

Communities and networks

After inventing one-to-one communication systems, it took the developers of what became the internet almost no time to develop platforms for group communication. Among the first such groups was SF-Lovers, a mailing list for science fiction fans. Accompanied by influential bulletin board systems such as the Bay Area counter-culture hangout, The Well (Rheingold, 1993), and early multiplayer games, these group communication platforms were followed by thousands, then millions, of topically organized mailing lists, Usenet newsgroups, and websites. The advent of social network sites (SNSs) in the late 1990s provided another platform for groups and simultaneously posed challenges for online groups by foregrounding more loosely bound networks of individuals.

Many online groups develop a strong sense of group membership. They serve as bases for the creation of new relationships as people from multiple locations gather synchronously or asynchronously to discuss topics of shared interest, role play, or just hang out. Participants have extolled the benefits of being able to form new connections with others regardless of location and to easily find others with common interests, the round-the-clock availability of these groups, and the support they provide. Members of these groups often describe them as "communities." Internet proponents such as Howard Rheingold (1993) touted a new age of "virtual community" in which webs of personal connection transcended time and distance to create meaningful new social formations. My own research on the newsgroup rec.arts.tv.soaps (r.a.t.s.) conceptualized the group as a community.

Given its emotional force, it's not surprising that this use of "community" generated strong counter-reactions from those such

as Lockard (1997: 225) who warned that "to accept only communication in place of a community's manifold functions is to sell our common faith in community vastly short." Early critics such as Stoll (1995) raised fears of a "silicon snake oil" that replaced genuine and deep connections with shallow and inadequate substitutes. The specter of people isolated indoors substituting Gergen's "floating world" of connection for meaningful contact with their neighbors sends a shudder through those concerned that, as Robert Putnam (1995) famously put it, we are already doing far too much "bowling alone."

If you hear echoes of the hopes and concerns about mediated interaction that have reverberated through the history of communication technologies, you should. As we've seen in previous chapters, people tend to doubt the authenticity of social connections sustained through new media and question their impact on interpersonal, local, and national civic and political engagement. Historical changes occurring in conjunction with and facilitated by communication technologies have led many to worry that people are losing meaningful connections to their local communities, with towns, cities, and nations suffering the consequences. Digital technologies hold the potential to engage us more closely in meaningful communal connections but, inasmuch as they might take us away from embodied local interactions, they could threaten to damage the real thing.

In this chapter we'll look at how people organize into groups and networks online. First, we'll ask what is meant when people say "community," and what it means to apply that term to an online group. We turn then to social networks, exploring how these more recent platforms have afforded more personalized and diffuse yet centralized connections. In closing the chapter we'll look at how the use of digital media seems to affect participation in local communities.

Online community

What did it mean when YouTube, with its millions of users, prominently featured the term "community" on its navigation bar, as

though all of its users were united into a common group through mere use of the site? What kind of “community” was being invoked when the digital services company Sparta Networks (n.d.) boasted on their website that they built a client “a highly scalable, function-rich, flexible online community . . . in less than a third of the time it would have taken them to build the community internally?” These technological definitions of “community” appeal to developers and also to marketers (Preece & Maloney-Krichmar, 2003) who can create a site, call it a “community,” and hope to reap the benefits of the term’s warm connotations without having to deal with questions of what actually happens on-site. Different technological platforms do lend themselves to different sorts of group formations, and differences in digital affordances lead to differences in group behavior. Yet one need only peek below the surface of any one online platform to see that technologically based definitions of “community” fall apart in the face of variety. YouTube, as Burgess and Green (2009) show, is far from a single collective. Instead it is comprised of many subgroups, each with their own practices and purposes, which are sometimes at odds with the other groups. Thus, when Oprah decided to join YouTube, many of the amateur media producers resented her and her fans’ presence, just as the female vloggers resented the sexist commenting practices of male subgroups with which they had to contend. The mere existence of an interactive online forum is not community, and those who participate using one platform may comprise very different groups.

