Article The Public Domain: Social Surveillance in Everyday Life

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Abstract

People create profiles on social network sites and Twitter accounts against the background of an audience. This paper argues that closely examining content created by others and looking at one's own content through other people's eyes, a common part of social media use, should be framed as *social surveillance*. While social surveillance is distinguished from traditional surveillance along three axes (power, hierarchy, and reciprocity), its effects and behavior modification is common to traditional surveillance. Drawing on ethnographic studies of United States populations, I look at social surveillance, how it is practiced, and its impact on people who engage in it. I use Foucault's concept of *capillaries of power* to demonstrate that social surveillance assumes the power differentials evident in everyday interactions rather than the hierarchical power relationships assumed in much of the surveillance literature. Social media involves a collapse of social contexts and social roles, complicating boundary work but facilitating social surveillance. Individuals strategically reveal, disclose and conceal personal information to create connections with others and tend social boundaries. These processes are normal parts of day-to-day life in communities that are highly connected through social media.

Part I: Introduction and Foundation

Introduction: Social surveillance

Interviewer: When someone says, "So-and-so is totally cyberstalking so-and-so," what does that mean? What are they actually doing?

Aarti (17, female, North Carolina): They're looking at their wall posts and who writes on their wall, and usually looking through their pictures— at least their profile pictures, if not more than that— and just reading comments or commenting on it or something.

Interviewer: When do you think that gets to the point where it's weird?

Aarti: If you— well, I don't know. I feel like now, it's not really weird for anyone anymore.

Social surveillance is the use of Web 2.0 sites like Twitter, Facebook and Foursquare to see what friends, family, and acquaintances are "up to" (Joinson 2008; Tokunaga 2011). These technologies are designed for users to continually investigate digital traces left by the people they are connected to through social media. The intended use of Facebook, for example, is to "connect and share with the people in your life" by viewing the News Feed and user profiles (Facebook 2011a). But Facebook is only one part of a larger social media system. In communities where social technology use is prominent, a single person may have a Facebook profile, a Twitter account, a Tumblr blog, a Foursquare account and an Instagram photostream, each transmitting personal information to an audience. This information is broadcast to be

looked at, and as such, people can look closely. The constellation of practices framed variously as stalking, watching, creeping, gazing or looking are characteristic of social media use, but this social surveillance creates panoptic-type effects. People monitor their digital actions with an audience in mind, often tailoring social media content to particular individuals (Gershon 2010; Trottier 2011). Technically mediated communities are characterized by both watching and a high awareness of being watched.

Social technology's role in surveillance is well-documented. For instance, social media companies like Facebook aggregate and collect personal data provided by users, a process sometimes called "dataveillance" or "actuarial surveillance" (Clarke 1997; Phillips 2010). Similarly, marketing firms monitor the digital traces left by web users as they move across websites and advertising networks (Grimmelmann 2009; Turow 2006). Legal scholars have documented the use of social media by law enforcement and government to track the activities of suspected or even potential criminals (Strandburg 2011). In addition to analyzing these traditional modes of surveillance, academics have begun to unpack the ongoing eavesdropping, investigation, gossip and inquiry that constitutes information gathering by people about their peers. These practices are facilitated and extended by the digitization of social information normalized by social media. Theorists have conceptualized this shift as *lateral surveillance* (Andrejevic 2005), *participatory surveillance* (Albrechtslund 2008), *social searching* (Lampe, Ellison, and Steinfield 2006) and the term I use in this article, *social surveillance* (Joinson 2008; Tokunaga 2011).

While multiple types of surveillance take place simultaneously within social media, they differ in their expression and effects. Social surveillance differs from typical surveillance, and its inverse, "sousveillance," in three key ways. First, it requires conceptualizing power as intrinsic to every social relationship, as micro-level and de-centralized, rather than as dualistic or modernistic (Gerrie 2007). Second, social surveillance takes place between individuals, rather than organizational entities and individuals (e.g. governments surveilling citizens or corporations surveilling consumers). Third, it is reciprocal: each participant is both broadcasting information that is looked at by others and looking at information broadcast by others. Despite these differences, social surveillance demonstrates the effects of domesticating surveillance practices on day-to-day life and interpersonal relationships. Theorizing social surveillance can inform our understanding of how technologies like Twitter, Facebook and Foursquare complicate "surveillance."

