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Are Virtual Communities True Communities?

Examining the Environments and Elements of Community

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Critiques of modern societies often cite the loss of community as a result of weak connections with local places and changing modes of social interactions. We will argue that both the loss of community and attempts to regain community can be understood as a series of debates progressing from one environment to another. Specifically, community was seen as being lost from its original environment, the local place, typically a village or a residential neighborhood. Then came the claim that community could be regained in the environment of shared space, typically voluntary associations or work groups. The most recent candidate for regaining community is the digital environment of cyberspace. Using existing research, we seek to determine if virtual communities are indeed true communities. Can the virtual community provide two of the core elements—common ties and social interaction—without identification with place? We explore each of these environments as we search for community and the qualities necessary to establish community, finding that virtual communities are spatially liberated, socially ramified, topically fused, and psychologically detached, with a limited liability. In this sense, if we understand community to include the close, emotional, holistic ties of *Gemeinschaft*, then the virtual community is not true community. That does not necessarily imply, however, that Internet relationships are the antithesis of true community relationships. The Internet may either reduce community, reinforce community, or provide a weak replacement.

Critiques of modern societies often include the loss of community, due to weak connections with local places and changing modes of social interactions. The idea that Western societies lose community as they modernize has been an ongoing theme in sociology since Tönnies's *Gemeinschaft und Gesellschaft*. Tönnies, Simmel, Wirth, and to a lesser degree, Durkheim, Marx, and Weber all concluded that, on balance, the quantity and quality of community is reduced when a society becomes more urban, more industrial, more *Gesellschaft*-like.

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Simmel's (1936) famous observation that "one nowhere feels as lonely and lost as in the metropolitan crowd" illustrates a common theme of alienation and lost community in classic social theory. More recently, analysts such as Nisbet (1976), Bellah (1996), and Putnam (2000) traced this theme in the United States, concluding that community is indeed diminished. Often, then, assessments of modern and even postmodern societies include the "eclipse of," "decline in," or "loss of" community. Although the nature of community decline remains debatable, there is nonetheless a wide acceptance of this decline and numerous searches for the lost community.

THE COMMUNITY DEBATE

We will argue that both the loss of community and attempts to regain community can be understood as a series of debates progressing from one environment to another. Specifically, community was seen as being lost from its original environment, the local place, typically a village or a residential neighborhood. Then came the claim that community could be regained in the environment of shared space, typically voluntary associations or work groups. The most recent candidate for regaining community is the digital environment of cyberspace.

Much of the debate on whether lost community can be regained focuses on the degree to which community can exist without a local place. Melvin Webber (1963) was among the first to argue for a "community without propinquity" as Americans became more closely tied to voluntary associations than to local neighborhood communities. More generally, voluntary associations can be seen as an environment for community based on shared space. The shared space is a church, a bar, a workplace, or anywhere that regular face-to-face interaction occurs. The shared space has a location, but unlike the local place, the specific location is not important for common ties or social interactions to exist (e.g., the church might move from the downtown location to the suburbs, but the community remains). Yet some analysts argue that shared space is insufficient for true community. Robert Wuthnow, for example, sees the weak ties in shared space as fundamentally diminishing the quality of community.

The social contract binding members together asserts only the weakest of obligations. Come if you have time. Talk if you feel like it. Respect everyone's opinion. Never criticize. Leave quietly if you become dissatisfied. . . . We can imagine that these small groups really substitute for families, neighborhoods, and broader community attachments that may demand lifelong commitments, when, in fact, they do not. (Wuthnow, 1998, pp. 3–6)

Unlike Wuthnow, Robert Putnam believes the ties in shared space of voluntary associations are sufficient for community, but we are not participating enough in things like fraternal organizations, religious affiliations, and labor unions.

Over this quarter century the number of voluntary associations roughly tripled, but the average membership seems to be roughly one-tenth as large—more groups, but most of them much smaller. . . . Official membership in formal organizations is only one facet of social capital, but it is usually regarded as a useful barometer of community involvement. (Putnam, 2000 p. 49)

Although the loss of community debate continues (Greeley, 1992; Ladd, 1999), some sociologists have begun to recast the debate, arguing that as modern society gives way to a postmodern society, a new replacement for the lost community is emerging in cyberspace ([Haythornthwaite, 2001](#)). According to the emerging debate, the explosion of the Internet provides either a new medium for an expanded, enhanced community (Wellman, 2001) or a refuge for social isolates avoiding real-world relationships (Kraut et al., 1998; Nie, 1999). Using existing research, we seek to determine if virtual communities are indeed true communities. This progression of losing and regaining community in the local place, then shared space, and now cyberspace begs the question of whether the essential elements of community can be found in each environment. However, answering that question requires defining one of the most nebulous concepts in the social science lexicon.

DEFINITIONS OF COMMUNITY

Since Robert Park's (1936, p. 3) classic definition,

The essential characteristics of a community, so conceived, are those of: (1) a population territorially organized, (2) more or less completely rooted in the soil it occupies, (3) its individual units living in a relationship of mutual interdependence . . .

the concept of community has been continually redefined and remains extraordinarily slippery. Less than 20 years after Park's definition, Hillery (1955) found no fewer than 94 different community definitions (e.g., a group, a process, a social system, a geographic place, an attitude, a common lifestyle, local self-sufficiency) and observed that no complete agreement exists as to the nature of community. Still, Hillery concluded that three core elements were essential components of most definitions: (1) a specific place—a point crucial to the analysis of cyberspace, along with (2) common ties—perhaps the least analyzed of the three elements, and (3) social interaction—the *sine qua non* of community. Although few terms can match “community” in definitional imprecision (Sutton and Munson, 1976), most sociologists could accept a traditional definition including the three core elements identified by Park and later confirmed by Hillery—identification with a specific geographic area, common ties through an identification by the residents with one another and with that area, and, finally, significant social interaction among the residents (Lyon, 1999).

For virtual communities, the first element is especially important. Although conceiving of a community as “rooted in the soil” seems quaint in a modern society, the traditional idea that a community has a spatial reference or identification with place continues ([Grannis, 1998](#); [Orum, 1998](#); [Molotch, Freudenburg, and Paulsen, 2000](#)). By definition, the element of identification with place seems to exclude the concept of a virtual community. The latter can be defined briefly and initially as people who form communities through computer-supported social networks within a social structure in cyberspace after prolonged discussions (Dean, 2000; Wellman, 2001). The virtual community does not include identification with place, but it does require common ties and social interaction. Thus, we can now recast our original question with more precision. Can the virtual community provide two of the core elements—common ties and social interaction—without identification with place? Answering this question requires detailed specification of each of these three core elements.