Whether you are willing to consider any digitally based group a “community” depends first and foremost on which of many definitions of “community” you choose. Articles and books on digital community often begin by noting that no one has ever been able to agree what exactly “community” means. “Ever since sociological theorist Ferdinand Tönnies declared community to be an essential condition for the development of close, primary social bonds,” wrote Mary Chayko (2008: 6), “sociologists have not been able to agree on how, or whether, definitions of community should be updated.” Despite the term’s openness to a variety of interpretations, it remains useful. Chayko conducted electronic interviews with 87 people who self-identified as active users of

group communication online, in order to explore their perspectives of mediated social dynamics. Although she did not use the word “community” in her interview questions (2008: 212–13), her interviewees repeatedly invoked it to describe their online experiences, saying things like “I feel I am part of a tight-knit community” and “You can definitely feel the community on the board” (2008: 7). Like Chayko, I am reluctant to drop the term altogether. “Community” has provided a resonant handle for developers, analysts, marketers, and even critics as they’ve tried to understand online groups. Rather than debate which definition is correct, and hence whether or not online communities are “real,” I will identify five qualities found in both online groups and many definitions of community that make the term resonate for online contexts. These include the sense of space, shared practice, shared resources and support, shared identities, and interpersonal relationships.

Space

Those who argue online groups cannot be communities often consider common geography a necessary condition of “community.” From early on, geographical communities such as Berkeley and Santa Monica, California, turned to the internet as a means of building local community, creating community networks to foster civic engagement and provide access for those without internet connections. Schuler (1996) runs through several examples of efforts to create online networks to support local communities. One of the earliest, Santa Monica’s PEN system had five objectives, including providing city residents with: easy electronic access to public information; an alternative means of communication, delivery and creating awareness of public services; and the opportunity to learn about computer technology. The PEN system also sought “to provide an electronic forum for participation in discussions of issues and concerns of residents in order to promote an enhanced sense of community” (quoted in Schuler, 1996: 120).

Most online groups are not so tied to geographical space, yet people who are involved in online groups often think of them as shared places. The feeling that online groups meeting on software

and hardware platforms constitute “spaces” is integral to the language often used to describe the internet. Consider the term “cyberspace,” coined by science fiction author William Gibson, or the western United States metaphor in the subtitle of Rheingold’s now classic 1993 book *The Virtual Community: Homesteading on the Electronic Frontier*.

The metaphor of space is particularly applicable in visual online environments such as massively multiplayer online role playing games (MMORPGs) where fictional worlds built through code are experienced as semi-physical realities. Second Life, where users create buildings, parks, and other emulations of physical spaces, also lends itself to spatial understandings of “community.” Schuler (1996) organizes the second chapter of his book around Ray Oldenburg’s concept of a “third place.” Similarly, in their analysis of two MMORPGs, Steinkuehler and Williams (2006) use Oldenburg’s ideas to argue that these environments function similarly to the “cafes, coffee shops, community centers, beauty parlors, general stores, bars and hangouts that get you through the day” in well-functioning cities and towns (Oldenburg, 1989: front cover). Third places, neither work nor home, are vital sites of informal social life, critical to social cohesion. Steinkuehler and Williams’s analysis of MMORPGs as third places shows how they provide sites of neutral ground, equal status, sociable conversation, easy access, known regulars, playful interaction, (sometimes) homely aesthetics, and a homelike atmosphere.

Textual groups can also be metaphorically based on space, as was the case in the official board for fans of television show *Buffy the Vampire Slayer* documented by Stephanie Tuszynski in her ethnographic film *IRL: In Real Life*. This board was called “The Bronze” after a hangout in the television show. Members Tuszynski interviewed frequently referred to the board as a place, one even laughing at herself for saying goodbye to her partner before walking down the hall to go to the Bronze, as though she were leaving the apartment to go elsewhere. Furthermore, online groups can be organized with reference to geographical location. People form groups to discuss national and regional issues (e.g. Mitra’s 1997 analysis of soc.culture.indian or Gajjala’s 2004

work on SAWNet, a discussion forum for women from East Asia). People also form groups to discuss cultural materials tied to particular regions, as I’ve described in the context of Swedish independent music’s international fans (Baym, 2007).

