influence is, at the very least, two-way. Rather than being deterministic, they see the consequences of technology for social life as *emergent*. Even if we knew all the factors that influence us at the start (an impossible feat), we would not be able to precisely predict the social interactions, formations, and changes that result from their ongoing interplay as people use technologies in specific situations.

This book adheres to social shaping and domestication perspectives, arguing that, to connect digital media to social consequences, we need to understand both features of technology and the practices that influence and emerge around technology, including the role of technological rhetorics in those practices. If you turn the page expecting to find simple answers to the question of what computers and mobile phones do to our personal connections, you will be disappointed. They do many things, and which ones they do to which people depends on many forces, only some of which are predictable. As the chapters that follow will show, sometimes these media are used in ways that are predictable given media affordances (people call to say they are running late more because they have mobile phones on hand through which to do it), surprising (the American social network site Orkut came quickly to be dominated by Brazilians and later Indians, Friendster became the dominant social network site in Southeast Asia), disruptive (people form close relationships before meeting in person), and affirming (people use the mobile phone to increase family cohesion). The complexity of the social shaping and domestication perspectives does not mean we should throw up our hands and despair of gaining any insight. We should, however, always be wary of simple explanations.

3

Communication in digital spaces

If asked to share general thoughts about communicating face-to-face, on the telephone, and on the internet, many people are likely to say something like this:

> Face-to-face is much more personal; phone is personal as well, but not as intimate as face-to-face. The internet is the least personal but it's always available.
>
> Face-to-face: I enjoy the best. I like to see facial reactions, etc. Phone: nice to hear their voice, but wish I could see their reactions. Internet: like it, but can't get a true sense of the person.
>
> I am more apt to be more affectionate and personable face-to-face. Over the phone, I can try to convey them, but they don't work as well. The internet is much too impersonal to communicate feelings.
>
> Internet would definitely be the least personal, followed by the phone (which at least has the vocal satisfaction) and the most personal would be face-to-face.

These responses to a survey I conducted in 2002 framed the comparison in terms of the extent to which nonverbal social cues ("hear their voice," "see their reactions," "vocal satisfaction") affected the perceived intimacy of each medium.

In the first chapter, we saw that a medium's ability to convey social cues about interactants and context is an essential component of its communicative possibilities and constraints. In chapter 2, we saw historical and contemporary visions, both hopeful and fearful, of how limited social cues may affect people, relationships, and social hierarchies. Media with fewer social cues often trigger hopes that people will become more equal and more valued for their minds than their social identities, but also raise fears that interactions, identities, and

relationships will become increasingly shallow, untrustworthy, and inadequate.

This chapter asks what happens to communication itself – the messages people exchange – when it's digitally mediated. We begin by examining the perspective seen in the quotes at the start of this chapter, that mediation is impoverishment. We'll look closely at the practice of "flaming," or extremely argumentative communication, as a test case for considering the extent to which a lack of cues can be considered a cause of how people behave. Having established that there's more going on than can be explained by a mere shortage of nonverbal cues, we'll see how people inject sociability into mediated communication, showing emotion, expressing closeness and availability, having fun, and building new social structures. I'll argue that mediated interaction should be seen as a new and eclectic mixed modality that combines elements of face-to-face communication with elements of writing, and that increasingly uses images, rather than as a diminished form of embodied interaction. In the closing section of the chapter, we'll consider how messages online are influenced by and potentially reshape social identities that transcend media, including gender and culture.

Mediation as impoverishment

Reduced social cues

The quotes that opened this chapter demonstrate a formulaic tendency to think about media in ranked order and to position the one that seems to offer the widest range of verbal and nonverbal social cues on top and the one seeming to offer the least on the bottom. As we saw in chapter 2, this is in keeping with popular discourses throughout history and may well resonate with your own intuitions. It is also in keeping with early research approaches that conceptualized face-to-face conversations as the norm against which other kinds of communication could be compared. From this point of view, mediated communication is seen as a diminished form of face-to-face conversation. Taking embodied co-present communication as the norm, early research often saw the telephone and internet as lesser versions of the real thing, inherently less intimate, and, therefore, less suited to personal connections.

The first research comparing mediated interaction to face-to-face communication began in the 1970s. At this time, audioconferencing, videoconferencing, and networked computer systems were being installed in large organizational contexts. Research was driven by managerial concerns about when to choose each medium. Put simply, both managers and scholars wanted to know when they could hold a teleconference and when they would need to get employees together face-to-face. The first two theories of media choice, Social Presence Theory (Short, Williams, & Christie, 1976) and Media Richness Theory (Daft & Lengel, 1984), both tried to match media capabilities, defined as their ability to transmit social cues, with task demands.

Short and his collaborators (1976) were interested in how different degrees of social cues invoked differing senses of communication with an authentic person during synchronous interaction. They defined social presence as "the degree of salience of the other person in the interaction and the consequent salience (and perceived intimacy and immediacy) of the interpersonal relationships" (1976: 65). Thurlow, Lengel, and Tomic (2004: 48) describe social presence as the "level of interpersonal contact and feelings of intimacy experienced in communication."

Social presence is a psychological phenomenon regarding how interactants perceive one another, not a feature of a medium. However, the perception of social presence was attributed to the nonverbal cues enabled or disabled by mediation. Important nonverbal cues include facial expression, direction of gaze, posture, dress, physical appearance, proximity, and bodily orientation. In body-to-body communication, these nonverbal cues serve important functions (e.g. Wiemann & Knapp, 1975). For example, looking at someone, turning your torso toward them, nodding your head, and using fillers such as "uh huh" are all ways in which we demonstrate attentiveness (e.g. Goodwin, 1981). We rely on gestures to keep our audience tuned in and to illustrate our words. Nonverbal "emblems" such as the American thumbs-up gesture have direct verbal translations (in this case, "yes," "good job," or "can I have a ride?" although the same gesture might directly translate into something far more provocative

elsewhere). Facial expressions including smiles, furrowed brows, and clenched teeth convey interpersonal attitudes of liking and aversion, as well as cognitive states such as confusion and understanding (e.g. Andersen & Guerrero, 1998). Given the importance of these nonverbal cues in coordinating interaction and conveying meaning, especially emotional meaning, it makes sense that people question how well mediated communication can successfully serve social functions.

Social Presence theorists argued that if you knew which social cues served which functions in conversation, and you knew which media transmitted which cues, you would be able to predict how much social presence people using a medium would experience. In particular, they expected that groups completing tasks that involved maintaining personal relationships would require media that conveyed more social cues than groups performing tasks in which people were primarily acting out social roles. In experiments, they found that people experienced more sense of social contact in face-to-face encounters than in videoconferences (Short et al., 1976). As Fulk and Collins-Jarvis (2001: 629) summarize, in several related studies people were found to perceive the least social presence of all in audio meetings "which are seen as less personal, less effective for getting to know someone, and communicate less affective content than face to face."

Social Presence Theory focuses on the perception of others as real and present. Media Richness Theory, developed by Daft and Lengel (1984), is closely related, but focuses directly on the medium. Daft and Lengel (1984) defined a medium's richness as its information-carrying capacity, which they based on four criteria: the speed of feedback, the ability to communicate multiple cues, its use of natural language rather than numbers, and its ability to readily convey feelings and emotions (a factor I find conceptually difficult to tease apart from the conveyance of multiple cues). Media Richness scholars compared rich and lean media for their suitability for solving tasks differing in equivocality and uncertainty. In contrast to Social Presence researchers, most Media Richness research focused on asynchronous communication (Fulk & Collins-Jarvis, 2001). The expectation was that tasks high in uncertainty with many possible answers, such as resolving personnel issues, would work better in rich media, while unequivocal tasks like telling someone you're running late would be best served by lean media (Daft & Lengel, 1984).

These two theories – developed in a time when all online interaction was text-only – and related work from around that time can be considered "cues filtered out" approaches (Walther, Anderson, & Park, 1994). In their simplest forms, cues filtered out approaches assume that, to varying degrees, mediated communication is lean and therefore impedes people's ability to handle interpersonal dimensions of interaction. Because computer-mediated interactants are unable to see, hear, and feel one another, they can't use the usual cues conveyed by appearance, nonverbal signals, and features of the physical context. Mediated communication may be better than face-to-face interaction for some tasks, but for those involving personal identities and feelings, mediation was depicted as inherently inferior (Fulk & Collins-Jarvis, 2001).