THE CORE ELEMENTS OF COMMUNITY

IDENTIFICATION WITH PLACE

The lost community thesis often argues that what was lost was a village or small town, a local place where one was born, raised, and died—a local place with inherently intimate, holistic relationships. Tönnies stresses the importance of place in his original description of the *Gemeinschaft*-like community.

A common relation to the soil tends to associate people who may be kinsfolk or believe themselves to be such. Neighborhood, the fact that they live together, is the basis of their union . . . this type is the rural village community. (Tönnies, [1887] 1957, p. 257)

To assess the necessity for an identification with place for community, it is important to note that when sociologists speak of the “loss” of community, there are at least two distinct meanings ([Bernard, 1973](#); [Lyon, 1999](#)). The psychological meaning focuses on the social interaction dimension of the community and analyzes the alienation that can come from the loss of community ([Bellah, 1996](#); [Putnam, 2000](#)). The territorial meaning focuses more on the specific area and the diminishing identification with place ([Gans, 1962](#); [Greer, 1962](#); [Kasarda and Janowitz, 1974](#); [Hunter, 1975](#); [Ahlbrandt, 1984](#); [Wellman and Wortley, 1990](#)). Both meanings share the same primary source for the loss of community—the urban, industrial mass society—and both describe similar problems—excessive individualism, alienation, and a resultant lower quality of life.

Although the two types of community that are “lost” can be conceptually distinct and are treated as separate phenomena in most literature, they are, nonetheless, closely related. Robert Nisbet, in the preface to the more recent printings of his famous treatise on individual alienation in the mass society, *The Quest for Community* (originally published in 1953), relates the decline in identification with the place and property of the territorial community to the more psychological alienation from close, personal interaction.

Similarly, I think alienation from place and property turns out to be, at bottom estrangement from those personal ties, which give lasting identity to each. Native health is hardly distinguishable from the human relationships within which landscape and animals and things become cherished and deeply implanted in one’s soul. (Nisbet, 1976, p. xii)

Analysts such as Nisbet believe the decline in the relevance of and identification with the territorial community is related to the decline in *Gemeinschaft*-like interpersonal relations; both reinforce one another and both are seen as symptoms of a modern society. If Nisbet is correct, and if identification with local place is necessary for psychological community, then a virtual community is impossible. However, if community can exist based only on common ties and social interaction, then a virtual community remains a possibility.

COMMON TIES

The proposition that the common ties necessary for *Gemeinschaft*-like community can emerge without the advantages of an identification with place did not originate with the

concept of cyberspace. Without reference to place, Tönnies claims that the *Gemeinschaft*-like common ties may exist in social organizations or corporate bodies such as leagues, fellowships, associations, or special interest groups.

These social bodies and communities retain their common root in that original state of belonging together, which according to our concept is the *Gemeinschaft*. Indeed, although the original state of common being, living, and working is changed, it retains and is able to renew its mental and political form and its cooperative functions . . . the essence of both *Gemeinschaft* and *Gesellschaft* is found interwoven in all kinds of associations. (Tönnies, [1887] 1957, p. 58)

The Internet certainly provides the opportunity for associations based on all manner of shared interests. Yet, observers such as Galston (2000) contend that newsgroups, fan clubs, mailing lists, or chat rooms do not constitute a community because a true community must have more things in common than a narrowly defined topic. For example, Amitai and Oren Etzioni (2001) believe that people meeting for the first time in a chat room may have a shared interest, but they would not have the broader common ties that constitute a community. Common ties require commonalities; the group of individuals on the Net must have a bond, a measure of commitment, a set of shared values, a culture, a history, and a shared identity. The Etzionis argue that the process of sharing values for the virtual community relies on a prior history, communal identity, experiences, and rituals, thus a need for a communal memory. The views of the Etzionis (2001) and [Galston \(2000\)](#) suggest that even with a measure of shared values, culture, and history, the common ties in virtual communities are often qualitatively different from those in traditional communities. Beyond the qualities of identification with place and common ties, are the social interactions also different?

SOCIAL INTERACTIONS

Perhaps the most important and widely analyzed elements of community are the number and nature of social interactions. Tönnies describes the social interactions of *Gemeinschaft* as being based on:

the feeling that we are intimate, that we affirm each other's existence, that ties exist between us, that we know each other and to a certain extent are sympathetic toward each other, trusting and wishing each other well . . . we have certain values in common . . . a definite mutual action must regularly result . . . which one feels obligated. (Tönnies, [1887] 1957, p. 9)

According to previous research and analysis, the ideal *Gemeinschaft*-type interactions reflect relationships that would be:

- Close and intimate (Redfield, 1947; [Tönnies, 1957](#); [Wellman and Gulia, 1999](#)).
- Holistic and all-encompassing (Park, 1936; Redfield, 1947; Bateman and Lyon, 2000).
- Emotional and supportive ([Fischer, 1975](#); [Wellman and Gulia, 1999](#)).
- Long term and enduring (Suttles, 1968; Rubin, 1969).
- Based on common values (Tönnies, 1957; Etzioni and Etzioni, 2001).
- Associated with regular social interaction ([Hillery, 1955](#); [Tönnies, 1957](#)).

If the many social interactions in virtual communities contain these elements, then the nonspatial and nonfacial contact interactions in virtual communities would not be qualitatively different from those associated with traditional communities based on local place or shared space. With similar *Gemeinschaft*-type relationships, virtual communities would resemble what traditional communities are thought to be, lacking only the spatial reference and the face-to-face contact. However, it appears that the quality and the quantity of the interactions in cyberspace are substantially different from the face-to-face interactions in the local place or shared space environments. While some relationships in virtual communities seem close and intimate, “there is legitimate concern about whether true intimacy is possible in relationships that operate only online, the Net promotes the functioning of intimate secondary relationship and weaker ties” (Wellman and Gulia, 1999, p. 183). The most effective way to address these concerns and to assess the nature of interactions in cyberspace is to analyze the environments of the local place, shared space, and then cyberspace. While the local place, shared space, and cyberspace may have many of the same qualities, we expect considerable variations to exist in each environment.