Practice

A metaphorical sense of shared space is thus one criterion that people use when they label digitally mediated groups “communities.” Community can also be found in the habitual and usually unconscious practices – routinized behaviors – that group members share. Communities of practice include occupational, educational, and recreational groups as well as regional ones (e.g. Dundes, 1977; Lave & Wenger, 1991). Because language is the primary tool through which digitally mediated groups cohere, the concept of “speech community,” which foregrounds shared communication practices, has been particularly useful for many of us studying online groups. Speech communities have distinctive patterns of language use which enact and recreate a cultural ideology that underpins them (Philipsen, 1992).

Online speech communities share ways of speaking that capture the meanings that are important to them and the logics that underlie their common sensibilities. Groups share insider lingo including acronyms, vocabulary words, genres, styles, and forms of play. Lynn Cherny (1999) conducted an extensive ethnography of a MOO she called ElseMOO, paying particular attention to how the language use embodied and evoked the community within the site. In my book *Tune In, Log On* (Baym, 2000), I wrote about a soap opera fan group (r.a.t.s.) on Usenet. Like Cherny, I spent years reading the group and conducted close analysis of the ways in which language created a social context akin to community. Members of r.a.t.s. used many terms comprehensible to insiders, including the acronym “IOAS” for “It’s Only A Soap” and numerous nicknames for characters. Members of The Bronze, like members of so many online groups, developed communication genres such as the morning “shout out” listing all new members of the group and the “question of the day” posed by the same individual each

morning. Though, like YouTube, I would not consider Twitter a single community, its users do share some practices, shaped both by technological affordances (the 140-character limit) and by other internet trends such as lolcat (see chapter 3). The power of being able to speak like a Twitter insider was evident when the four founders of Swedish file-sharing site The Pirate Bay went on trial in 2009. One defendant twittered from the courtroom. With posts such as “EPIC WINNING LOL” he quickly won the hearts of his Twitter followers (if not the court), who saw one of their own in his use of language. They did not win the trial, but the Swedish election of a member of the Pirate Party to the European Parliament in the wake of their conviction was evidence of the popular support they had gained.

These terms and genres are markers of insider status and hence help to forge group identity (see further discussion of this below). They also indicate groups’ core values. IOAS did not just mean “it’s only a soap opera,” it also meant that the group valued soap operas and understood that one could be involved enough to find them frustrating yet not be the lifeless idiots represented by the soap viewer stereotype. The term simultaneously validated group members’ shared love of the genre, self-representation as intelligent, and their shared frustrations. The Bronze shout out demonstrated their openness to new members. Twitterers use of “epic” demonstrates the shared values of humor and irreverence.

Shared practices entail norms for the appropriate use of communication. Ongoing groups develop standards that guide members’ behavior. Violations of these norms are often met with critical response from other users. In an early study, McLaughlin, Osborne, and Smith (1995) collected messages from Usenet in which participants had been castigated for misbehavior. Analyzing those instances, they identified several issues that spanned Usenet groups, including incorrect use of technology, bandwidth waste, network-wide conventions, newsgroup-specific conventions, ethical violations, inappropriate language, and factual errors. Online groups that discuss television shows and movies often have a norm that the word “spoilers” should be included in the subject lines of posts which give away the story ahead of time. This

enables those who don’t want the show spoiled by this advance information to avoid such posts. Other groups are devoted entirely to sharing spoilers.

In the last chapter, we saw groups differ in their attitude towards flaming (Lea et al., 1992); the soap opera group I studied would have none of it, while other groups tolerate and even encourage it. The discussion board for my favorite band tolerates a great deal of rudeness, particularly when people violate norms, but attends carefully to an implicit norm that people must be thanked when they share materials with the group. Users of r.a.t.s. shared a commitment to friendliness, which could be seen in the details of how they disagreed with one another. Their disagreements were packed with qualification (“I might be wrong but I thought that . . .”), partial agreement (“I agree that . . ., but I still thought that . . .”), and other linguistic strategies designed to minimize offense and maximize affiliation (Baym, 1996). Group members do not have to think about these norms as they formulate their messages. Instead, becoming a group insider involves a process of being socialized to these norms and values so that they guide one’s communication without having to be considered.