Cues filtered out studies examining how reduced cues affected social qualities of communication (e.g. Baron, 1984; Kiesler, Siegel, & McGuire, 1984) had several expectations, which resonate with much of the public discourse we saw in the previous chapter. First, mediation would make it more difficult to maintain conversational alignment and mutual understanding. Messages would be harder to coordinate. This would mean that communicators would have to work harder to achieve their desired impact and be understood.

Second, because social identity cues would not be apparent, interactants would gain greater anonymity. Their gender, race, rank, physical appearance, and other features of public identity are not immediately evident. As a result, people would be "depersonalized," losing their sense of self and other. This impersonal environment would make these media inherently less sociable and inappropriate for affective bonds. On the other hand, anonymity was also expected to result in a redistribution of social power, echoing the visions of blurred social status seen in chapter 2. With the cues to hierarchy (e.g. age, attire, seating arrangement) missing, participation would become more evenly distributed across group members. This egalitarian balance would make it difficult for people to dominate and impose their views on others (Baron, 1984; Walther, 1992). For those seeking speedy task resolution, the plurality of voices could mean tasks would

take longer to accomplish. When everyone voices opinions, it often takes longer to reach a decision, complete a task, or achieve consensus (Sproull & Kiesler, 1991).

Cues filtered out researchers also expected that the lack of social cues would result in contexts without social norms to guide behavior (Kiesler et al., 1984; Rice, 1984, 1989; Sproull & Kiesler, 1991). Where face-to-face communication is regulated by implicit norms made apparent in the social context (for example, that this is a formal situation and it would not be appropriate to stand up enraged and start swearing), computer-mediated discourse was seen as a social vacuum in which anything went. Among other predictions, this was expected to lead to less social and emotional (socioemotional) communication and, somewhat paradoxically, more negatively loaded emotional communication. Instead of following the social norms mandating politeness and civility, rendered anonymous by the absence of social cues we would be meaner to one another than we would ever be in person.

These theories made enduring contributions to our understandings of communication media. The concepts of social presence and media richness continue to influence the ways scholars think about the consequences of mediation for interaction, and have become important pieces of later analytic frameworks. Social Presence continues to be an important thread in internet research (e.g. Cortese and Seo, 2012). Furthermore, cues filtered out predictions about task accomplishment have held up well in research and in practice. However, their expectations about social interaction turned out to be problematic at best and sometimes downright wrong. Certainly, some people do become aggressive sometimes under some circumstances, a phenomenon to which we'll return below, but people also build warm loving relationships and provide one another with all kinds of social support, phenomena for which these approaches failed to account. Despite their contributions, they fall short as ways to describe and explain mediated communication's social consequences.

One reason for this is that scholars tended to use experimental research strategies that were unrealistic, usually involving small groups in short-term one-shot interactions in which they were supposed to accomplish an assigned task (Rafaeli & Sudweeks, 1997; Walther et al., 1994). Furthermore, their research findings, and findings from other lines of research, provide grounds for empirical criticisms. Lab studies did find statistically significant differences between face-to-face and computer-mediated communication, but the differences were very small (Walther et al., 1994).

More importantly, the few field studies in which researchers spent time in naturally occurring contexts in which computer systems were already being used demonstrated that socioemotional communication not only existed, but was more likely to be prosocial than antisocial (Hiltz & Turoff, 1978). The social cues reported in early field studies included typographical art, salutations, the degree of formality of language, paralanguage, communication styles, and message headers (Hiltz & Turoff, 1978; Lea, O'Shea, Fung, & Spears, 1992). In a content analysis of transcripts from a professionally oriented CompuServe forum, Rice and Love (1987) found that socioemotional content (defined as showing solidarity, tension relief, agreement, antagonism, tension, and disagreement) constituted around 30 percent of messages, and was mostly positive.

Cues filtered out approaches can also be criticized for how they conceptualize the forces at play. The very definition of media richness distinguishes the conveyance of emotion from the ability to convey social cues, though they are profoundly interrelated. Many studies counted all emotional expression as evidence of disinhibition (Lea et al., 1992), with the result that friendly asides were seen as evidence of a norm-free medium. In fact, as we'll discuss in the next chapter, over time, mediated groups develop strong communicative norms that guide behavior. Furthermore, positive consequences of disinhibition, such as increased honesty and self-disclosure, of the sort we will see in chapter 5, were also overlooked or assumed to be negative.

The perspective that mediated communication is a diminished form of face-to-face communication ignores many other factors that affect mediated communication, such as people's familiarity with the technology, whether they know one another already and what sort of relationship they have, whether they anticipate meeting or seeing one another again, their expectations and motivations for interacting, and the social contexts in which interactions are embedded. But, more significantly, it sells people short, failing to recognize the extent

to which we are driven to maximize our communication satisfaction and interaction. This "communication imperative" (Walther, 1994) pushes us to use new media for interpersonal purposes and to come up with creative ways to work around barriers, rather than submitting ourselves to a context- and emotion-free communication experience.

The example of antagonism

Despite its problems, as the comments with which I opened this chapter and some of the technological rhetorics seen in chapter 2 demonstrate, the cues filtered out approach still rings true for many. I would be the first to insist that nothing can replace a warm hug. But even if we accept that face-to-face communication provides a kind of social connection that simply cannot be attained with mediation, it does not follow that mediated communication, even in lean media, is emotionally or socially impoverished, or that social context cannot be achieved.

In chapter 2, I argued that our best shot at understanding the social consequences of mediated communication is a social shaping stance that recognizes both technological and social influences on behaviors. Research on flaming helps to illustrate how both qualities of the medium and emergent group norms influence online group behavior. Walther et al. (1994) defined flaming as messages that include swearing, insults, name calling, negative affect, and typographic energy. Flaming is exactly the kind of behavior that cues filtered out approaches predict and it is widely perceived as both common and unpleasant online. If cues filtered out theory were going to be able to fully explain one thing about social interaction, this should be it.

This flame from the Usenet newsgroup rec.arts.startrek.current from 1993 remains one of my favorites for its ability to illustrate how virulent, petty, mean, and yet entertaining flames can be:

> >>Just fine by me. Personally I'd like to involve Lursa and her sister (the
> >> Klingons) too. Now THAT would be a fun date.
> >>
> >> -Jim Hyde

> > Will you stupid jerks get a real life. Everyone with half a brain or more
> > know that a human and a Kligon can not mate. The Klingon mating
> > procedure would kill any human (except one with a brain like you).
> > Stay of the net stoopid!
>
> Oh really. Hmmmm. And I suppose Alexander and his mom are just clones or something? If you recall, she is half human, and Alexander is 1/4. Romulans don't seem any more sturdy than humans, and we saw hybrids there as well.
>
> Looks like I'm not the one with half a brain. Check your facts before you become the net.nazi next time pal. This isn't just a forum for us to all bow down and worship your opinion you know. You might also do well for yourself to learn how to spell, stooopid.
>
> -Jim Hyde

These messages occur predictably in online group interactions and often lead to "flame wars" in which flames are met with hostile retorts. The hostilities escalate, drawing in more participants. Other participants chime in urging the original participants to move the discussion off-list or ignore the hostilities. Eventually people lose interest and the discussion dies out. Many sources on the internet can be found describing this pattern and offering "netiquette" tips to prevent flame wars (e.g. Shea, n.d.).

But flaming is not always as laughable as this example, especially when it merges with trolling (Hardaker, 2010). Hate speech against both individuals and ethnic groups is common online and raises significant policy issues around regulation (Citron & Norton, 2011). YouTube comments are famous for their aggression – as a musician I interviewed told me, "I think there's something about YouTube. The people that comment on there, I think, if you put them together and gave them weapons and put them in uniform, they could take over the world, 'cause they are the nastiest people I've ever come across." Twitter has come under fire for the virulently misogynistic attacks on women that take place there, such as the case of Caroline Criado-Perez whose (successful) campaign to get a woman who was not royalty (the author Jane Austen) on the British £10 bank note unleashed a torrent of rape and murder threats, ultimately leading to

at least one arrest and a campaign urging Twitter to be more active in reining in abusive tweets. When the female Asian-American chancellor of the University of Illinois at Urbana-Champaign did not cancel classes on a particularly cold day in 2014, she was attacked by both men and women on Twitter in the crudest of sexist and racist terms. Many news sites have begun requiring commenters to log in through platforms with an expectation of real names such as Facebook and Google+ in hopes that people posting under real names will behave better. (As a glance at many Facebook groups will show, there is little evidence that they do).