THE ENVIRONMENTS OF COMMUNITY

LOCAL PLACE

The original concept of community was an ideal type that emphasized local place, common ties, and social interaction that is intimate, holistic, and all-encompassing. Tönnies contrasted the types of relationships appearing typically in extended families or rural villages (*Gemeinschaft*) with those found in modern, capitalist states (*Gesellschaft*). *Gemeinschaft*-like relationships are based on sentiment, tradition, and common bonds. The basis for these relationships is in either the family or the “soil” (i.e., living and working in a local place). *Gemeinschaft* is characterized by a strong identification with the community, emotionalism, traditionalism, and holistic conceptions of other members of the community (i.e., viewing another as a total person rather than only as a segment of his status or viewing a person as significant in her own right rather than as a means to an end). Since *Gemeinschaft* is an ideal type, there is no place where one can find total *Gemeinschaft* or, for that matter, complete *Gesellschaft*. Rather, they are hypothetical, extreme constructs, existing solely for the purpose of comparison with the real world. This “gold standard” community where residents identify with the local place, where common ties bind them together, and where all interactions are completely holistic has never existed. Instead, human organizations and relationships fall somewhere in between *Gemeinschaft* and *Gesellschaft*.

Yet, the question remains: Does local place still matter? Confining community to solely spatial conditions clearly neglects the relational elements (common ties and social interactions) necessary for community, and a body of research shows that just because people are neighbors, does not necessarily mean they are friends (Fischer, 1982). Local place is certainly not always *sufficient* to produce community, but the question is: Is place *necessary* to produce community? Can communities without local place meet the needs traditionally met by a village or a neighborhood?

SHARED SPACE

Some argue that community has not really been lost since common ties and social interaction can exist without the local place. These ties and interactions can exist in a more generic, nonresidential shared space, such as a school, workplace, church, or social club. The common tie could be to a company or a religion; the social interactions could be of an intimate and holistic nature. Therefore, some analysts argue that voluntary associations, the workplace, or other meeting places can meet the same psychological needs that we assumed small towns and neighborhoods once met (Webber, 1963; Rubin, 1969; Zablocki, 1979; [Fischer, 1982](#); [Oldenburg, 1989](#)).

Urban planner Melvin Webber was among the first to suggest that the concern for the lost local community is unnecessary and that attempts to revive the territorial community (local place) are misplaced. In an article, subtitled "Community without Propinquity," he argued that the concerns of analysts such as Nisbet over the standardization and centralization of the mass society are unfounded because "rather than a 'mass culture' in a 'mass society' the long term prospect is for a maze of subcultures within an amazingly diverse society" (Webber, 1963, p. 29). However, the basis for this subcultural variation is not the territorial community. Rather, "Americans are becoming more closely tied to various interest communities than to place communities" (Webber, 1963, p. 29). A similar observation is made by Israel Rubin (1969, p. 116).

The romantic theme that modern man has "lost" his community is fed by the common observation that the neighborhoods, towns, and cities have ceased to serve as significant foci of identification for the mobile man of industrial society. However, from our vantagepoint we see no reason for saddling the concept with the territorial element.

Rubin, like Webber, argued that the territorial, local place community is becoming irrelevant. Still, the idea of community requiring a local place is a powerful one with remarkable staying power. Thirty years after Rubin's observations, we find that network analysts such as Barry Wellman (Wellman and Gulia, 1999, p. 169) still feel obligated to "educate traditional, place-oriented, community sociologists that community can stretch well beyond the neighborhood." Research has established a widespread connectivity in cities. In the shared space, the community ties are often long-distance relationships extending far beyond the neighborhood (Gans, 1962; [Wellman, 1979](#); [Fischer, 1982](#); Greer, 1962; [Hampton and Wellman, 2001](#)).

Still, the idea that communities based on shared space can replace the local place community as the primary basis for the psychological feelings of community is questionable. A base level of community rises naturally from residential propinquity. While professional associations, labor unions, religious groups, and other voluntary associations can provide a measure of *Gemeinschaft*, the local place community seems certain to remain a primary basis for the psychological community. For example, Benjamin Zablocki (1979, p. 108) maintains that a psychological community requires an "infrastructure" of interpersonal interactions to maintain itself and observes that while a voluntary organization "must nourish this infrastructure out of a surplus of its members' vested resources, if any such surplus remains after the manifest goals of the organization are met," in the territorial (local place) community, "proximity itself provides for the greater part of

the maintenance of this infrastructure without the deliberate intention of the individuals involved.” In other words, when people live near one another, a level of interaction and common identification is naturally forced upon them. Shared space and voluntary associations can and do supplement the local place, but it is difficult to foresee a time when *Gemeinschaft* is no longer associated with the local place. Still, it seems clear that in shared space, the common ties and social interactions can and do exist without local place.

Organizational ties and networks found in shared space serve as a predecessor to the types of relationships found in cyberspace. The search for community continues outside the territorial local place and outside the confines of an organization meeting in a shared space to the virtual environment of nonspatial cyberspace.

CYBERSPACE

The most recent extension of the idea that community can exist without local place is the concept of a virtual community existing in cyberspace. Now the argument is pushed further: not only is local place not necessary,¹ neither is shared space. This means that face-to-face contact is not necessary for the common ties and social interaction associated with community.

Barry Wellman has long argued that communities can be liberated from traditional spatially compact, densely-knit neighborhoods to a person-to-person community that is completely independent of local place or shared space (e.g., connectivity through wireless cell phones where one interacts with another regardless of location). Wellman (2001, p. 228) defines community “as networks of interpersonal ties that provide sociability, support, information, a sense of belonging and social identity . . . not limited to neighbourhoods and villages.” According to Wellman, communities function as networks, not local groups. These networks of family, neighbors, friends, and co-workers are partial communities that are loosely connected and fragmented (Wellman and Leighton, 1979; Wellman, 2001). From this perspective, the community networks can exist in local places, shared spaces, and cyberspace. People effectively use the technology of the Internet to create networks and sustain community ties in cyberspace, thus forming relationships that are both meaningful and supportive (Wellman, 2001). If Wellman is correct, then virtual communities in cyberspace can provide the same quality of common ties and social interactions that can be found in shared spaces and even local places.