Social norms also emerge in social network sites (SNSs). Fono and Raynes-Goldie (2006) interviewed users of LiveJournal about their reasons for friending people on that site and the issues that arise around friending. boyd (2006) interviewed users of MySpace and Friendster. Both studies found friending norms, although they were not uniform and, as we will return to in chapter 6, caused confusion and interpersonal conflict. Donath (2007) argues that SNSs develop norms for what constitutes truth in terms of “the mores of our community.” Humphreys (2007) observed the short-lived location-sensitive SNS Dodgeball for one year and performed in-depth interviews with users in seven American cities. She found that there were norms regulating things such as how often one should post one’s location to the network. Just as the norms around friending are uncertain, “normative Dodgeball use is not only emerging but contested”; subgroups “may have different tolerance levels, expectations, and definitions of acceptable or ‘correct’ Dodgeball use” (Humphreys, 2007).

Community norms of practice are displayed, reinforced, negotiated, and taught through members' shared behaviors. They are also enshrined through FAQs (Frequently Asked Questions files). Early on, these appeared as regularly occurring posts in message boards. Web boards often include them as a link. Hansen and his collaborators studied a question-and-answer mailing list for web developers that also maintained a wiki repository that worked as a FAQ and as an alternative space that allowed members to keep the list discussion on-topic (Hansen, Ackerman, Resnick, & Munson, 2007). They performed both qualitative thematic analysis and quantitative content analysis of all the wiki pages as well as samples from several thousand of the group's 90,000 emails, and conducted semi-structured interviews. They found that the wikis served several normative functions in the group. When people broached irresolvable disputes over topics such as font size, they could be gently referred to the wiki. This allowed the list to avoid irresolvable "holy wars," maintain the "friendly and professional tone," and socialize new members without losing old members who had been through those questions many times before.

Online groups also share norms for what constitutes skilled communicative practice. The Pirate Bay founder who knew to use the phrase "epic winning" and the acronym "LOL" demonstrated not just his insider status, but also his skill as a twitterer. Participants in r.a.t.s valued humor and insight in their posts, and, in surveys I conducted, particularly funny posters were those most frequently mentioned as "good" contributors. In fan communities, those who write particularly good fan fiction might be celebrated, while those who give especially helpful advice might be considered the best contributors to support communities. Friends who post status updates at the right frequency with the right mix of humor, self-deprecation, and thoughtfulness might be most appreciated on Facebook.

Normative standards always implicate power structures. Hierarchies form online, giving some people more say than others in creating and regulating behavioral standards within group contexts. Stivale, for example, examined the variants of what counts as spam in LambdaMOO and argued that "the ambiguity of what is

appropriate or not suggests once again the ongoing struggle between centripetal and centrifugal forces, i.e. forces that seek some unified central 'command' versus those seeking to contest such unification from the margins" (Stivale, 1997: 139). Many groups are moderated, meaning that power structures are both explicit and built into the group's very structure. Some of the norm-maintaining jobs that moderators do include keeping the group on-topic, deleting posts that they deem inappropriate or distracting, and fixing problematic formatting. In unmoderated groups, power structures may be implicit and emergent (Preece & Maloney-Krichmar, 2003). The contrast between this and optimistic predictions that the absence of social cues in online interaction would eliminate hierarchy and render all participants equal should be obvious.

Social norms are also rooted within the behavioral contexts in which users live, as we saw in the last chapter's discussion of how social identities influence online communication. On social network sites (SNSs), where people may be "aware that their friends and colleagues are looking at their self-presentation," they are likely to feel pressured to conform to those groups' norms (Donath, 2007). Walther, Van Der Heide, Kim and Westerman (2008) conducted an experiment in which they first had focus groups describe what constituted good and bad peer behaviors. They then manipulated Facebook profiles to demonstrate those behaviors and assessed perceptions of those profiles. They found that people did rely on societal and peer group standards when forming impressions online. Wall posts describing excessive and questionable behavior result in more negative perceptions, although this was only true for women (at least amongst the college-aged Americans in the study). In an analysis of the metadata from 362 million fully anonymized private messages and "pokes" exchanged by 4.2 million North American Facebook users through that site, Golder, Wilkinson, and Huberman (2007) found that messaging was guided by strong temporal rhythms that were often grounded in local norms. For instance, messaging took place at night and peaked Tuesdays and Wednesdays and was at its lowest during the "college student weekend" beginning mid-afternoon Friday and lasting through mid-afternoon Sunday.