There's no question that flaming and abusive online behavior are real. To some extent, this is surely facilitated by what cues filtered out scholars describe. The lack of social presence and accountability in a reduced-cues medium is seen by some as a platform for launching attacks. However, if flaming were caused by reduced social cues, it ought to be very common online. Yet it is perceived as more common than it actually is. In Rice and Love's (1987) study, only 0.2 percent of the messages were antagonistic. We may overestimate the amount of flaming because single messages may be seen by so many people and because hostile messages are so memorable (Lea et al., 1992). The fact is that most people in online groups are far more likely to be nice than to flame (e.g. Preece & Ghozati, 1998; Rice & Love, 1987). Even those who have been the targets of abuse such as Criado-Perez report experiencing more supportive messages than abusive once their abuse became known.

If reduced cues cause flaming, we should also see equal amounts of flaming in all interactions in a medium. But the amount and tolerance of hostility varies tremendously across online groups. Martin Lea and his collaborators (1992) argued that, contrary to the cues filtered out explanation that flaming occurs because of a lack of norms, flaming occurs *because* of norms. Groups with argumentative communication styles encourage people to conform to the group's style, while those with more civil styles invoke more courteous behavior. The predominantly female soap opera discussion group I studied had almost no flaming; what little there was came from outsiders (Baym, 1996, 2000).

Furthermore, rather than occurring in the absence of social norms, people often flame in ways that demonstrate their awareness that

they are violating norms (Lea et al., 1992). They may substitute punctuation marks for letters in swear words or use the html inspired "<flame on>" and "</flame off>" designations to bracket the abrasive message. Flames are also used to discipline people for behaving inappropriately, thus maintaining group norms. Norms are also negotiated through flaming, as participants in discussion forums work out what kinds of activities they are taking part in. For example, people in a cancer support group flamed as a means of determining whether or not venting was appropriate (Aakhus & Rumsey, 2010). In some groups, flaming is a form of playful sport. Although women flame too (Savicki, Lingenfelter, & Kelley, 1996), flaming has been linked to masculinity, or "the chest-thumping display of online egos" (Myers, 1987a: 241). The misogynistic trolls of Twitter come there from communities on sites like Reddit that support and foster their abusive behavior.

Putting social cues into digital communication

Instead of asking what mediation *does to* communication, we can also ask what people *do with* mediated communication. People appropriate media characteristics as resources to pursue social and relational goals (O'Sullivan, 2000). People show feeling and immediacy, have fun, and build and reinforce social structures even in the leanest of text-only media. As a consequence of people's enthusiasm for digital social interaction, developers have created ever-richer means for us to communicate. Facebook is the world's largest photo repository, Tumblr is overwhelmingly image-based, Instagram (owned by Facebook) is entirely image-based, and image-based memes have become pervasive throughout online communication. "Selfie" was the *Oxford English Dictionary*'s 2013 Word of the Year. YouTube has enabled people to communicate via video, and Skype has become a common means of communication for people in long-distance relationships, including romantic partners but also immigrants, around the world (e.g. Lingel, 2013; Madianou & Miller, 2012a, 2012b). However, even text-only interaction, on which we'll focus here given how much more research is about text-based communication, can be used to accomplish relational and social connection, leaving no

question that we can do it with additional cues such as video, images, and voice.

In 1972, just three years into ARPANET's existence, Carnegie Mellon University professor Scott E. Fahlman proposed that punctuation marks could be combined like this :-) to mark jokes (Anderson, 2005). Fahlman's innovation responded to the now-familiar problem that emotional information can be difficult to convey without facial expression and vocal intonation. Sarcasm can be particularly tricky. Conflict often results. The smiley face, used by many and reviled by some, has spread into elaborate lexicons of *emoticons*, most of which show feelings, but some of which are simply playful. Emoticons have now been built into new media to the extent that when I first typed that punctuation combination, my word processor automatically translated it into this graphical representation: ☺. Emojis (a Japanese term combining "picture" and "letter") now extend far beyond facial expressions and are standardized in smartphone keyboards. Most emoticons and emojis originated in novel uses of punctuation to illustrate feeling or to convey how the words were meant to be interpreted (Dresner & Herring, 2010). Emoticons and emojis have not entirely solved the confusion about what words mean and the emotions behind them, but they have helped.

There are other ways in which people convey nonverbal social cues when limited to textual communication. We use asterisks as brackets, upper-case lettering, and letter and punctuation repetition to indicate emphasis, as in "I am *so* busy" (my word processor automatically transforms the asterisked word into boldface), "I am SO busy," "I am soooooooo busy," or "I am so busy!!!!!!" (e.g. Darics, 2010; Herring, 2001). People also simply use words or abbreviated phrases to describe their nonverbal reactions in textual media. The people discussing soap operas I studied frequently used phrases like "I laughed so hard everyone knew I wasn't working" or the more oblique "does anyone know how to clean coffee off a keyboard?" to describe nonverbal reactions to others' humorous messages. Someone in a music fan group I followed described herself dancing on her couch while listening to the song under discussion. The acronyms LOL (for either "lots of laughs" or "laughing out loud") is even more ubiquitous than its oft-used forerunners ROTFL or the now more common ROFL

("rolling on the floor laughing"). We also display immediacy online, engaging in behaviors that reduce psychological distance and increase affiliation (Mehrabian, 1971).

We show others that we are approachable, and that we are interested in them, through immediacy cues (O'Sullivan et al., 2004). The language of immediacy is informal, filled with non-standard spellings, deletions, casual and slang vocabulary, greetings, and sign offs (Baron, 2008; O'Sullivan et al., 2004), and other linguistic markers. In my Twitter feed as I write, for instance, highly educated friends have written "yer" (your) and "tho," "Hahaha," "LOL," and "sammich" (sandwich). "Tho" shows how we delete letters. We may also leave out subject pronouns ("gotta go now"), vowels, punctuation, and, in text messages, spaces, adjectives, and adverbs (Hård af Segerstad, 2005; Ling, 2005). Deletions may be partially driven by the formal limitations of message space and time constraints (especially in synchronous media) and the physical discomforts of too much typing, but they can also create immediacy. Together, these many linguistic variations serve as ample resources for building friendly conversationality.

People also appropriate qualities of digital media as resources for play. In her book *Cyberpl@y*, Brenda Danet (2001) traced the playful quality of much online interaction, especially when synchronous, to several influences, including interactivity and synchronicity, anonymity, the lack of clear authorities and formal governing structure, and the legacy of hacker culture with its love of wordplay, puns, irony, flippancy, and irregular uses of typography and spelling. On Twitter, people play with fonts.

Many people have noted how common humor is in mediated communication contexts, whether it's the use of mobile phones to share dirty jokes amongst teenagers (Oksman & Turtiainen, 2004), the forwarding of humorous emails and links, displays of creativity in online groups (e.g. Baym, 1995; Myers, 1987a), or signifyin' amongst Black users of Twitter (e.g. Brock, 2012; Florini, 2013 – I return to this below). Rafaeli and Sudweeks (1997) found that more than 20 percent of the thousands of messages they coded from international discussion forums contained humor. In my soap group study, I found that, even in the discussion of a dark storyline the fans disliked and found disturbing, 27 percent of the messages were humorous. Group

members indicated in my surveys and in their responses to one another that humor was one of their main criteria for assessing the quality of messages and one another.

There are many other kinds of creative play in textual media. In ASCII art, the symbols available on a keyboard are used to draw images. A particularly clever account, @Glitchr, exploits glitches in the code to create tweets with letters and symbols that extend outside of the box meant to constrain the content of the tweet, disrupting the appearance of Twitter itself. An IRC group Danet (2001) studied used the keyboard in combination with colored fonts to create illustrations with many qualities found in traditional folk designs, such as those in rugs and other textiles. People invent new words and even dialects in textual interaction. The widespread LOLcat phenomenon, in which short grammatically incorrect phrases rife with misspellings (e.g. "I can haz cheezburger?" or "Literecy cat is amaized at ur perfick grahmar") are juxtaposed with pictures of cats (among other things), has given rise to a new grammatical dialect which can, in fact, be done incorrectly. "You me give cheezburger?" is bad grammar, but it is not LOLspeak (Lefler, 2011). More recently, a similar dialect, "doge," emerged, based on imagined canine speech. We also see playful humor in the creation and spread of "memes" such as Socially Awkward Penguin, Success Kid, and the others catalogued at knowyourmeme.com (Milner, 2012; Shifman, 2013). These kinds of humor require particular kinds of literacies in "vernacular creativity" (Burgess, 2006; Milner, 2012; Miltner, 2014), otherwise they will not be funny or accepted by the communities in which they circulate.