Most social media users are less concerned with governments or corporations watching their online activities than key members of their extended social network, such as bosses or parents (Marwick and boyd 2011). As a result, people self-monitor their online actions to maintain a desired balance between publicity and seclusion, while readily consuming the profiles and status updates of others (boyd and Marwick 2011; Marwick 2010). This self-monitoring is related to internalizing the practice of social surveillance; as Daniel Trottier writes, "the potential of being watched by others contextualizes their own surveillance" (2011). This process reveals much about social norms, user actions, and self-presentation strategies in social software. I look at three variations of how power plays out between individuals within social media contexts to flesh out the theoretical model of social surveillance presented in this paper.

First, the paper examines role shifts and their significance within boundary work (Nippert-Eng 2010: 10–14). Privacy has historically been built upon a set of dichotomies and divisions, whether they be spatial (workplace or home), temporal ("on" or "off" the clock), or object-related (work BlackBerry or parent's car). The "context collapse" common to much social media means that users must navigate concealing and revealing information to people who blur the boundaries of work and home, school and private life, or friends and family (Marwick and boyd 2011). In social technologies where these relationships are

¹ Sousveillance, or "inverse surveillance," is the use of monitoring and tracking technologies to watch powerful entities. For example, filming police actions using digital video in order to document potential abuses. See Mann, Nolan, & Wellman, 2003.

flattened, the re-emergence of clearly hierarchical social roles such as employer or parent demonstrates that power exists and is reinforced even when technologies attempt to categorize all connections within the category of "friends". Theories of surveillance that do not incorporate this dynamism fail to explain the problems that befall individuals when these roles are asserted.

Second, I examine "Facebook stalking," the increasingly common practice of digging through digital information on the social network site Facebook to reveal information about others (Kennedy 2009). I argue that this "stalking" is intimately tied to power relations: it is both a way to compensate for perceived weakness by obtaining social knowledge, and maintaining status hierarchies by reinforcing the importance of others. A jealous boyfriend scrutinizing his girlfriend's Twitter feed can be reacting to a perception of lost control; a teenage girl expecting her friends to pay attention to what she posts on Facebook is asserting her importance. The flux and flow of power relations are ongoing.

Third, the paper examines how people use social media to be seen. Social surveillance is consensual partly because people are motivated by social status, attention, and visibility to broadcast personal details about themselves to an audience. In the process of lifestreaming, tracking and disseminating digital personal information, people choose to disclose and reveal as appropriate (Senft 2008). Beyond Facebook stalking, conceptualizing Web 2.0 as an ecosystem of overlapping and connected sites creates a model of social behavior that is larger than its parts. Individuals broadcast information in multiple places that, when synthesized by curious onlookers, reveals much. Social media has a dual nature in which information is both consumed and produced, which creates a symmetrical model of surveillance in which watchers expect, and desire, to be watched.

Surveillance and Social Media

In Surveillance Studies: An Overview, David Lyon defines surveillance as "the focused, systematic and routine attention to personal details for purposes of influence, management, protection or direction" (2007: 14). Typically, surveillance refers to an activity which enables the nation state, or capitalist formations like corporations, to manage a population (Gandy 1993; Ogura 2006). This conception of surveillance involves an asymmetry in which individuals are surveilled by structural entities, the balance of power overwhelmingly tipped in favor of the surveillor. However, individuals both comply with and resist surveillance, a dynamic referred to by Anthony Giddens as the "dialectic of control" (1982). For instance, accounts of "sousveillance" (Mann, Nolan, and Wellman 2003) involve repurposing surveillance equipment to watch the watchers, whether by capturing video of police brutality at a Critical Mass event or tweeting about a protest march in Egypt.²

Electronic communication technologies are intrinsic to contemporary surveillance activities, such as wiretapping telephone conversations, using infrared cameras to find individuals in hiding, tracking people with biometric data, creating databases to process and aggregate this information, and so forth (Nissenbaum 2010). Similarly, social media technologies can be used by companies, marketers, and governments to collect significant amounts of data about individual users. For example, the photo-sharing site Flickr aggregates user information with data collected by its parent site Yahoo! Networked banner advertisements track users across websites, creating detailed pictures of their actions and demographics. Third-party Facebook or iPhone applications may collect and disseminate still more personal data to actors outside these networks (Hull, Lipford, and Latulipe 2010). Helen Nissenbaum isolates three privacy issues surrounding social network sites. First, people use social media to disseminate information about themselves, such as writing intimate blog entries or posting pictures online, with potentially negative

² Critical Mass is a monthly event held in cities around the world where bicyclists ride en mass in an attempt to reclaim streets from automobiles. In 2008, a police officer was convicted of assaulting a Critical Mass rider in New York based partially on a YouTube video of the incident which contradicted the officer's claims (Dwyer 2008). For a discussion of Twitter's use in the Arab Spring political movements in Egypt and Tunisia, see Lotan *et al.*, in press.

effects, including limiting future employment, housing, and so forth. Second, people post information about others, whether deliberately or inadvertently, through actions like tagging faces in a photograph or @replying on Twitter. Third, social network site owners aggregate and distribute information that users provide to the site (2010: 59–64). Social surveillance intrinsically involves the first two issues.