Shared resources and support

Communities were often defined as “composed of broadly based relationships in which each community member felt securely able to obtain a wide variety of help” (Wellman, 1988: 97). The supportive exchange of resources is often implied when people use the term “community” in digital contexts. Closely related to social support is “social capital” (Coleman, 1988). Social capital, as Ellison, Steinfeld, and Lampe (2007) explain, is “an elastic term with a variety of definitions.” In essence, it refers to the resources people attain because of their network of relationships. When people provide and receive social support in online groups, they are contributing to one another’s accumulated social capital. Social capital may be either “bonding” or “bridging” (Putnam, 1995). Bridging capital is exchanged between people who differ from one another and do not share strong relationships. The internet lends itself to and expands the potential for this kind of capital. In contrast, bonding capital is usually exchanged between people in close relationships. While the former is a “sociological lubricant,” the latter is “a kind of social superglue” (Steinkuehler & Williams, 2006). Many online groups provide bridging capital, exchanged in relationships that are highly specialized, yet it is also common to find members of online communities and social networks providing one another with the sort of emotional support often found in close relationships.

Social support offers many benefits to its recipients. Documented positive effects include better psychological adjustment, higher perceptions of self-efficacy, better coping, improved task performance, better disease resistance and recovery, and lowered risk of mortality (Burlison & MacGeorge, 2002). Some online communities are explicitly support groups. Forums abound for people with medical conditions, addiction, traumas, and other debilitating or stigmatizing life circumstances. Walther and Boyd (2002) conducted an email survey of a sampling of people who had posted to Usenet support groups. Their research identifies four motivations for people to seek this kind of support online, including the security provided by anonymity, the ease of access to these groups,

the ability to manage one’s interaction within them, and the social distance from others. Online support can thus allow people access to bonding and bridging resources without the entanglements and threats of close relationships. These groups are also important for those without local support groups.

The provision of social support is common even in groups that are not explicitly designated as supportive (Wellman & Gulia, 1999). There are several, often overlapping, kinds of social support (Cutrona & Russell, 1990). *Social integration or network support:*

enables people to feel part of a group whose members have common interests and concerns. Such relationships reflect more casual friendships, which enable a person to engage in various forms of social and recreational activities. (Cutrona & Russell, 1990: 322)

Online fans and hobbyist groups exemplify this, as their very existence is predicated on a desire to organize around common interests for social and recreational purposes. Consider the *Survivor* spoiler fan “knowledge community” described by Jenkins (2006). Members of this group collaborated to figure out the identities of all the contestants and even the winner of the sixth season’s contest before the entrants had been officially announced or the first show had aired. In the short term, this group was “just having fun on a Friday night participating in an elaborate scavenger hunt involving thousands of participants who all interact in a global village.” In the long term, Jenkins posits that they were coming to understand “how they may deploy the new kinds of power that are emerging from participation within knowledge communities” (2006: 29). The recreational information exchanged amongst fans online becomes a form of subcultural capital that can bolster individuals’ status within and outside of the fan group (Kibby, 2010).

Emotional support represents “the ability to turn to others for comfort and security during times of stress, leading the person to feel that he or she is cared for by others” (Cutrona & Russell, 1990: 322). In one striking example, Heather Spohr, a prominent “mommy blogger,” had been writing about her daughter since her premature birth at 29 weeks. She and her readers built strong connections. When Spohr’s daughter passed away unexpectedly at

17 months, the *Los Angeles Times* (Bermudez, 2009) described an outpouring of support that crashed the servers and generated more than \$20,000 in donations to the March of Dimes, a nonprofit organization working to help prevent birth defects. While emotional support may be more common in explicit support groups, a content analysis of diverse online groups found that most demonstrate empathic communication and provide emotional support (Preece & Ghozati, 1998).

Esteem support bolsters “a person’s sense of competence or self-esteem” through the provision of “individual positive feedback on his or her skills and abilities or expressing a belief that the person is capable” (Cutrona & Russell, 1990: 322). McKenna and Bargh (1998) surveyed people who posted to Usenet groups for homosexuals. They found that newsgroups contributed to “identity demarginalization.” As people participated within the newsgroups and received positive feedback for their gay identities, their self-acceptance increased and sense of estrangement dropped. As a direct result, they were more likely to come out to their loved ones. McKenna and Bargh concluded that the anonymity of online groups allows people to engage in riskier self-disclosure and, when that is affirmed, such groups can create positive changes in people’s self-concepts.