The following section addresses the qualities of virtual communities in cyberspace and assesses the degree to which virtual communities contain *Gemeinschaft*-type elements of identification with place—the common ties and social interaction necessary for community. We will argue that communities in cyberspace are spatially liberated from geographic and social boundaries, socially ramified in their connections, topically fused in areas of interest, psychologically detached from close interpersonal ties, with only limited liability for their members. These characteristics of virtual communities, when contrasted with the characteristics of the ideal *Gemeinschaft*-type relationships, enable us to evaluate the differences between the nonspatial cyberspace community and the spatially based communities in local places and in shared spaces.

IDENTIFICATION WITH PLACE IN CYBERSPACE

Spatially Liberated

Certainly the most visible and possibly the most crucial difference between cyberspace and other types of community is the absence of place. Almost by definition, the virtual community in cyberspace has been liberated from confines and constraints of place (Wellman, 2001). Even before the Internet, Western society privatized community with the automobile and the suburbs, telephones and television, all resulting in less time in public places and more activities indoors and in private homes. Community building activities such as visiting friends at a café, or dropping in on the barbershop on Main Street to catch up on the local gossip, grew less common. It may be that relations in virtual communities are sufficient to offset the declining importance of local place (Katz, Rice, and Aspden, 2001; Wellman, 2001). Whether this is the case depends, of course, on the level of common ties and quality of social interaction in virtual communities.²

COMMON TIES IN CYBERSPACE

Two distinctive characteristics emerge from the literature on the types of ties that develop among Internet users; neither lends itself to a *Gemeinschaft*-like community.

Socially Ramified

In comparison to the communities of local place and shared space, cyberspace communities tend to be more numerous and more heterogeneous in social characteristics such as race, region, or income (Hiltz and Turoff, 1993). Thus, we may follow Fischer (1975) and conclude that the virtual community is ramified in its ties and social interactions. On the Net, it is possible to maintain an increasing number of ties in virtual communities. The easy accessibility of e-mail and Internet chat rooms supports sending messages to a large number of people and remaining in contact with multiple social environments (Wellman and Gulia, 1999). In cyberspace, therefore, the virtual community can easily support ties to a large number of people. Participants are almost effortlessly connected to virtual communities that would not exist otherwise (Wellman et al., 1996). The virtual community allows participants to increase both the number of community ties and the diversity of the people whom they encounter. While we are likely to resemble our family, neighbors, fellow worshipers, and co-workers in racial and social background, a chat room of Star Trekkers, for example, may be of any racial category, educational level, religion, political party, or income level. Of course, the participant may also join groups discussing Star Wars, Spiderman, and Britney Spears, but the fact that one may belong to a large number of interest groups in cyberspace does not mean that any of them contain qualities of *Gemeinschaft*.

Limited Liability

The virtual community holds only limited liability for its members (Greer, 1962; Suttles, 1968). The ties binding virtual community relationships are typically weak, reflecting a marketplace approach to community much like that described in the recent analysis of Wuthnow (1998). Virtual communities are self-selecting, contingent, and often transient,

with short attention spans. In the traditional community, relationships are more permanent and based on affective ties. An essential aspect of a traditional community is the assumption that the members of the community will always be there. Virtual members, however, can shut others out with one click of the mouse (Dean, 2000). It is not easy to leave one's family, move from a familiar neighborhood, change or renounce one's religion, or find a new workplace, but one can obtain a new e-mail address, chat room, website, or Usenet by just the click of the mouse. In the cyber relationship, it can be easier to replace the relationship, change chat rooms, or "move" to another virtual community than to work out differences. Due to the lack of face-to-face contact and the weak ties, virtual communities in cyberspace, unlike the local place or shared space community, have only limited liability for their members. While cyberspace lacks the identification with place and has ramified and weak common ties, it is also expected that social interactions in cyberspace will vary from the types of interactions in the local place and shared space.

SOCIAL INTERACTIONS IN CYBERSPACE

Two characteristics of social interactions in cyberspace suggest qualities that generally appear antithetical to *Gemeinschaft*.

Topically Fused

In cyberspace, interactions are topically fused in their focus. Interactions in the virtual community are narrowly focused on specific topics and specialized (Wellman and Wortley, 1990; Kling, 1996); relationships in the local place are viewed as holistic and all-encompassing (Park, 1936; Redfield, 1947). Internet relationships are highly segmented and are usually based on shared interest rather than the more holistic relationships based on family, neighborhood, or work relationships. While our Trekkers are from various racial groups, educational levels, religious groups, and income levels, they will all know and care about the Borg's battles with the Federation. Thus, the interest in Star Trek may be intense and also narrow in that concerns are not likely to extend beyond the Federation's quadrant of the galaxy. Our parents, spouse, neighbor, or even co-worker may be interested in what we had for dinner, what we think about the local football team, and how late our teenagers stayed out last night; members of our Star Trek chat room probably will not. Online discussion groups tend to fragment into narrower and narrower topics as users share a specific topic of interest (Shapiro, 1999; UCLA CCP, 2000). Cyberspace communities foster specific communities of interest rather than communities of multi-interests that support a personal closeness and broad familiarity among members (Wellman and Gulia, 1999).

Psychologically Detached

The quality of social interaction necessary to create and sustain community requires a significant level of trust and intimacy. Virtual communities and online relationships may lack this psychological closeness. Many features of the virtual community do not promote interpersonal knowledge, trust, or commitment. Virtual communities may lack identity recognition in voice and tone, physical responses or gestures, and incremental signals from others resulting in deception or manipulation (Donath, 1999). Furthermore, such

anonymity allows people to send messages online that probably would not be articulated in a face-to-face conversation (Wellman and Hampton, 1999). Although there is little empirical data, the commonly expressed view is that the virtual community lacks an element of trust due to its limited information and social cues about the other community members (Donath, 1999; Etzioni and Etzioni, 2001). While members in a traditional, local place community will have a degree of social responsibility, the virtual community requires no commitment beyond one's own interest (Galston, 2000). Robert Putnam comments that while the Internet is a tool of communication, he is unsure if the computer-mediated communication can foster social capital and genuine community.

