our observations at the learning centers’ beginning online courses, people noted how friends and family were online and using email, and this was the primary factor motivating people’s desire to get online. More generally, others noted how computers
So anyhow I'm trying to keep an open mind about it. A little bit I say to myself, why does an old lady like me have to be bothered with all of this modern stuff? And on the other hand, I don't want to be left behind completely. I want to know what is going on in the world. So it's a mixed feeling.

This sense that one needs to “keep up” with computers indicates the ways in which the Internet has been taken up in the mass media and has recently become a pervasive social and cultural fact that is part of general US cultural literacy. Age is only one dimension of a person’s identity, and intergenerational relations, as well as an identification with contemporary American culture are all factors determining whether a person sees computers as for “somebody like me.”

While other computer using people and the pervasiveness of computers in current social life are all factors motivating access for people irrespective of age, seniors are unique in that they face a cultural barrier to access in the cultural equation of computers with youth. Our fieldwork with SeniorNet has indicated that age is indeed a significant identity category for seniors, especially as it relates to relations with technology. It is here that SeniorNet play a key role in challenging the stereotypes that say that computers are not relevant for seniors, and for providing an online context that is comfortable for an older age cohort. Jeanne Lee, a SeniorNet host, describes the kind of identity shift that SeniorNet promotes:
I think we were all leery of [the technology] at first, and kind of feeling our way along. But when new people come in now, they see everybody in their own age group doing all these kinds of things and they think, "well, you know, this one's seventy, I'm only sixty-eight. If she can do it, why can't I? I'm going to learn how.

As described in the earlier section on technical support, SeniorNet provides a communal space in which are keyed to the particular learning and discourse styles of seniors. One posting by a frequent participant in the AOL newcomer’s forum embodied the spirit of those providing technical support:

Hang in with us here at SeniorNet. We all had the same problems, at one time, that you do now. Most of the time you'll get an answer to your questions -- if we think we can help. At times we can’t---But that's rare :-). At times we may be away or busy doing other things, but eventually someone picks up the ball and runs with it. In a few short years you'll be as good as the grandkids, or more likely, better :-)    

Ram34

SeniorNet member

[email address]
Similarly, one of the instructors at a learning center described how the seniors in his classes have often dropped out of mixed-age computing classes at the local community college, as they felt alienated from the pace and style of instruction by “kid” instructors.

Network communities are clearly not the only contexts that could support identity shifts for people that feel alienated from technology. In fact, the high social demands of participation guarantee that network communities cater to people who desire more social interaction and support rather than those that are seeking lightweight interaction or informational resources. Many of the seniors we spoke to in the SeniorNet learning center computer classes pointed to information access, email communication with people they already knew, and standalone software applications (such as word processing or spreadsheets) as their goals for computer access. In fact, none of the students in beginning computer or online classes we observed specifically referred to participation in a community as a relevant goal for their computer use. One online participant described some dissatisfaction at SeniorNet’s focus on social support rather than information access during a time of particular need. “For example, my mother has fibromyalgia. I checked on the fibromyalgia site. Well they were patting each other on the hand, and saying ‘We kiss you and hug you and we love you.’ That is fine, I don’t disagree with that. But I wanted information.”

While acknowledging that network communities are not appropriate for everyone at every time, we would also like to stress that people may not see network communities as interesting or relevant prior to their involvement in one because they are not aware of what network communities are. In other words, lack of perceived relevance can be considered a sociocultural barrier to entry that may exclude people who could benefit
from participation. People may find themselves drawn toward heavily-advertised uses of the Net such as e-commerce on the Web and more accessible forms of interpersonal interaction such as individual email exchange, thus missing out on forms of access that may be more demanding, but can lead to stronger and more richly contextualized social ties.