Informational support offers “advice or guidance concerning possible solutions to a problem” (Cutrona & Russell, 1990: 322). Advice may be about topics as diverse as writing CSS or managing one’s love life. Much of the communication on Oprah’s web board exemplifies informational (and emotional) support, as seen in this exchange when Brokenhearted girl wrote about her ex-boyfriend’s on-again off-again affections for her. Phyllis g advised:

Listen to what all frosting1112 had to say to you today . . . she is wise and what she said is right-on!! I, too, think your ex-boyfriend is trying to keep you hanging on!! Guys do this all the time. They will break your heart . . . knowing that you love them. and then feel some sort of . . . male “thing” when you cry about them.. It makes me sick!! Girl.. Maybe it’s time you just start setting some of those boundaries for yourself!! Your pain is very genuine to me. I know and can feel threw the computer and threw your words that you need help . . . but . . . if you keep focusing on him and never

really try working this out for yourself. You are going to continue to stay sick!! And, you are sick . . . he is like a drug for you. YOU got to make a step . . . toward recovery!! He is an addiction!! (Phyllis g)

Frosting 1112 later returned to the thread, offering emotional support:

Hi again. Hope things are getting better for you girl.. You still sound a little confused and upset to me.. I hope and shall keep you in my prayers. And know God will bring you peace if you let him!! (Frosting 1112)

In response, Brokenhearted girl provided the others in the thread with esteem support:

I wanted to thank you all for you beautiful reply. I could only hope to be as beautiful as the sweet spirit that I know from all of you!!

This exchange demonstrates the cyclical and self-reinforcing nature of much supportive behavior in online communities, a point I’ll return to in discussing people’s motivations for providing strangers and casual acquaintances with resources.

When people support one another with money, by doing things for them, and by providing them lodging and other services, Cutrona and Russell call this *tangible aid*. Though this is less common in online groups than the other forms of support, it occurs regularly and frequently. For instance, when one of the regular writers at Daily Kos, a left-leaning political blogging site, suffered extreme damages to his home, members of the site sent him money to help him to recover. People often provide traveling members of online groups places to stay or at least meals, when they visit their towns.

As they share resources in public group contexts, people participating in online groups collaboratively build a replenishing repository of public goods that can be used by unknown recipients one might never encounter again and whom one can’t expect to reciprocate immediately (Kollock, 1999). One might ask why people do this. It makes obvious sense to take the time and financial and emotional risks to support those you already know and love, but why provide this kind of support to people you hardly know or may not know at all? One reason may be what Cutrona and Russell

(1990: 332) refer to as a sixth form of social support: supporting others gives people the feeling that they are needed. Helping others online may give people a sense of efficacy (Kollock, 1999). Offering support to others now may lead to receiving support should you ever go looking for it in the future (Kollock, 1999). Being a skilled provider of resources can also increase people's status and prestige within online groups (Matzat, 2004). On the board for my favorite band, one member gained high standing because he regularly searched the internet for relevant videos and photographs and then shared them with the others, solving the ongoing informational problem fans face of never being able to know enough about that which they love.

Shared identities

The sense of shared space, rituals of shared practices, and exchange of social support all contribute to a feeling of community in digital environments. Shared identities are also important. These include personalities and roles assumed by individuals. Identities also include a shared sense of who "we" are that may be pre-existing or develop within a group. Many regulars take on specific roles. Some of the most common roles are "local experts, answer people, conversationalists, fans, discussion artists, flame warriors, and trolls" (Welser, Gleave, Fischer, & Smith, 2007). People assume roles by enacting consistent and systematic behaviors that serve a particular function. I've mentioned the fan in a music group who regularly hunted down and shared videos and photographs of the band. In r.a.t.s., one woman took on the role of welcome-wagon, greeting all new contributors with an enthusiastic response designed to encourage them to continue participating, a role seen also in The Bronze, where one contributor posted the "shout out" to new posters each morning. The forums on Last.fm were filled with people playing the role of "Last.fm fan," systematically defending the site's staff and developers against criticism while telling the critics that the site was free and, if they didn't like it, they should leave. In the community of fans of Swedish music, a particularly powerful and recognizable identity is that of mp3 blogger, and

the few who claim this role gain status amongst the fans, as well as with the musicians, labels, and others professionally involved with Swedish independent music (Baym, 2007; Baym & Burnett, 2009).