As people appropriate the possibilities of textual media to convey social cues, create immediacy, entertain, and show off for one another, they build identities for themselves, build interpersonal relationships, and create social contexts, topics to which we will return in coming chapters. Performing well can bring a person recognition, or at least lead to a sense that there is a real person behind otherwise anonymous text. Our expressions of emotions and immediacy show others that we are real, available, and that we like them, as does our willingness to entertain them. Our playful conventions and in-jokes may create insider symbols that help groups to cohere. These phenomena are only enhanced by the additional cues found in shared

video, photography, sound, and other multimedia means of online interaction that have developed over time.

Digital language as a mixed modality

If comparing mediated text to face-to-face communication doesn't work adequately, it might be more fruitful to think of digital communication as a mixed modality that combines elements of communication practices in embodied conversation and in writing. Instead of approaching mediated interaction as face-to-face communication and finding it wanting, we draw from our existing repertoire of communication skills in other modes to make a medium do what we want it to do as best we can.

Online language has been called an "interactive written register" (Ferrara, Brunner, & Whittemore, 1991), a hybrid (Danet, 1997), a creole (Baron, 1998), and an "uncooked linguistic stew" (Baron & Ling, 2003) that blends elements of written and oral language with features that are distinctive to this medium, or at least more common online than in any other language medium. Mediated interaction in several languages (including English, French, Swedish, and Norwegian) resembles both written language and oral conversation (Baron, 2000; Baron & Ling, 2003; Baym, 1996; Danet, 1997; Ferrara et al., 1991; Hård af Segerstad, 2005; Herring, 2001; Ling, 2005).

Online interaction is like writing in many ways. In detailed analyses of naturally occurring messages, Baron (2008) argues that, on balance, emails, instant messages, and text messages look more like writing than speech, but fall on a spectrum in between. Like writing, textual interaction online often bears an address. Messages can be edited prior to transmission. The author and reader are physically (and often temporally) separated. Messages can be read by anonymous readers who may not respond and it is not possible for interlocutors to overlap one another or to interrupt. Context must be created through the prose so that messages are often explicit and complete. There is rarely an assumption of shared physical context. Messages are replicable and can be stored.

On the other hand, there are many ways in which online language resembles speech. As we saw in the discussion of immediacy

above, misspellings and deletions often foreground phonetic qualities of language. Despite the challenges to conversational coordination (Herring, 2001), messages are generally related to prior ones, often through turn-taking. The audience is usually able to respond and often does so quickly, resulting in reformulations of original messages. Topics change rapidly. The discourse often feels ephemeral, and often is not stored by recipients despite the capacity for storage.

The specter of a new language form, neither spoken nor written yet both, raises dual fears about the degeneration of spoken conversation and written language. Newspaper articles have worried, for instance, that the brief exchanges of Instant Messaging (IM) will lead to an inability to conduct face-to-face conversations, or that non-standard spelling and punctuation will decimate grammar as we know it. Teachers in Finland, where text messages are full of non-standard Finnish, worry about negative consequences for student writing (Kasesniemi & Rautiainen, 2002), echoing concerns heard in seemingly every nation that uses these media.

The scant evidence so far does not offer strong reasons for concern. There are far fewer such deviations from standard language forms than people think (Baron & Ling, 2003). Baron (2008) found few abbreviations, acronyms, contractions, misspellings, emoticons, or missing punctuation in American college students' Instant Messages. Furthermore, like flaming, few of the non-standard features of language are due to inattention or lack of awareness of standards (Herring, 2001). Most are deliberate adaptations of the technical and social contexts of interactions for social purposes. The language of mediated interaction is "at most a very minor dialectal variation" (Baron, 2008: 163).

The discourse of fear and language decay surrounding these media (reflected in the rhetorics of new media discussed in chapter 2) can be understood as part of a cultural reaction to the growing informality of public life. Baron (2008) argues that, culturally, formality has increasingly been replaced by casualness, something that extends to writing across media. Writing standards, she argues, are declining as we rarely linger over the written word. Social attitudes to proofreading and perfect writing have changed so that writing is done more quickly. In a survey, 68 percent of US Advanced Placement and National

Writing Project teachers expressed concern that digital tools make students more likely to take shortcuts and put less effort into their writing (Purcell, Buchanan, & Friedrich, 2013). "Computers are not the cause of contemporary language attitudes and practices," Baron writes (2008: 171), but, "like signal boosters, they magnify ongoing trends."

People also usually understand that not all textual digital media, or circumstances in which they are used, are alike, and adapt accordingly. Messages in IM, chat, and SMS are considerably shorter than those in most other forms of online interaction, for instance, due to the temporal and software structures of those modalities. Any instance of digital language use depends on the technology, the purpose of the interaction, the norms of the group, the communication style of the speakers' social groups offline, and the idiosyncrasies of individuals. There is no standardized "digital language."

However, even if there is little reason for concern about wholesale devolutions of language in other contexts, there is still disagreement about which elements of digital style are appropriate to use when. These are value questions we are still resolving. In one particularly prominent example, Jerry Yang, then CEO of Yahoo!, wrote an entirely lower-case email to all employees to announce the layoff of thousands of workers. Yang's letter spread widely across the internet where the lack of capitalization generated controversy. While some saw it as a means of creating immediacy, thus showing compassion for the workers, and others saw it as a goofy personality quirk, some found all-lower-case entirely inappropriate in these professional and difficult circumstances. Most teachers can tell tales of students who use immediacy cues in email that seem inappropriate for that relationship. For instance, I often received emails from students asking favors of me that opened with "Hey Nancy," even when we had not met. Some professors have taken to writing guides for appropriate email and including them with their syllabi (general rule: whenever you are communicating with someone more powerful, err on the side of too formal and too polite).

What was once a complex hybrid between writing and speech has become even more complicated now that we blend and incorporate styles from conversations and writing with stylistic and formal

elements of film, television, music videos, and photography, and other genres and practices. In an analysis of "Instafame" – the amassing of large numbers of followers through the Instagram platform without being famous outside of that site – Alice Marwick (in press) shows that many of the Instafamous post selfies that appropriate the poses and props seen in celebrity culture. As Alper (2013) puts it, they use a particular "visual lexicon," which in this case draws on clothing, poses, and settings familiar from shoots of famous people. In contrast to words alone, pictures – especially selfies – can feel "more 'real' than text" (Van House, 2011: 131).

Contextual influences on online communication

Thus far we've focused on technological and social drivers of online communication. Communication is also shaped by larger social forces we carry with us into our mediated interactions. A quick look at how gender and culture play out online speaks to how social contexts shape and are shaped by mediated communication.

Gender

All cultures have different customs, rules, and expectations for behavior from men and women. Early discourses of the internet suggested that gender might become irrelevant or reinvented online. Some online contexts do take gender as a subject for linguistic play. One much-studied Multi-User Domain, Lambda MOO, offered participants multiple gender options for their identity, each with its own set of pronouns (Danet, 1998). In addition to male, female, and neuter, people can choose to identify as: either Spivak, splat, plural, egotistical, royal, or 2nd person. Third-person descriptions of each of these options would be he, she, it, s/he, E, e*, they, I, we, and you.

Several language-oriented researchers have compared men's and women's mediated messages and concluded that gender influences mediated interaction just as it influences unmediated communication. Rather than being liberated from gender, people perform gender through the ways they communicate (e.g. Herring, 1996). Most studies of gendered communication find men and women are far more similar in their communication than different, but women are socialized to attend more to relational dimensions of conversation while men are reared to specialize in the informative dimensions (Burleson & Kunkel, 2006; Kunkel & Burleson, 1999).