Many participants in SeniorNet online found the community through friends or the press which touted the benefits of network community, and many also happened across SeniorNet as they were surfing the Internet or AOL, though they were not specifically seeking a network community. These latter cases point to the fact that relevance and identification can only be recognized after a certain amount of exposure to a particular social practice; it is important that people be able to explore a range of online possibilities, without a priori foreclosing certain possibilities. Seniors may not be aware of the benefits of interpersonal and communal uses of the Internet, although this is a compelling use for seniors once they get online. SeniorNet’s 1995 survey of members indicated that only 9.5% of respondents listed to “connect with others” as a reason to purchase a computer, although 47.6% ended up using the computer for telecommunications (SeniorNet 1995). People’s imagined uses of computing can often be quite different from what they actually end up doing.

Just as it may require an identity shift to consider that computers are “for me,” it may also require exposure and a similar identity shift to consider that network communities may be relevant and appropriate. In fact, like the “nerdy” image of computer users in general, network communities also suffer from being typecast as a haven for socially-challenged people. This may take the form of a stereotype that such participation is
appropriate for people who are homebound or in remote areas, but it is not for socially
and physically active seniors. Such stereotypes can be considered a cultural barrier to
access which must be overcome for people to become participants in a network
community. Contrary to these stereotypes, our observations of SeniorNet online have
demonstrated that the community caters to highly sociable and communicative
individuals.

**Community Empowerment**

Many current efforts to support online access by technologically disenfranchised
groups have taken a regional focus, through community networking projects and through
support of local public institutions such as schools and libraries (Frechtling et al. 1999).
The SeniorNet learning centers also follow this model by providing basic computer
classes and organizing local user groups through community institutions such as senior
centers. By contrast, SeniorNet Online provides a rare case of a different kind of model
for using community to support online access for a population not well-represented on
the Net. SeniorNet Online shares a family resemblance with groups such as Planet Out,
Net Noir, Systers, and LatinoNet, which provide online contexts for developing group
solidarity around marginalized identity categories. Rather than growing out of regional
affiliation, these groups leverage forms of affiliation that span geography. We believe
that efforts of this nature are one vehicle for overcoming sociocultural barriers to access
that often track along cultural categories such as gender affiliation, age cohort, race and
ethnicity.
In order to gain access to a community like SeniorNet Online, there are requirements, as described above, to have certain forms of literacy and to find meaning and relevance in the online activity. There also must be a conscious shaping of the online technological and policy infrastructure in order to support this kind of active community participation. We have chosen to call this characteristic of a successful community “empowerment”, a term familiar from many forms of community activism. In recent years, “empowerment” has taken on a considerably less benign connotations in the corporate world, where it is used to describe a consequence of downsizing and flattening of management hierarchies, where line workers may find themselves with more responsibility but just as little authority.

In a voluntary community like SeniorNet, however, empowerment describes the result of policies and practices which give participants a sense of active voice, robust participation, and sense of ownership of the online space. This sense of empowerment comes only if the community participants take up the power to shape and change the site, but much of the onus for enabling this sense of community authority rests with the designers and administrators of the site.

Creating a site that enables this kind of empowerment takes a great deal of work. SeniorNet has struggled throughout its history to gather grants, membership dues, and other donations in order to continue its operations. SeniorNet as an organization carefully attends to developing a cadre of volunteers, supporting those volunteers, and respecting the autonomy of participants, even in disputes. Staff orient their work explicitly toward fostering community and a sense of solidarity rather than developing an
Marcie Schwarz, the Director of Education at SeniorNet, 
describes this orientation:

On our site, the goal has always been to encourage active participation. . . We thought that we were creating a structure for an online community in which they could collaborate and support one another. That has been our objective. I think people see that it's a place if they want to get more than just information like on a search engine.

SeniorNet puts a great deal of effort into social (as compared to technical) facilitation. This involves the work of volunteers in supporting new and existing members, as well as the work of the SeniorNet staff in supporting volunteers and members. Schwarz, as the staff member overseeing the online component of SeniorNet, is in close contact with the volunteers and encourages them to take responsibility whenever possible. While community members may turn to her to mediate disputes, she encourages community members to resolve their own problems and define the content and norms of their community.