Welser and his colleagues (2007) were interested in whether they could identify people who play roles within Usenet communities from structural information alone. Based on a sample of almost 6,000 messages from three different newsgroups, they determined that several roles could be identified from metadata. "Answer people" frequently responded yet never initiated, while "discussion people" both initiated and responded. Furthermore, there was very little communication amongst the individuals in the threads to which "answer people" contributed, while there was a great deal amongst participants in "discussion people's" threads. They conclude that roles have "behavioral and structural 'signatures'" (Welser et al., 2007). From the point of view of regular participants, these structural signatures are less visible than the fact that the answer person is a regular, one who can be counted on to provide informational support when a new participant asks for it.

The most common role in most, if not all, online communities is that of "lurker," the person who reads but never posts. The Scandinavian music newszine that serves as a hub of sorts for that fan community, It's a Trap!, had a message board. Of the 30,000 people who looked at that board each month, fewer than 100 ever left comments or contributed. Most who do post to an online group do so rarely. In r.a.t.s., more than half who posted did so only once, while the top 10 percent of posters wrote half of all messages (Baym, 2000). Hansen et al. (2007) found that the top 4 percent of the CSS-L mailing list wrote half of the messages.

Given the prevalence of this silent majority, Preece, Nonnecke, and Andrews (2004) investigated the reasons for lurkers' silence. Their survey of a sample from 375 online groups found no differences between lurkers and posters in terms of age, gender, education, or employment. They did find, though, that lurkers were less likely to read the group because they sought answers

and less likely to feel they attained the benefits from group membership that they expected, felt a lower sense of group belonging, and respected the other participants less than did the posters. Ironically, posters were more likely to consider lurkers part of the community than were lurkers themselves. The vast majority of lurkers had not intended to read without posting from the outset (only 13.2 percent did). Their silence was motivated by a variety of reasons which Preece et al. (2004) collapse into five. First, many lurkers felt they were already getting what they needed from the group without contributing their own messages. Some felt they needed to get to know the group better. For instance, they may not have felt they knew enough about the group's norms or the topic of discussion, or may have felt shy. Several indicated that they believed they were contributing to the well-being of the community by staying silent when they had nothing to offer. Technical problems with posting were a fourth reason for lurking. Some simply couldn't make the software work or did not know how to post their own messages. Finally, people indicated that they lurked because they did not like the group's dynamics, perhaps because the participants seemed different from themselves, or because they feared aggressive responses.

Groups sometimes develop a sense of themselves as a group, a social identity or schema of who they are that is shared amongst them (Tajfel & Turner, 1986) and which contributes to the feeling of community. These group identities foster ingroup norms and resistance or opposition to outgroups (Spears & Lea, 1992). Groups may develop names for themselves, such as those in the Buffy fan group who referred to themselves as "Bronzers." As I showed in *Tune In, Log On*, the soap fans in r.a.t.s. defined themselves as intelligent and witty people, primarily women, who loved soap operas, and who had rich rewarding lives. This was a response to the dominant stereotype of soap opera fans as lazy stupid women who watched because they had nothing useful to do with their time. This group identity was rarely made explicit, only stated outright in response to trolls who attacked that self-image, as seen in this excerpt from a post responding to one such flame:

What do I know? I've only got a *suma cum laude* BA degree, an MS in chemistry, and in a few more than a few more months, a PHD in X-ray crystallography (that's structural bio-physical chemistry). You say you are well read, Mark? Let's discuss Sartre, Kuhn, Locke, Tolstoy, quantum vs. classical mechanics, cloning, new advances in immunosuppression and drug design, Montessori, James (Henry or William), Kierkegaard, Friedman, Piaget, classical or modern theatre, the pros and cons of recycling, the deterioration of the ozone layer, global warming, James Bay, the Alaskan wilderness crisis, hiking/climbing/camping, cycling, gourmet cooking, fitness and nutrition, or any other topic in which you may feel adept. Feel free to reply in French, German, or Spanish. Chinese or Japanese, I admit, will take me a little longer to handle.