Not surprisingly, gender differences appear in mediated interaction. Statistical analysis of large samples of communication from Usenet groups found that the influence of gender on language style was present, but modest (Savicki et al., 1996). Kasesniemi and Rautiainen (2002: 185) described Finnish girls' text messages as "full of social softening, extra words and emotional sharing of experiences. Boys tend to write only about what has happened, and where and how . . . girls contemplate the reasons." Women are more likely to use a supportive/attenuated style oriented toward affiliation. Messages written by women are more likely to include qualifications, justifications, apologies, and expressions of support (Herring, 1996). In blogs written by young Iranians, Bordbar (2010) found that women were more likely to use cooperative and accommodating language than men, who were more likely to use aggressive and motion-oriented language. Women's IM closings take twice as many turns and are nearly three times as long as male closings. Women are also nearly three times more likely to begin SMS interactions with openings (Baron, 2008; Baron & Ling, 2003). Kapedzic and Herring (2011) found that teens' word choice in synchronous chat was determined primarily by topic, but that all other speech acts, tone, and the appearance in profile images were shaped by gender identity and conformed to gender stereotypes. In her work comparing discussion groups oriented toward male and female topics, Larson (2003) found that women used a wider range of nonverbal cues online than men. Groups with more men use more factually oriented language and calls for action, less self-disclosure, and fewer attempts at tension prevention and reduction (Savicki et al., 1996). Men may be more likely to use an adversarial style in their messages (Herring, 2001), though the data on flaming is mixed (Savicki et al., 1996). One MUD developed a term for the behavior of its male members: "MAS" for "Male Answer Syndrome" (Kendall, 2002). Gender can also influence how messages are perceived: men may be more likely to see aggressive messages as evidence of freedom of speech, candor, and healthy

debate, while women are more likely to see them as hostile and unconstructive (Herring, 1996).

As we have seen with the Twitter attacks mentioned earlier, like gender, sexism persists and is amplified online. Women with unpopular positions are routinely attacked for being women while men with unpopular ideas are attacked for their ideas (Gurak, 1997). Women are depicted as sexual objects. When someone mentions seeing a woman in one MUD, for instance, a typical response is "did you spike 'er?" (Kendall, 2002: 85). When people sell their characters in role-playing games, female avatars go for 10 percent less than their male counterparts, even when they have comparable skill levels (Castronova, 2004). Kishona Gray (2012) studied Black women's experience in Xbox Live gaming environments where people can hear one another speak in addition to seeing what they write and how they play. She found these women received sexist comments complicated by racist ones. The result is different experiences of gender for women of color than for white women.

Culture

Gender has received a good deal of attention from scholars interested in new technology. The topic of cultural identity, including nationality, language, and race and ethnicity, has received less. Miller and Slater's (2000) ethnographic analysis is an exception, showing how Trinidadian identity permeated online interaction. "Trinis" living both at home and abroad communicated in a style that displayed "being Trini and representing Trinidad" for one another and for outsiders. This ranged from engaging in "limin'," an often risqué form of playful banter, to including links to Trinidadian national sites on their personal webpages. Ananda Mitra's (1997) analysis of the soc.culture.indian Usenet group showed how diasporic Indians used communication that both maintained their Indian identity and recreated India's internal ethnic divides. Paula Uimonen (2013) analyzed profile photos of Tanzanian college students, showing how they moved between representing themselves as globe-trotting cosmopolitans and as distinctly Tanzanian. One young woman, for instance, used a photo of herself lying in a pile of autumn leaves, marking her as being

out of Tanzania, but later changed it to a picture of the Tanzanian flag.

Lisa Nakamura (2002) and David Silver (2000) have drawn attention to how race is represented or erased through the interfaces of online spaces. Race is often "routed around" online, rather than brought to the front (Silver, 2000). For example, many online sites that make users select gender and even species do not make them select race. This may be celebrated as an erasure of an unnecessary social division, but it can also be read as an assumption that most users are White. Listings of discussion groups on Yahoo! Groups were typical in that they designated many racial and ethnic groups, constructing for their users a range of social identities with which they may or may not identify. "White" did not appear in Yahoo!'s list of racial and ethnic categories. Discussion groups that do label themselves "White" are often supremacist. Like sexism, racism thrives online, and groups that do self-identify as "White" are often replete with horrifying demonstrations of racial animosity toward others. Even when one can select a non-White race, online spaces often offer highly stereotypical portrayals (Nakamura, 2002). Asian men, for instance, are frequently sword-wielding or nerdy. Asian women, so often the subjects of online pornography, often appear as passive sex toys.

In contrast, many African-Americans on Twitter have drawn on the site's use of hashtags to make themselves visible and connect with each other, resulting in a phenomenon dubiously labeled "Black Twitter" (Brock, 2012; Florini, 2013). As mentioned above, Black Twitter draws on traditions of African-American communication that favor verbal dexterity and performance, often, though not always, using Black Vernacular English or indicating "an intended oral delivery" (Florini, 2013: 11). This may be done through phonetic spellings such as "wit" in place of "with," or "tryna" in place of "trying to," and has led to standardization of Black Vernacular English on Twitter with words like "talmbout" for "talking about" becoming widely used and expected (Florini, 2013). What is important about Black Twitter is that it uses language styles associated with a marginalized and oppressed cultural group in order to claim an online space. That this has met with hostility from non-Black users (Brock, 2012) is disappointing, though sadly not surprising.

Cultural identity also manifests through the language we use. As discussed in chapter 1, the internet was created in the English-speaking world, and the influence and spread of English online remains disproportionate to its speakers. It's only in the last few years that English has come to represent less than half of the internet's language, but it is still (for now) the most common language used online. Until recently, online writing was restricted to the ASCII character set, which is designed exclusively for the Latin alphabet. With the advent of Unicode, people can now write with other alphabets and emojis; however, this technology is neither available to nor used by all. The result has sometimes been considered a form of "typographical imperialism" (Herring & Danet, 2003) with potential social, political, economic, and linguistic consequences. For instance, I've mentioned the outcry about the devolution of language in Greece and its echoes of Socrates' warnings about the alphabet. This centers on "Greeklish," the online version of written Greek using the Latin alphabet, which has been decried in Greek papers for destroying the language (Koutsogiannis & Mitsikopoulou, 2003).

The business Translate to Success (2009) compiled data from a variety of surveys of internet users to estimate that, in 2004, 38.3 percent of internet users spoke English. Chinese, Japanese, and Korean are also popular, constituting 11.2 percent, 10 percent, and 4.1 percent respectively. Only 1 percent of the world's internet users speak Arabic. Fewer than 0.1 percent speak any African language. A now-defunct effort to conduct a language census of blogs (www.hirank.com/semantic-indexing-project/census/lang.html; *Languages*, n.d.) indexed over 2 million blogs. More than half of these were in English, followed in dramatically smaller numbers by those in Catalan, French, Spanish, and Portuguese. German, Italian, Chinese, Farsi, Japanese, and Dutch were the only other languages found in more than 10,000 blogs each. Herring, Paolillo, Ramos-Vielba, et al. (2007) studied blogs on the site LiveJournal, where two-thirds of users report being outside the USA and pages can be set to appear in 32 different languages. They found that the blogs were 84 percent English, 11 percent Russian, 0.4 percent Portuguese, 0.3 percent Finnish, Spanish, Dutch, and Japanese, and 2.3 percent mixed language. All other languages combined only made up 0.8 percent of the site's user-generated content. According to WordPress.com (2014), a blogging platform with more than 69 million users worldwide, more than half of its blogs are in English, followed in dramatically smaller numbers by those in Spanish, Portuguese, and Indonesian. Italian, German, French, Russian, Vietnamese, and Swedish, though also in the top-ten most-used languages, each accounted for only 1–2 percent of all blogs.

These statistics are obviously profoundly skewed in comparison to the distribution of speakers in the global population, and reflect economic and social conditions in these parts of the world. The over-representation of languages used in wealthy countries, especially English, has often given rise to a sentiment that the internet represents a further colonization of poor nations by those with greater wealth, particularly the United States. Many of the world's voices and communicative styles are simply absent from online communication.

Summary

Mediated online messages are shaped by both technological and social qualities, both of which affect the consequences they may have. From a deterministic perspective, the two primary forces that influence online language use are the paucity of social cues, or media leanness, and the potential asynchronicity of a medium. Together, these are taken to have a host of effects, foremost among them decreasing the intimacy or personal quality of interactions (and subsequently relationships) and increasing the hostility of mediated interactions. There is a grain of truth in those claims, but they are inadequate to explain what people do with language online. Rather than giving up and accepting limited cues as a directive to live without emotion and caring in their mediated interactions, a communication imperative inspires people to appropriate the cues that are on offer in creative ways so they can show feeling, play, perform, and create identities, relationships, and group contexts.

Social forces, both online and off, shape communication online and in mobile texting, their signal boosted by mediation. People's familiarity with the medium is an influence, as are their motivations for participating. Relational and group contexts, which may themselves

be shaped through online discourse, matter. Most online communication happens against a backdrop of a shared history, whether that involves two individuals or a group that has had time to develop norms to guide appropriate behavior. People draw on long-standing practices in other media like writing, oral conversation, film and photography to guide their verbal and nonverbal activity in new media. Social identities including (but by no means limited to) gender and culture affect how people act and how their messages are perceived. The ways people communicate in these media have reshaped the media themselves, as developers respond to user creativity by automating emoticons, adding new ways to represent social cues (e.g. color, images, sound), and making it possible to use diverse alphabets through the technologies. In sum, mediated communication demonstrates many new qualities, but continues to display and reinforce the broader cultural forces that influence messages in all contexts.