We believe that the nonprofit status of SeniorNet, as well as its philosophy of community empowerment, has been crucial to its success. Staff have mentioned that volunteer help is a necessity because of limited funds. While this could be considered a limitation to growth, it has created a strong sense of community ownership that has enabled a sense of solidarity and personal investment among community members. In contrast to consumer or information access sites, there are responsibilities as well as benefits of participation.
In our interviews with the volunteer hosts involved in SeniorNet Online, we were consistently impressed with the degree of commitment and the amount of time spent tending to the community. The hosts on the Web described how they gradually developed their sense of roles and responsibilities through a variety of experiments. When they discovered that their “Newbie Nook” was not being discovered by newcomers, they developed a practice of scanning the entire site for people whose names they do not recognize, people who explicitly introduce themselves, or people whose postings sound hesitant. When the hosts have identified people who seem to be newcomers, they send them welcome letters that include information on how to navigate the site. Jeanne Lee, one of the five hosts who performs this role, estimates that approximately two hundred such letters are emailed out every month. Other hosts attend to specific discussion areas, which were gradually developed as volunteers opened new areas in response to community interest.

When we consider the work of facilitating an online community like SeniorNet, an analogy that comes to mind is the work of administering a public space such as a city park. The wardens of the park must insure the maintenance and smooth operation of the site, but they also are responsible for ensuring that it serves the needs of the community, ideally by encouraging community uptake and appropriation of the space. We believe that the nonprofit sector has a valuable role to play in maintaining these kinds of “public” online spaces that are open to community appropriation and remain relatively free of overriding commercial interest. In addition to providing space that is open to community uptake, SeniorNet has, more specifically, created this space in support of a population that can truly benefit from this kind of social and technical resource.
This case has particular relevance for other forms of social organization and activism that seek to promote a sense of solidarity and group consciousness, whether around certain ethnic groups, professional communities, or special interests. By opening up a space of possibility and supporting the development of community empowerment, SeniorNet has provided the tools to activate and mobilize a sometimes marginalized social group. It is important to stress that this sense of community and solidarity has been achieved by allowing members to substantively self-organize and find a voice as active members, technical experts, and leaders in the networked world.

CONCLUSIONS AND RECOMMENDATIONS

Researchers engaged with the digital divide debates are increasingly aware of the need to attend to social and cultural contexts of access to the net (e.g., Clement and Shade 1996; Kling 1998; Shade 1998), and ethnographers are beginning to document the social and cultural contexts of online communication (e.g. Cherny 1999; Hine 2000; Markham 1998; Miller and Slater 2000). There has still, however, been little articulation of the relation between these different research endeavors. We see our work as one step in the effort towards comparative ethnography of network communities (Miller and Slater 2000, 9-10) oriented towards issues of differentiated access. It will be through more extensive ethnographic documentation of different online groups, analyzed in relation to broader demographic indicators of access, that we can arrive at a more complete picture of not only who has access, but also the meaningful contexts in which access takes place. Here
we make some initial efforts to extend what we have learned from the SeniorNet case to other groups.

*Network communities provide communal benefits that differ from the benefits of information retrieval or more individualized interpersonal communication.*

Information retrieval and individual email exchanges are important types of online activity that drive much of the interest in accessing the Net. We believe, however, that it is also important to pay attention to communal contexts and the multilayered social ties fostered by groups such as network communities. In contrast to information retrieval and lightweight interpersonal interaction, network communities provide contexts oriented toward social support and a sense of group solidarity. The visibility of SeniorNet as a robust community of computer using seniors contributes to a general cultural shift, creating meaningful contexts for seniors to participate online as well as changing perceptions in the population at large. SeniorNet breaks down a cultural barrier to entry for seniors as a whole by challenging the stereotype that seniors are technophobic.

In order to mitigate against the socially alienating effects of networking technologies, it is crucial to foster meaningful contexts as well as individual connectivity. Our unit of concern needs to extend beyond the activities of individuals to the social contexts and communities that support this activity.