Anonymity and fluidity in the virtual world encourage "easy in, easy out," "drive-by" relationships. That very casualness is the appeal of computer-mediated communication for some denizens of cyberspace, but it discourages the creation of social capital. If entry and exit are too easy, commitment, trustworthiness, and reciprocity will not develop. (Putnam, 2000, p. 177)

Not only are members of virtual communities physically distant, they are socially distant as well. Participants seeking companionship or support rather than basic information may find virtual communities unfulfilling. The low level of trust, intimacy, and commitment make the kinds of emotional support associated with traditional, local place communities difficult to replicate in cyberspace.

Although it would be rare, a virtual community with a relatively small number of largely homogeneous participants could foster intimacy. And while achieving such conditions is difficult, it appears that virtual communities can achieve a level of intimacy if the number of participants is small, admission to the community is controlled, and people are honest about their identities (Etzioni and Etzioni, 2001). It becomes a tradeoff as users try to balance privacy, accountability, and trust (Donath, 1999). Thus, while the possibility for virtual communities with close psychological ties exists in theory, in practice, members of virtual communities are likely to remain psychologically detached from one another.

THE LACK OF TRUE COMMUNITY IN CYBERSPACE

In evaluating virtual communities, we find them unlikely to contain many aspects of the ideal *Gemeinschaft*-type relationships. Without exception, the non-*Gemeinschaft* characteristics of the virtual community in cyberspace reflect the absence of a spatial reference. The fact that virtual communities are spatially liberated increases the likelihood that they also possess characteristics antithetical to *Gemeinschaft*. Relationships in communities without a spatial reference are more likely to be socially ramified and topically fused, resulting in community members who are psychologically detached and feel only limited liability to the community.

Although virtual communities can include both common values and regular social interaction, the limited liability to the community reduces long-term stability and strong group identification. Further, given that virtual communities are likely to be psychologically detached, these communities will not have the qualities of close, intimate, emotional, and supportive characteristics of *Gemeinschaft*-type relationships. Finally, as virtual communities are socially ramified, they do not have the holistic knowledge of their virtual neighbors common in *Gemeinschaft*-type relationships of traditional communities in

TABLE 1. Community Environments and Elements

Environments	Core Elements		
	Identification with Place	Common Ties	Social Interaction
Local place	+	+	+
Shared space	±	+	+
Cyberspace	–	±	±

+ element likely to be present.

± element may be present.

– element likely to be absent.

the local place, or even the organizations in the shared space. Thus, Table 1 posits that *Gemeinschaft*-type relationships cannot easily exist without place (the local place or shared space).

Our reading of the literature generally supports the proposition that the decline in the relevance of and identification with the local place is related to the decline in *Gemeinschaft*-type relationships. While the shared space of voluntary associations may provide a suitable environment for community, it seems plausible at this point to conclude that most virtual communities do not contain the necessary qualities of true community. However, such a conclusion does not address the related but conceptually distinct questions concerning the effects of the Internet on community.

NET EFFECTS ON COMMUNITY

While virtual communities, lacking a spatial component, have a difficult time providing the common ties and social relationships associated with *Gemeinschaft*, it does not necessarily follow that this is a problem. Most social entities do not create *Gemeinschaft*; even the traditional local place community often falls short (Fischer, 1995; Bellah, 1996; Wuthnow, 1998; Putnum, 2000). Holding virtual communities to the “gold standard” of *Gemeinschaft* may be unrealistic. Perhaps a more reasonable metric would be the impact of virtual communities on *Gemeinschaft*-like relationships. Are communications via the Internet likely to hinder or help the development of the common ties and social interaction associated with *Gemeinschaft*?

A significant body of research concerning Internet use and its effects on community is emerging. Many of the initial studies indicated a negative effect on community. Although these reports were often limited methodologically, the common view of detrimental effects on community persisted.

NEGATIVE EFFECTS

Observations that Internet-induced isolating, alienating individualism is replacing community typically generates more popular acceptance than empirical support. Initial reports indicated that long-term and intense Internet users would indeed replace community activities with solitary cyberspace activities. Many authors are concerned that Internet use may encourage spending more time alone, communicating with strangers, or forming

relationships with weak ties, displacing the higher quality face-to-face relationships of family and friends ([Thompson and Nadler, 2002](#); [Putnam, 2000](#)). Although lacking empirical support, Norman Nie (1999) suggests that people who spend even a few hours on the Internet each week suffer higher levels of depression and loneliness than less frequent users. According to Nie, isolation is reinforced, not reduced, in cyberspace. The Internet use provides a refuge for social isolates avoiding real-world relationships.

In a small, nonrandom study, [Kraut et al. \(1998\)](#) conducted the "HomeNet" study of first time users in Pittsburgh. The 73 households that agreed to participate in the study were given a free computer and Internet access. This longitudinal study included 169 people self-reporting on various scales of social involvement and psychological well-being. When compared with nonusers, participants in the HomeNet study spent less time in family communication, maintained fewer local social networks, received less social support, and reported higher levels of stress. The HomeNet study concludes that Internet use is associated with subsequent reductions in social involvement and increases in loneliness and depression.

POSITIVE EFFECTS

A major and widely cited empirical study of the Internet is the *UCLA Internet Report: Surveying the Digital Future* by the UCLA Center for Communication Policy (UCLA CCP). The sample included 2,096 American Internet users and nonusers in a national random-digit-dialing phone survey. According to the UCLA CCP Internet Report, two-thirds of all Americans use the Internet. The most popular activities are not the chat rooms that might create a virtual community, but web surfing, browsing, e-mailing, locating hobby information, reading news, and finding entertainment information. Most Internet users appear to be seeking information rather than social support. UCLA CCP (2000) reports that Internet users spend an average of 9.4 hours per week online and those who have more than four years of Internet experience spend on average a remarkable 16.2 hours a week on the Net. Surprisingly, users and nonusers spend roughly the same amount of time reading books, reading newspapers, and talking on the telephone.

The UCLA CCP (2000) data imply that the Internet may be a catalyst for creating and maintaining friendships. Users report that the Internet has had a modestly positive impact on both increasing contact with others and communicating more with family. Some users have friends known only online, while others have created in-person friendships that began on the Internet, thus making the Internet a new source of social contact. In fact, Internet users report having slightly more friends outside their household than do nonusers. Overall, however, few differences were found in comparing Internet users and nonusers. The Internet effects on community appear to be minimal, but positive.