People may also join groups because they already share a social identity. Many online groups are designed for people who share a race or ethnicity, a profession, or another affiliation. Many social network sites too are designed for specific social identities such as BlackPlanet for African Americans, Schmooze for Jewish people, Jake for gay professional men, Ravelry for knitting enthusiasts, FanNation for sports fans, Vinorati for wine buffs, or Eons for aging baby boomers. Cultural location and identification may also influence the groups and social networks people join. Although Swedes are found on Facebook and MySpace, like many countries, Sweden also has a regional site, LunarStorm, to which most Swedish youth belong. LunarStorm has parallels in Arto in Denmark, and South Korea's Cyworld.

Interpersonal relationships

Online groups provide contexts for forming one-on-one relationships, which the next two chapters will consider in more detail. These friendships and sometimes romances are made visible to the group when members post reports of having met or spent time with one another (Baym, 1995). The visible pairs of connections that form are important contributors to the sense of connectivity Rheingold (1993: 5) invoked when he famously described virtual communities as "social aggregations that emerge from the Net when enough people carry on those public discussions long enough, with sufficient human feeling, to form webs of personal

relationships." Interpersonal pairs provide a social mesh that underlies and helps to connect the broader web of interconnection within the group more closely.

Networks

Thus far I've focused mostly on groups which have clear boundaries – they are located at one website or have the same mailing address. Messages go to all members. One-on-one communication is backstage, conducted through private channels such as private messaging or chat. Since the early 2000s, SNSs have become increasingly popular, staking out a middle ground between private dyadic encounters and tightly bounded group interactions. Wellman (e.g. 1988; Wellman, Quan-Haase, Boase, Chen, Hampton, & de Diaz, 2003) argues that a crucial social transformation of late modernism is a shift away from tightly bounded communities towards increasing "*networked individualism*" in which each person sits at the center of his or her own personal community.

Social network sites are designed to afford organization and access to such personalized communities. boyd and Ellison (2007) defined social network sites as "web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system." In traditional (if one can use that word) online communities, messages are available to be seen by all participants in that group. In SNSs, in contrast, messages are only seen by people tied to a user's individualized network, which is a small subset of the total members of the site. The only messages available to all users are those sent by the sites themselves. To the extent that members of different people's social networks overlap and are internally organized, they may constitute groups, but social networks are egocentric and no two will be identical. Thus, no two SNS users will have access to the same set of people or messages, giving them each an experience of the site that is individualized yet overlapping with others.

Just as individuals organize themselves into networks online, so too do online groups. Recent years have seen groups increasingly distributing themselves through the internet in interconnected webs of websites, blogs, SNSs, and other domains. I call this *networked collectivism*, meaning that groups of people now network throughout the internet and related mobile media, creating a shared but distributed group identity. The fans of Swedish independent music, for example, organize themselves into clusters on music-based SNSs, blogs, news sites, other SNSs, and sites developed around individual bands (Baym, 2007).

This development has empowered members of these communities to share more kinds of media with one another, and to interact in a wider variety of ways, but also challenges many of the qualities that can make these groups cohere into something more than the sum of their parts (Baym, 2007). When there is no single shared environment, the metaphor of space quickly unravels. Communities organized through multiple sites do not feel like places. Shared practices are less likely to develop when groups are spread throughout sites, especially since each site is embedded in contexts that bring with them their own communicative traditions. Norms about what constitutes appropriate behavior may be quite different in comments on YouTube videos from how they are on fan websites. In-jokes and jargon are hard to sustain when there are many places to be inside and outside at once. The resources exchanged in supportive interactions may have to be deployed repeatedly to reach all community members, and people who hang out in some of the online spaces but not all may miss them, while those who hang out in all of them may encounter too much repetition. Identities are also harder to develop. People may frequent and play roles in some inter-related sites but not others, with the consequence that a crowd of regulars who contribute in predictable ways may be harder to find or discern. A sense of group identity may be difficult to build. Interpersonal relationships may not be as visible to others, meaning that, although they are valuable to those in the relationships, their existence may be less valuable for the coherence of the group as a whole (Baym, 2007).