4

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 counterculture 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 them by foregrounding more loosely bound networks of individuals. Yet communities continue, even if it means creating Twitter hashtags.

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, 2000) 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, civic, and political engagement. Historical changes occurring in conjunction with and facilitated by communication technologies have led many to worry that people are losing connections to their local communities, with towns, cities, and nations suffering the consequences. Digital technologies have potential to engage us more closely in communal connections but, if they take us away from embodied local interactions, they could threaten 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 label an online group "community." 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 digital media connect with participation in geographically grounded 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 its millions of 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 its 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 one platform can host many 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. 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 (or perhaps because of) 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 members, 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 are 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, in which users create buildings, parks, and other emulations of physical spaces, also lends itself to spatial understandings of "community." The immersive graphics of World of Warcraft, combined with participants' organization into guilds, shapes the sense of community – or communities – in that environment (Nardi, 2010). 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 (2007) 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 or to share the things that make their locations special to them (e.g. the Facebook group called "MAN !!!! LOOK AT THIS THING I SAW IN A LAWRENCE, KANSAS ALLEY !!!"). 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). With the rising use of social media in social protests (to which I will return below), many ad hoc groups emerge throughout Twitter, Facebook, and elsewhere, enabling rapid organization but also governmental surveillance.

Shared 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 and literacies including acronyms, vocabulary words, genres, styles, and forms of play. In my book *Tune In, Log On* (Baym, 2000), I wrote about a soap opera fan group (r.a.t.s.) on Usenet. 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.

Though I would not consider Twitter a single community, any more than YouTube, its users do share some practices, shaped both by technological affordances (the 140-character limit) and by other internet trends such as LOLspeak (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 tweeted from the courtroom. With posts such as "EPIC WINNING LOL" he quickly won the hearts of his 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. The discussion of Black Twitter (Brock, 2012; Florini, 2013) in the previous chapter provides one example of playful language use that serves to build a distinctive community. Image memes, which often emerge on the site 4Chan and then move to Reddit and Imgur, and are old news by the time they appear on Facebook, are another example of shared practice that requires a sense of group identity (Milner, 2012; Miltner, 2014; Shifman, 2012).

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 phrase simultaneously validated group members' shared love of the genre, self-representation as intelligent, and their shared frustrations. Tweeters' use of "epic" demonstrates the shared values of humor and irreverence. Rage Comics' frequent representations of socially awkward young white men, like the Socially Awkward Penguin meme, speak to the shared masculine geek culture of sites like 4Chan and Reddit (Milner, 2012). Summer postings of "hot dog legs" on Instagram demonstrate the values of leisure, luxury, and the body amongst young female Instagrammers.

Shared practices entail *norms* for the appropriate use of communication. In a piece on norms and their violations on Facebook, McLaughlin and Vitak (2011: 300) define norms as "a framework through which people determine what behaviors are acceptable and unacceptable." Norms can be explicitly stated, but they are often implicit, negotiated without discussion. Ongoing groups develop standards that guide members' behavior. The "NSFW" (Not Safe For Work) Tumblr community Katrin Tiidenberg studied (e.g. 2014) had distinct norms about sexiness, emphasizing that every woman's body

can be appealing, and training one another in the aesthetics of what constitutes a sexy image. 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 toward 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 tolerated a great deal of rudeness, particularly when people violated norms, but attended 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. On Wikipedia, adherence to norms is critical to remaining an editor or rising through the editorial ranks. In his analysis of the use of the word "community" by Wikipedians, Pentzold (2011) describes Wikipedia as an "ethos-action community" committed to ideals of openness, fairness, objectivity, consensus, and following the guidelines. No one enters the community with trust, but new editors are able to earn it by acting in accordance with that ethos.

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). On Facebook, the undergraduates interviewed by McLaughlin and Vitak (2012) voiced norms regarding whether to accept or deny friend requests (accepting was generally preferred), not posting too many status updates, not writing overly emotional updates, fighting, or tagging pictures of other people that reflect negatively on them. How people responded to violations of those Facebook norms depended on both the nature of the violation and the relationship.

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 Twitter skill. 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. Good-looking people whose selfies best capture the aesthetic of celebrity photographs may achieve fame on Instagram (Marwick, in press).

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. On social network sites, where people may be "aware that their friends and colleagues are looking," 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 college student participants 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's profiles. 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. Studies of millions of images posted to Instagram from different cities likewise demonstrate temporal and color patterns, displaying distinctive "visual rhythms" in each city (Hochman & Manovich, 2013; Hochman & Schwartz, 2012).

Shared resources and support

Communities are 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, 2000). Bridging capital is exchanged between people who differ from one another and do not share strong relationships. The internet and social network sites lend themselves to and expand the potential for this kind of capital (Hampton, Lee, & Her, 2011). 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. Indeed, supportive exchanges between weak ties may be more stress-reducing than those between strong ties (Wright, Rains, & Banas, 2010).

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 (Burleson & 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. Though one might be inclined to think of support as inherently good, there are cases that push or cross that boundary – what Haas, Irr, Jennings, and Wagner (2011) call "online negative enabling support groups." The "pro-ana" sites they studied provide support to those who view anorexia as a life-style choice rather than a disease. Extreme body modification communities support those interested in changing their bodies in ways practitioners embrace as self-expression, but which many consider mutilation and which may be illegal (Lingel & boyd, 2013).

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 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." 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. In contrast, the pro-ana groups studied by Haas et al. (2011) supported one another in their negative self-appraisals, affirming one another by accepting without contradiction their expressions of self-loathing and worthlessness. The men Elija Cassidy (2013) studied in Brisbane, Australia, used Grindr and Facebook to connect with other gay young men, but in so doing often came to abhor images of gay masculinity and to feel marginalized and unattractive within that community.

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 exemplified 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. In groups supporting marginalized identities – including extreme body modification and anorexia – informational support becomes fraught, as people simultaneously seek information and seek to hide that information-seeking from others in their lives (Haas et al., 2011; Lingel & boyd, 2013). Information within such groups may be managed in ways designed to keep outsiders out, or, as one of the body modifiers interviewed by Lingel & boyd put it, "keep it secret, keep it safe."

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*. When one of the regular writers at Daily Kos, a left-leaning political blogging site, suffered extreme damage 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. In recent years, increasing numbers of artists and entrepreneurs have turned to their online communities and networks to crowdfund their projects through sites like Kickstarter and Indie Go-Go. The musician Amanda Palmer, for instance, was able to raise US$1.2 million for an

album from her fans, though she initially requested $100,000. On a more modest yet still impressive scale, Jill Sobule was able to motivate her online community to donate $74,000 for her album *California Years*. (In the realm of absurdity, Zach Danger Brown of Columbus, Ohio raised more than $60,000 on Kickstarter to make a potato salad for which he had initially sought $10.)

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).

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. In a music group I frequented, there was a fan known for regularly hunting down and sharing 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. In the community of fans of Swedish music, a particularly powerful and recognizable identity was 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, It's a Trap!, that served as a hub of sorts for that fan community, 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. As Crawford (2011) has noted, lurking can be better understood as listening, and, seen through that lens, a valuable mode of participation in online communities. Though one might argue that some speak far too much, few would argue that

the quality of online discourse would be higher if everyone who read a message responded to it.

Given the prevalence of this silent majority, Preece, Nonnecke, and Andrews (2004) investigated the reasons for 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 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). This is very striking in the case of pro-ana groups, and is also seen in the extreme body modification groups, but is common elsewhere as well. 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* (Baym, 2000), 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, and 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, Jake for gay professional men, Ravelry for knitting enthusiasts, or FanNation for sports fans (although these sites may have trouble staying in business – several mentioned in the first edition of this book have since folded). Geography also influences the groups and social networks people join. Americans and many Europeans may flock to Facebook, but in China it is Weibo where people congregate online, and, at least as of this writing, Line is wildly popular in Japan.

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 that 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 toward 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. Ellison and boyd (2013: 158) defined a social network site as a "networked communication platform in which participants (1) have uniquely identifiable profiles that consist of user-supplied content, content provided by other users, and/or system-level data; (2) can publicly articulate connections that can be viewed and traversed by others; and (3) can consume, produce, and/or interact with streams of user-generated content provided by their connections on the site." In SNSs, messages are only seen by people tied to a user's individualized network, which is a tiny subset of all users. 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. User innovations such as hashtags on Twitter can help to increase the overlap.