Similar results were found in an earlier study of Internet use and its effects of community integration conducted by Katz and Aspden (1998). They compared users and nonusers in a national random-digit-dialing survey of 3,000 Americans. The results indicate that Internet use does not decrease shared space community participation, does not decrease face-to-face interaction, and does not promote social isolation. Overall, they conclude that the Internet probably strengthens ties and creates richer social relationships (Katz, Rice, and Aspden, 2001).

Probably the strongest evidence for positive effects comes from Wellman and Hampton's (1999) study of "Netville." Theirs was a two-year study of approximately 60 families living in a newly built, wired (equipped with Internet technologies) suburb of Toronto—Netville. The residents' ties tended to extend not only to those in close proximity, but throughout the Netville community (Wellman, 2001), and wired residents reported increased contacts with neighbors, family, and friends ([Hampton and Wellman, 2001](#)). The Net helped build relationships with neighbors and kept them informed of the community and neighborhood activities. Similar to reports from other hybrids like the WELL, the Internet activities of the place-based Netville encouraged and integrated face-to-face interaction. The Net enhanced participants' ties to the Toronto community. In fact, users recognized three times as many of their neighbors and spoke with two times as many neighbors as nonusers ([Hampton and Wellman, 2001](#)).

EMERGING CONSENSUS

Although it is hardly uncommon to find contradictory positions in the social sciences, the emerging consensus seems to be that the Net has a limited, but positive, effect on users' face-to-face interactions. In fact, some recent research reexamines and backs away from the claims of social isolation, loneliness, and depression (Nie, 2001; Kraut et al., 2002). In an updated study, Nie (2001) tries to reconcile some of the negative findings by arguing that the key to the isolating effects is often the amount of time spent on the Internet. His survey results indicate that excessive time spent on the Internet takes away from time once spent interacting and socializing with family and friends ([Nie and Erbring, 2000](#)). When spending excessive amounts of time in cyberspace, users may actually reduce their personal interactions and face-to-face contacts (Nie, 2001), with the key variable being the amount of time, not the effect of the Internet. Further, Nie (2001) found that individuals who already exhibit a high degree of social ties and community participation continue to be social and maintain a high degree of social interactions.

In a follow-up study of HomeNet, Kraut and his associates (2002) found that some of the negative effects dissipated and those that remained were nuances of personality types. Internet use predicted better outcomes for extroverts and those with more social support; the outcomes were worse only for introverts and those with less support. Among introverts, using the Internet was associated with decreases in community involvement and self-esteem and increases in loneliness and time pressure. However, among extroverts, Internet use was associated with increases in community participation and social interactions.

Similar to the recent findings of Kraut et al. (2002) and Nie (2001), Gross, Juvonen, and Gable (2002) report that there is no simple or main effect of the Internet on the average person, but that the most common effects are minimally positive. For the socially dysfunctional or anxious individual, the Internet may exacerbate isolation and depression. Simultaneously, for well-adjusted individuals, the Internet is simply another form of communication—a tool to maintain ties with family members and the community ([Gross, Juvonen, and Gable, 2002](#)).

Given this emerging consensus, rather than virtual communities replacing local place communities, the Internet may enhance community in the local place or shared space. Wellman and Gulia (1999, p. 179) provide accounts of community ties that combine both online and offline relationships and appear rooted in a shared space and local place:

"Despite all the talk about virtual community transcending time and space *sui generis*, much contact is between people who see each other in person and live locally." Their research indicates that communication, via telephone or the Internet, takes place with people who live nearby and that the communication "filled in the gaps between in-person meetings, and made arrangements for future get-togethers." It appears that cyberspace provides an excellent arena to initially establish and subsequently maintain the network of social ties necessary for community. Still, additional research exploring the Net effects is needed. As Internet use expands and telecommunications technology evolves, what is true now may not be so in the near future.

CONCLUSIONS

The inherent qualities of cyberspace suggest that virtual community members will be liberated from geographic and social boundaries, develop ramified social connections, become topically fused in their interests, and yet remain psychologically detached, with only a limited liability toward other residents. In this sense, if we understand the elements of community to include the close, emotional, holistic ties of *Gemeinschaft*, then cyberspace does not contain these elements and, therefore, the environment of cyberspace is less likely to support true community than the environments of local place and shared space. That does not necessarily mean, however, that the cyberspace relationships are the antithesis of true community relationships or even that they are merely weak, unfulfilling substitutes for holistic community relationships.

The Internet is better conceived not as a substitute for community, but as a new enhanced means of communication having effects on community similar to that of the telephone (Pool, 1983; Fischer, 1992, 1997). For example, an e-mail relationship may enhance community, just as a telephone conversation could, by leading to more holistic, more personal, face-to-face interactions. The phone, and now the Net, can be the first limited contact toward developing closer levels of community (e.g., when asking for a date), and they can provide important substitutes when face-to-face encounters are impossible (e.g., when families are physically separated). Most of the interaction that occurs on the Net is relatively narrow communication of specific information. Although communication is necessary for community, communication alone cannot create community.

Thus as we search for community, the Net may: (1) *reduce community* with hours devoted to impersonal searches of websites for information leading to social isolation and the absence of community, by any definition of community; (2) *create a weak community replacement* by including significant amounts of e-mail correspondence and chat room conversations, leading not to a *Gemeinschaft*-like community, but to a virtual community of specialized ties with a weak set of secondary relationships; or (3) *reinforce community* by providing the initial or supplemental connections that lead to the *Gemeinschaft*-like community. All three connections to community currently exist in cyberspace, and if the telephone is a reasonable analogy, our growing use of the Internet will continue to simultaneously reduce, replace, and reinforce community.

The quest for community continues in cyberspace. However, after the first few years of this search, the proposition that nonspatial virtual communities can replace the local place and shared space community as the primary basis for the psychological feelings of community remains questionable. For now, at least, Internet relationships can complement

the community found in the local place and in shared space, but they are poor replacements for the *Gemeinschaft*-type relationships found in the place called *The Community*. Communities still exist most readily, most naturally, and most often when people identify with place—the neighborhood, the school, the church, or the workplace—and personal, face-to-face interactions are still important within the boundaries of a geographic area.