*Network communities cater to highly literate and sociable populations.*
In turning to network communities as a particular kind of online destination, we have found that literacy and identity issues take on added salience. In comparison to information retrieval, active participation in a network community requires a high degree of comfort with written expression, a strong interest in interpersonal contact, as well as identification with and a stake in the community in question.

We have found that network communities are rewarding online destinations that provide important social and technical support, and yet the high social, technical, and cultural barriers to entry mean that it can be difficult for people to gain and sustain access. Further, people may not realize the benefits of network communities, in part, because of a cultural barrier that suggests that such contexts are for people who lack other social outlets. Given the multiple requirements for as well as multiple benefits of participation in network communities, we feel that it is important that diverse network communities are supported and that new users be exposed to and encouraged to participate in such communities.

*Technical support is an important by-product of participation in a network community.*

While social support and solidarity have emerged as the most salient benefits of participation in a network community, we found that technical support is a crucial by-product of engagement. We believe that this is the case for any community that relies on a technological infrastructure. When technology is embedded in the everyday practices of a community, technical support becomes part of the ongoing social exchange, which happens on an ad hoc and informal basis and is distributed throughout the community.
Unlike formal instructional contexts or materials, this kind of technical support is peer-based and often invisible. Further, a communal context allows access to expertise that is keyed to the specific learning styles of the population in question, and is situationally and time sensitive, responding to the specific needs of the group and ongoing technical changes.

The SeniorNet case suggests that technical literacy and access are often effectively driven by a sense of social relevance and interpersonal exchange. Unlike early adopters who are attracted to technology itself, it is more typical of mainstream users that their use is preceded by compelling social engagements such as those provided by network communities. Given this, the question of technical literacy can be addressed not only by providing instructional materials and contexts, but also by supporting contexts for people to do interesting, technology-supported things together on an ongoing basis.

*Broadening net access means allowing diverse groups to have a stake in the networked world.*

The SeniorNet case provides a window into what it takes to organize a network community for a population that is not well-represented on the Internet. By well-represented, we mean actual numbers of people online, as well as cultural representation, the sense in which the content of the Internet reflects the cultural references of a particular social group. Supporting such a community requires more than creating infrastructure and providing classes, though these are important parts of the effort. In addition, we have found that SeniorNet was able to hit the right balance between
providing a context for identification (around a diffuse "senior" identity) and creating openness for group members to self-organize and mobilize on their own terms. Rather than dictate topics or adhere to a rigid notion of what it might mean to be a senior, SeniorNet, by necessity and by design, allowed members to grow the community over many years into something of their own making. We found this history and continuity to be crucial. Combined with a critical mass of core participants, SeniorNet has emerged as a resilient and long-standing community that can handle the comings and goings of individual participants.

We have also found that the nonprofit aspect of SeniorNet has been important in supporting this sense of community empowerment. While it is not inconceivable that a commercial effort could support such a community, the nonprofit context allows for a sense of community ownership and distributed responsibility that is at odds with the interests of a profit-making venture. Stakeholding in a community is a shared social responsibility and a meaningful personal interest, not a financial investment or transaction.

Enfranchisement is not a matter of possession (I have access or I don’t), but rather it is a model of social and cultural inclusion—which means identity issues, questions of belonging, and the issues of relevance and meaning. Being “marginal” means having neither the means to participate nor the shared context to do so. Seniors may generally feel that the Internet is not for “people like me,” but SeniorNet creates a context in which seniors can identify with other seniors. It creates social and cultural identifications and investments in the networked world for a group that is not as well-represented on the Net as in the general population. It is crucial that this kind diversity be supported online for
seniors as well as other underrepresented populations. The Net will become a truly
diverse and democratic domain not through corporations marketing to and providing
content to a diverse clientele, but through diverse people actually having a stake in and
responsibility for their participation on the Net. We can recast some of the terms of the
digital divide debate to consider the importance of creating social boundaries and
differentiated cultural contexts to support the access by different social groups, or more
specifically, different social identities.

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