Just as individuals organize themselves into networks online, so too do groups. Recent years have seen groups increasingly distributing themselves through the internet in interconnected webs of websites, blogs, SNSs, and other platforms. I call this *networked collectivism*, meaning that groups of people now network throughout the internet and related mobile media, and in-person communication, creating a shared but distributed group identity. The fans of Swedish independent music, for example, organized themselves into clusters on music-based SNSs, blogs, news sites, other SNSs, sites developed around individual bands, and regular nights in local music venues (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 in comments on YouTube videos may be quite different from in 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 interrelated 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).

Engagement with place-based community

Critics often view the widespread use of online media and social network sites as a threat to geographical community. People are said to be engaging their screens rather than one another (e.g. Turkle, 2011). I turn now to whether and to what extent participation in digital interaction affects engagement with one's geographical community.

One of the defining qualities of communication technologies from their beginnings in bone scratchings is that they rupture the otherwise-mandatory connection between message delivery and shared space. The ability to communicate in the absence of shared space in real time invokes fears of separation from physical reality, hence Gergen's (2002) concern about "floating worlds," Meyrowitz's (1985) worries about "no sense of place," and 100-year-old arguments that the telephone would lead to a lost sense of place (Fischer, 1992). As we lose connection to space, do we also become detached from those nearby whose social support comprised communities of old and on whose interconnections civil society depends?

Testing this is not easy. Most of the data that we have about the impacts of digital media on people's local connections comes from surveys. Many of these divide users into categories based on whether or not they use the internet, how much they use it in comparison to one another, or how long they have been using it. There are serious theoretical problems with these strategies. They assume that simply using the internet or using it more than others may cause effects, regardless of how it is used (Campbell & Kwak, 2011; Jung et al., 2001). More sophisticated measures attempt to distinguish different kinds and contexts of internet use. Hampton, Lee, and Her (2011), for instance, use multiple measures including whether participants use the internet or not, whether they use it frequently from home or from work, and whether they used Instant Messenger, blogged, shared digital photos, or used social networking services.

It's not surprising, given the range of measures, that the results of studies are mixed. As a whole, though, they do not support the dystopian critique that time spent online detracts from social participation offline (Boulianne, 2009). The roles of the internet in civic and political engagement are vast and well beyond the scope of this book (see, e.g., Dahlgren, 2005, 2009; Hartelius, 2005), so consider what follows to be a cursory look.

Civic engagement

People are civically engaged when they act in ways that address "social and/or community issues that are not political by nature but, nevertheless, are conducive to the collective well-being" (Gil de Zúñiga & Valenzuela, 2011: 399). One way to assess civic engagement is to ask people how many of their neighbors they know. Katz and Rice (2002) compared people who had used the internet recently to non-users of the internet and found that recent users knew the fewest, while non-users were most likely to know them all. On the other hand, in a study of a suburb of Toronto built to be wired from the ground up, Hampton and Wellman (2003) found that those who had the high-speed access when they moved in had three times the local connections and communicated more with neighbors both online and offline. They also stayed in touch more with long-distance friends and relatives who continued to provide them social support that the non-wired residents did not have (Wellman et al., 2003). Hampton, Lee, and Her (2011) found that, on average, people who used social network sites knew fewer neighbors than those who did not, but they also had more diverse social networks.

When the internet is used to connect neighbors, it can enhance their connections to one another and to their communities. There are more than 10,000 neighborhood groups in Yahoo!'s group directories, one of many sites that offer neighbors the means to connect (Hampton, 2010). In a study of a neighborhood email list in Israel, Mesch and Levanon (2003) found that the list increased the size of people's local networks and extended their participation in the community. In his "I-Neighbors" project, Hampton (2010) provided all online Americans with the means to create online groups for their

neighborhoods and then studied those groups. People created over 6,000 neighborhoods, although 80 percent only attracted 1 or 2 participants. But 28 percent of the most active neighborhoods were disadvantaged communities. People used these groups to organize local activities such as cleaning up the yards of elderly neighbors. Hampton concluded that the internet has the potential to increase the collective efficacy of those who are economically and structurally disadvantaged. However, it seems evident from these studies that simply providing a means of connection does not ensure that people take it up in ways that empower their communities.

In choosing the decline of bowling leagues to epitomize the decline of community in American life, Putnam (1995, 2000) emphasized engagement in clubs and organizations as a means of assessing civic engagement. Several surveys have looked at the relationship between internet use and engagement with clubs and volunteer organizations in the United States and Canada (Cole, 2000; Gil de Zúñiga & Valenzuela, 2011; Hampton, Lee, & Her, 2011; Katz & Aspden, 1997; Katz & Rice, 2002). Though differences are small, these studies find that internet and social network site users spend more time with such civic associations. How people use a medium matters more than whether or not they do; those who use the internet for "information acquisition and community building" are more likely to be civically engaged than those who use it for "entertainment and diversion" (Gil de Zúñiga & Valenzuela, 2011: 401). In one of the few studies looking at mobile phone use and civic engagement, Campbell and Kwak (2009) polled a stratified sample of Americans chosen to reflect their representativeness vis-à-vis census data. People who used mobile phones to exchange information and opinions were more likely to "do volunteer work, work on a community project, contribute money to a social group or cause, go to a community or neighborhood meeting, and [work] on behalf of a social group or cause." Echoing the discussion from chapter 1 about the importance of skill in understanding issues of access, Campbell and Kwak found that using the mobile phone for civic purposes was more likely when people were comfortable with the technology. Designing technologies for ease of use is important in enabling their use for civic purposes.

One can argue that the increases in public wifi and mobile media

mean that people are less engaged with their physical environments and hence less likely to engage the diverse people found in public realms. In an observational and interview study of four public parks with wifi in two countries (the USA and Canada), Hampton, Livio, and Sessions (2010) found that wifi users did pay less attention to their surroundings. They kept their heads down and hence closed themselves off to interaction with others in the park. However, when asked, 28 percent of them said that they had met a stranger in that park, and most were actively engaged with other people through their wifi connections.

Complaints about screen-obsession are often cast in contrast to a past in which people spent more time engaged in face-to-face communication, at least in public space. In an ambitious study designed to examine this, Hampton, Sessions-Goulet, and Albanesius (2014) filmed the same public places in Boston, New York City, and Philadelphia as did sociologist William H. Whyte in 1978–79. They found that people in 2008–10 were less likely to be alone than their historical counterparts. They also found that there were more women in public, and that cross-sex pairings were more common now. Despite the common perception that everyone stares at their phone these days, the highest mobile phone usage they found was 9.68 percent in one New York City park, and the average was considerably lower. With the exception of those on the steps of the Metropolitan Museum of Art, most people they observed using a mobile phone were alone. In short, people are more likely to be with others in public than they used to be and, when they aren't, a small percentage of them look at their phones. This hardly suggests a withdrawal from public life.

People who know one another use locative media – applications and features designed to help people find each other in space. Dodgeball (Humphreys, 2007) was an early example of the ground now covered by Foursquare/Swarm, Facebook places, and specialty networks like Grindr (Cassidy, 2013). Such networks can be used to meet potential romantic partners and friends (Cassidy, 2013). Less sociably, they are also used at times to avoid bumping into people you know (Humphreys, 2010).

In times of crisis such as natural disasters, warfare, or social

turmoil, people create "hashtag publics" to share information and to offer and organize support (Agarwal, Bennett, Johnson, & Walker, 2014; Bruns & Burgess, 2011; Potts, 2014). These loose collections of people organize through use of a common hashtag, usually on Twitter, though supplemented through other platforms. Monroy-Hernández, boyd, Kiciman, De Choudhury, and Counts (2013) analyzed an enormous corpus of tweets using hashtags associated with the narcowars in Mexico to map patterns of tweets onto local events and locations. They also interviewed residents who had made the potentially dangerous choice to serve as their community's primary warning system. The Mexican government and news media have been intimidated into silence, they argue, leaving local communities dependent on volunteers on social media who share real-time information on violence. This example of citizen journalism speaks to the innovative and important ways people use social media to support their local environments and to engage one another civically. Similarly, automotive enthusiasts in Kazakhstan, for whom explicit political engagement is risky, organize online and off in ways that blur boundaries between civics and politics (Shklovski & Valtysson, 2012).