Notes

¹ Ironically, references to space and spatial metaphors abound in the electronic environment. Internet users often refer to navigating through cyberspace, traveling the information highway, and visiting different virtual communities around the Net (Hiltz and Turoff, 1993; Howard, 1997). Further, high technology facilities that could be located anywhere in the new global economy tend to be spatially congregated in high-tech centers such as Silicon Valley (Webster, 2001).

² Although the concept seems oxymoronic, a number of place-based virtual communities exist. Rheingold (2000) argues that the WELL (www.well.com) meets the qualifications for a real community by creating a neighborhood through a fusion of virtual and territorial community (see also Charles, 1992; Schwartz, 1995; Shapiro, 1999; Rheingold, 2000). Other Internet-based communities with important spatial reference include Echo (www.echonyc.com), based in New York, Charlotte's Web in Charlotte, North Carolina (www.charweb.org), Blacksburg Electronic Village in Blacksburg, Virginia (www.bev.net), Liberty Net in Philadelphia (www.libertynet.com), and Seattle Community Network (www.scn.org). The WELL and other similar virtual communities with emphasis on the local place facilitate face-to-face contact and, thus, help build common ties that are intimate, holistic, supportive, and enduring (Kavanaugh and Patterson, 2001). Different examples of distance learning programs integrating the local place environment with cyberspace (Haythornthwaite et al., 2000; Kazmer and Haythornthwaite, 2001) include the successful distance learning program at Duke University. Duke Corporate Education, Inc. (2000) has developed the "Place and Space" model that blends traditional, residential forms of teaching and learning (place) with virtual, distributed communities (space).

References

- Ahlbrandt, R. S., Jr. 1984. *Neighborhoods, People, and Community*. New York: Plenum Press.
- Bateman, R. L., and Lyon, L. 2000. "Losing and Finding Community: The Quest for Territorial and Psychological Community from the Neighborhood to Cyberspace," in D. A. Chekki (ed.), *Research in Community Sociology*, Vol. 10, pp. 59–78. Stamford, CT: JAI Press, Inc.
- Bellah, R. [1985] 1996. *Habits of the Heart: Individualism and Commitment in American Life*. Berkeley, CA: University of California Press.
- Bernard, J. 1973. *The Sociology of Community*. Glenview, IL: Scott, Foresman.
- Charles, D. 1992. "Socializing in Cyberspace," *New Scientist* 134(1821), 12–14.
- Dean, J. 2000. "Community," in T. Swiss (ed.), *Unspun: Key Concepts for Understanding the World Wide Web*, pp. 4–16. New York: New York University Press.
- Donath, J. S. 1999. "Identity and Deception in the Virtual Community," in M. A. Smith and P. Kollock (eds.), *Communities in Cyberspace*, pp. 29–59. New York: Routledge.
- Duke Corporate Education, Inc. 2000. *The Place and Space™ Model*. Available online at www.dukece.com/PandS/Place.html.
- Etzioni, A., and Etzioni, O. 2001. "Can Virtual Communities be Real?" in A. Etzioni (ed.), *The Monochrome Society*, pp. 77–101. Princeton, NJ: Princeton University Press.
- Fischer, C. S. 1975. "Toward a Subcultural Theory of Urbanism," *American Journal of Sociology* 80, 1319–1341.
- Fischer, C. S. 1982. *To Dwell Among Friends*. Chicago, IL: University of Chicago Press.
- Fischer, C. S. 1992. *America Calling: A Social History of the Telephone to 1940*. Berkeley, CA: University of California Press.
- Fischer, C. S. 1995. "The Subcultural Theory of Urbanism: A Twentieth-Year Assessment," *American Journal of Sociology* 101, 543–577.