Political engagement

The example of Mexican women who tweet crimes in their streets that government and journalists are afraid to mention might seem evidence enough that use of the internet does not simply displace real political engagement. Nonetheless, critics (e.g. Morozov, 2009) warn that the kind of activities that have political influence may be replaced by "slacktivism," in which reading political blogs, signing online petitions, sending emails, sharing links, and clicking Like buttons provides an ineffective substitute for effective action (Christensen, 2011).

As we saw in chapter 2, concerns about authenticity and pittings of technologically mediated practices against seemingly more-embodied ones are endemic to the reception of new media. Some evidence suggests that people who use digital media may be more likely to be politically engaged offline than those who do not. Internet users have been found to be more likely than non-users to engage in political activities, read magazines and newspapers, attend to campaign coverage in TV shows and interviews, and, perhaps most importantly, vote (Boulianne, 2009; Katz & Rice, 2002). Campbell and Kwak (2011) found that when people used their mobile phones to discuss and exchange opinions on issues, they were also more likely to "attend a political meeting, rally, or speech, circulate a petition for a candidate or issue, and to contact a public official or political party."

A 2012 survey of Americans (Brenner & Smith, 2013) found that 66 percent of American adults who use social networking sites have used them to "engage in a range of activities around political or social issues," such as posting content related to political/social topics or encouraging others to vote. Those who did this online, like those who did this offline, were considerably more affluent and educated than those who did not. Brenner and Smith found that people who used the SNS politically were "also likely to be engaged in other forms of political and civic activity that occur somewhere other than social networking sites." The survey found that 53 percent of American adults who engage with political or social issues on SNSs regularly talk about politics or public affairs with others in person, by phone, or by letter; 63 percent involved themselves directly in political activities or groups; and 53 percent used offline channels to speak out on political issues. These percentages are considerably higher than they are among adults as a whole.

These trends seem to have some international generalizability, although, as we will see soon, it is complex. Time on Facebook didn't itself correlate with political participation in a study of university students in Hong Kong (Tang & Lee, 2013), but people on Facebook who had more diverse networks, more direct connections to political actors, and were exposed to more political information on Facebook, were more likely to have participated in political activities. Similarly, Chileans who used Facebook for news and socializing were more likely to take part in political protests, in contrast to those who used Facebook for self-expression (Valenzuela, Arriagada, & Scherman, 2012).

New media are being used in many novel ways to engage people in political processes. This is particularly evident in protest movements such as those that comprised the Arab Spring and Occupy.

The internet and mobile media serve as information conduits (e.g. Christensen, 2011) that can change the dynamics of domestic protests. In this regard they are not unlike the taverns of the Middle Ages where people pooled information and let off steam (Briggs & Burke, 2009). Political information shared online can serve as a mirror – reflecting a nation back to its citizens in a new way – or as a window – setting a nation's policies within an international context of which people may not have been previously aware (Bailard, 2012). As Bailard found in a field experiment in Tanzania, internet use can "alter the cost–benefit calculus of political behavior by expanding the range of information individuals have regarding their government's actual performance" (Bailard, 2012: 341). In that study, those people assigned to an internet group were more likely to question the fairness of an election than people in a control group who had not used the internet during or after the elections.

Information distribution can also take the form of culture jamming (Lievrouw, 2011) in which people playfully remix materials in order to convey social messages. The example of Pepper Spray Cop, a meme in which people took a photograph of a police officer spraying protesting students with pepper spray and superimposed him on countless other scenes (Milner, 2012), is one example of how humorous remix was used to build support for the students in this case and for protesters in the United States at that time (including Occupy) more generally.

When information is shared through online channels, it can serve many different functions. It can spread shared grievances, draw international attention to domestic plights, broaden the appeal of social movements, and facilitate new connections between people and organizations (Howard & Parks, 2012; Lim, 2012). Social media exchanges do not necessarily mobilize people to take to the streets to demand change. For instance, online interaction functioned as a safety valve for Chinese bloggers when they discussed issues already covered in the country's newspapers, but as a pressure cooker when those same bloggers discussed topics the mainstream media ignored (Hassid, 2012). As Papacharissi and Oliveira (2012: 280) put it, social media "provide a form of emotional release that simultaneously invigorates and exhausts tension ... depending on context, these affective

attachments create feelings of community that may either reflexively drive a movement, and/or capture users in a state of engaged passivity." Furthermore, just as social media allow individuals and groups who are unhappy with their governments to find and connect with each other, it allows those governments to find and intimidate them. In Azerbaijan, for instance, the government has actively used social media to spread misinformation and to intimidate government critics into silence (Pearce & Kendzior, 2012). Even in the most visible cases of people taking to the streets, such as the Tahrir Square protests in Egypt, the role of the internet and mobile media was deeply interwoven with face-to-face communication and other media. Tufekci and Wilson (2012) interviewed 1,200 people at Tahrir Square during the protest. Half had first heard of the protests face-to-face, followed by via Facebook. Once at the protest, 82 percent of protesters used phones for communicating about the protests, and almost everyone who had a Facebook or Twitter account used those platforms to report on the protests. A quarter of them used Facebook to disseminate pictures and videos they had taken.

Even if one grants that political activity online can get people into the street, there is a concern that political interaction through new media serves to polarize rather than facilitating discussion across diverse viewpoints. This is in keeping with the critique that online communities are homogeneous and limit exposure to diversity. Gergen (2008) speculates that people are increasingly engaged in "monadic clusters," small groups that affirm one another's perspective and lead people away from political action. Anyone reading opposing political blogs cannot help but be struck by the sense of parallel worlds, in which the same events have completely different and irreconcilable meanings. Campbell and Kwak (2009) found that the monadic cluster effect holds best when people are in small diverse social networks. When communication happens in a small social circle of people who disagree, individuals are more apt to opt out of political discussion and engagement rather than risk the peace.

In recent studies, Keith Hampton and his collaborators have shown that social network sites can lead to more diverse social networks rather than more homogeneous ones (e.g. Hampton, 2011; Hampton, Lee, & Her, 2011). Gil de Zúñiga and Valenzuela (2011) also found

that social network users had more diverse ties and, as a result of having more interaction with weak ties, were more engaged citizens. Pew data (Rainie & Smith, 2012) show that nearly 40 percent of Facebook users have learned their friends have different politics than they thought, and 73 percent only sometimes, or never, agree with the political views their Facebook friends express.

The many complex ways in which engagement in digital interaction impacts civic and political life are not yet clear. New media are used to spread information, to connect people and groups, to support existing communities of activists, to mobilize new people to become engaged, to motivate already engaged people to become more engaged, and to shape and foment opinion. Perhaps most of all, they "reinforce participation in existing foci of activity" (Hampton, Lee, & Her, 2011: 1045) and serve as a "technology and space for expanding and sustaining the networks upon which social movements depend" (Lim, 2012: 234). The effect of the internet relative to other motivations for political (in)action is small, but generally positive. Far from floating, new media are part of a "hybrid complex system of social awareness" (Papacharissi & Oliveira, 2012).

Summary

In closing this chapter, let's return to the key concepts and theoretical perspectives identified in the first two chapters. New technologies offer many affordances that influence what happens through and because of them. Their combination of speed, interactivity, and reach allow people to come together around shared interests, transcending local communities in ways that may be personally empowering but potentially polarizing. Asynchronous platforms in particular offer people access to like-minded others and support, whether those others are online simultaneously or not. Synchronous or near-synchronous platforms like Twitter, combined with broad reach and replicability, can enable swift grassroots organizing. Minimal social cues in some online groups can open doors for people to make riskier self-disclosures, and hence to gain more social support, but may also contribute to polarization, as people may feel less pressured to find peaceful middle grounds. Mobility can help new media be concretely

tied to location even as people move around, and hence support local civic engagement and social movements.

Technological determinism might predict either that these combinations of features usher in a new era in which people substitute simulated communities for real ones, or that they are democratizing, empowering people to participate and increasing civic engagement. Social constructivism would focus on the social forces that influence community online and off, including the social identities of people who participate, the motivations that inspire their online actions, and the social norms they develop around how to behave and what counts as skill and competence. Social shaping and domestication approaches would do as this chapter has, looking at both the technological factors and the social ones that combine unpredictably to create practices and outcomes that have not yet cohered into clear consequences. What does seem clear at this point is that new media do not offer inauthentic simulations that detract from or substitute for real engagement. As we will continue to see in the remaining chapters, what happens through mediation is interwoven, not juxtaposed, with everything else.