- Fischer, C. S. 1997. "Technology and Community: Historical Complexities," *Sociological Inquiry* 67(1), 113–118.
- Galston, W. A. 2000. "Does Internet Strengthen Community?" *National Civic Review* 89(3), 193–202.
- Gans, H. 1962. *The Urban Villagers*. New York: Free Press.
- Grannis, R. 1998. "The Importance of Trivial Streets: Residential Streets and Residential Segregation," *American Journal of Sociology* 103(6), 1530–1564.
- Greeley, A. 1992. "Habits of the Head" (book review), *Society* (May–June), 74–81.
- Greer, S. 1962. *The Emerging City*. New York: Free Press.
- Gross, E. F., Juvonen, J., and Gable, S. L. 2002. "Internet Use and Well-Being in Adolescence," *Journal of Social Issues* 58(1), 75–90.
- Hampton, K., and Wellman, B. 2001. "Long Distance Community in the Network Society," *American Behavioral Scientist* 45(3), 476–495.
- Haythornthwaite, C. 2001. "Introduction: The Internet in Everyday Life," *American Behavioral Scientist* 45(3), 363–382.
- Haythornthwaite, C., Kazmer, M., Robins, J., and Shoemaker, S. 2000. "Community Development Among Distance Learners: Temporal and Technological Dimensions," *Journal of Computer-Mediated Communication* 6(1). Available online at <http://www.ascuse.org/jcmc/vol6/issue1/haythornwaite.html>.
- Hillery, G. A., Jr. 1955. "Definitions of Community: Areas of Agreement," *Rural Sociology* 20, 779–791.
- Hiltz, S. R., and Turoff, M. 1993. *The Network Nation* (2nd ed.). Cambridge, MA: MIT Press.
- Howard, T. W. 1997. *A Rhetoric of Electronic Communities*. Greenwich, CT: Ablex Publishing Corporation.
- Hunter, A. 1975. "The Loss of Community," *American Sociological Review* 40, 537–552.
- Kasarda, J. D., and Janowitz, M. 1974. "Community Attachment in Mass Society," *American Sociological Review* 39, 328–339.
- Katz, J. E., and Aspden, P. 1998. *Cyberspace and Social Community Development: Internet Users and Its Community Integration Correlates*. Available online at www.nicolahoering.net/Hogrefe/Katz2.htm.
- Katz, J. E., Rice, R. E., and Aspden, P. 2001. "The Internet, 1995–2000: Access, Civic Involvement, and Social Interaction," *American Behavioral Scientist* 45(3), 405–419.
- Kavanaugh, A. L., and Patterson, S. J. 2001. "The Impact of Community Computer Networks on Social Capital and Community Involvement," *American Behavioral Scientist* 45(3), 496–509.
- Kazmer, M. M., and Haythornthwaite, C. 2001. "Juggling Multiple Social Worlds: Distance Students Online and Offline," *American Behavioral Scientist* 45(3), 510–529.
- Kling, R. 1996. "Social Relationships in Electronic Forums: Hangouts, Salons, Workplaces and Communities" in R. Kling (ed.), *Computerization and Controversy: Value Conflicts and Social Choices*, 2nd ed. San Diego, CA: Academic Press.
- Kraut, R., Kiesler, S., Boneva, B., Cummings, J., Helgeson, V., and Crawford, A. 2002. "Internet Paradox Revisited," *Journal of Social Issues* 58(1), 49–74.
- Kraut, R., Patterson, M., Lundmark, V., Kiesler, S., Mukopadhyay, T., and Scherlis, W. 1998. "Internet Paradox: A Social Technology that Reduces Social Involvement and Psychological Well-Being?" *American Psychologist* 52(9), 1017–1032.
- Ladd, E. C. 1999. *The Ladd Report*. New York: Free Press.
- Lyon, L. 1999. *The Community in Urban Society*. Prospect Heights, IL: Waveland Press, Inc.
- Molotch, H., Freudenburg, W., and Paulsen, K. E. 2000. "History Repeats Itself, But How? City Character, Urban Tradition, and the Accomplishment of Place," *American Sociological Review* 65, 791–823.
- Nie, N. 1999. "ZEITGEIST—Telecommuting and the Future of the Social Sphere," *American Demographics* 21(7), 50–80.
- Nie, N. H. 2001. "Sociability, Interpersonal Relations, and the Internet: Reconciling Conflicting Findings," *American Behavioral Scientist* 45(3), 420–435.
- Nie, N., and Erbring, L. 2000. *Internet and Society: A Preliminary Report*. Stanford, CA: Stanford Institute for the Quantitative Study of Society.
- Nisbet, R. [1953] 1976. *The Quest for Community*. New York: Free Press.
- Oldenburg, R. 1989. *The Great Good Place: Cafes, Coffee Shops, Community Centers, Beauty Parlors, General Stores, Bars, Hangouts and How They Get You Through the Day*. New York: Paragon House.
- Orum, A. M. 1998. "The Urban Imagination of Sociologists: The Centrality of Place," *Sociological Quarterly* 39(1), 1–10.
- Park, R. 1936. "Human Ecology," *American Journal of Sociology* 17(1), 1–15.
- Pool, I. de S. 1983. *Forecasting the Telephone: A Retrospective Technology Assessment of Telephone*. Norwood, NJ: Ablex Publishing.

- Putnam, R. D. 2000. *Bowling Alone: The Collapse and Revival of American Community*. New York: Simon and Schuster.
- Redfield, R. 1947. "The Folk Society," *American Journal of Sociology* 52, 293–308.
- Rheingold, H. 2000. *The Virtual Community*. Cambridge, MA: MIT Press.
- Rubin, I. 1969. "Function and Structure of Community: Conceptual and Theoretical Analysis," *International Review of Community Development* 21–22(Dec.), 111–122.
- Schwartz, E. 1995. "Looking for Community on the Internet," *National Civic Review* 84(1), 37–42.
- Shapiro, A. L. 1999. "The Net that Binds: Using Cyberspace to Create Real Communities," *Nation* 268(23), 11–15.
- Simmel, G. [1936] 1950. "The Metropolis in Mental Life," translated and edited by K. H. Wolff, *The Sociology of Georg Simmel*. New York: Free Press.
- Suttles, G. D. 1968. *The Social Order of the Slum*. Chicago, IL: University of Chicago Press.
- Sutton, W., Jr., and Munson, T. 1976. "Definitions of Community: 1954 Through 1973." Paper presented to the American Sociological Association. New York.
- Thompson, L., and Nadler, J. 2002. "Negotiating via Information Technology: Theory and Application," *Journal of Social Issues* 58(1), 109–124.
- Tönnies, F. [1887] 1957. *Community and Society*, translated and edited by C. P. Loomis. East Lansing, MI: Michigan State University Press.
- UCLA Center for Communication Policy. 2000. *The UCLA Internet Report: Surveying the Digital Future*. Available online at www.ccp.ucla.edu.
- Webber, M. 1963. "Order in Diversity: Community without Propinquity," in L. Wingo, Jr. (ed.), *Cities and Space: The Future Use of Urban Land*. Baltimore, MD: Johns Hopkins University Press.
- Webster, F. 2001. "Re-Inventing Place: Birmingham as an Information City?" *City* 5(1), 27–46.
- Wellman, B. 1979. "The Community Question: The Intimate Network of East Yorkers," *American Journal of Sociology* 84(March), 1201–12731.
- Wellman, B. 2001. "Physical Place and Cyberplace: The Rise of Personalized Networking," *International Journal of Urban and Regional Research* 22(2), 227–252.
- Wellman, B., and Gulia, M. 1999. "Virtual Communities as Communities: Net Surfers Don't Ride Alone," in M. A. Smith and P. Kollock (eds.), *Communities in Cyberspace*, pp. 167–194. New York: Routledge.
- Wellman, B., and Hampton, K. 1999. "Living Networked On and Offline," *Contemporary Sociology* 28(6), 642–654.
- Wellman, B., and Leighton, B. 1979. "Networks, Neighborhoods, and Communities: Approaches to the Study of the Community Question," *Urban Affairs Quarterly* 14(3), 363–390.
- Wellman, B., Salaff, J., Dimitrova, D., Garton, L., Gulia, M., and Haythornthwaite, C. 1996. "Computer Networks as Social Networks: Collaborative Work, Telework, and Virtual Community," *Annual Review of Sociology* 22, 213–226.
- Wellman, B., and Wortley, S. 1990. "Different Strokes from Different Folks: Community Ties and Social Support," *American Journal of Sociology* 96(3), 558–588.
- Wuthnow, R. 1998. *Loose Connections: Joining Together in America's Fragmented Communities*. Cambridge, MA: Harvard University Press.
- Zablocki, B. 1979. "Communes, Encounter Groups, and the Search for Community," in K. Black (ed.), *Search for Community*. Boulder, CO: Westview Press.

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