While both *surveillance* and *sousveillance* are good starting points with which to think about issues of power and privacy within social networks, they do not help us understand increasingly common situations in which people of relatively equal power are watching each other and acting on the information they find. While this behavior has existed throughout history (Locke 2010), social media differs significantly from pre-digital interpersonal and mediated communication. Digital information is replicable, persistent, searchable, and scalable; it can be easily disseminated, copied, and accessed (boyd 2010). In many communities, Facebook, with its 800 million users, is ubiquitous (Facebook 2011b). Moreover, social media sites are commercial and incorporate capitalist logics, such as self-promotion and celebrity (Marwick 2010). As a result, social media users engage in self-conscious identity construction to manage impressions, taking the real and potential audience into account (Ellison, Heino, and Gibbs 2006; Hodkinson and Lincoln 2008; Liu 2007; Papacharissi 2002). The implications of enormous databases of consensually-provided information like Facebook and Twitter with their correspondingly large potential audiences are significant, and still developing.

Several scholars have linked surveillance to social media (Albrechtslund 2008; Andrejevic 2005; Joinson 2008; Lampe, Ellison, and Steinfield 2006; Tokunaga 2011). In the tradition of surveillance theory, Andrejevic's relatively early study of "lateral surveillance," though focused primarily on other methods by which individuals could "spy" on their peers such as people search tools, identified Friendster as a tool for investigating potential dates (2005). Albrechtslund, while concurring with Andrejevic overall, argued that this surveillance could be positive and empowering, framing it as playful and participatory (2008). These concepts have also been investigated by quantitative scholars. In a study of more than two thousand undergraduates, Lampe et al. identified social searching as a primary use of Facebook: using the site to learn more about friends, acquaintances, and classmates, distinct from social browsing in which the site is used to meet new people. Lampe framed social searching as relationship-building (2006). Joinson continued this approach in two surveys of Facebook users which categorized "keeping in touch" as a major reason for using the site. Joinson concurred with Lampe et al.'s distinction between searching and browsing, and further argued that this category included a sizable amount of surveillance-related activities, or "virtual people watching" (Joinson 2008). A recent study by Tokunaga (2011) examined what he calls "interpersonal electronic surveillance." He identifies four differences between traditional surveillance and the "horizontal" nature of social surveillance. "Vertical," traditional surveillance demonstrates asymmetrical surveillance, presence of a strong hierarchical power structure, and the "potential for regulatory oversight," and has different reasons for gathering information (706). The rest of the study is focused primarily on the surveillance of romantic partners (see also Muise, Christofides, and Desmarais, 2009) and concludes that Facebook can contribute to feelings of jealousy and create a "feedback loop," increasing time on Facebook.

Social surveillance clearly differs from traditional surveillance, to the point where some might question whether it is surveillance at all. Returning to Lyon's definition, social surveillance certainly involves "the focused, systematic and routine attention to personal details" that characterizes traditional surveillance. While surveillance is typically undertaken to manage, control, or influence a particular population, social surveillance leads to *self*-management and direction on the part of social media users. The internalization of the surveilled gaze—behavior modification as the result of being watched—can best be understood through the lens of surveillance studies. This paper fleshes out some of the tensions and complications in this perspective.

Method

Current studies of social surveillance focus either on the theoretical or the quantitative. This study explains the concept of social surveillance in greater theoretical depth and uses qualitative data to examine the practice and effects of individuals surveying each other using social media sites. In this article, I answer Lyon's call to "show the connection between the real lives of ordinary people and the modes of surveillance that serve to watch, record, detail, track and classify them" (2007: 46). The next part of this article examines the theory of social surveillance in depth, particularly along axes of power and participation. In the final section, I draw from ethnographic work and examples of popular discourse to show how social surveillance is carried out in day-to-day life, what motivates people to engage in it, and its effects on participants.

The qualitative data in this paper is drawn from two ethnographic studies of technosocial practices within the United States: an ethnography of workers at San Francisco Web 2.0 companies that took place from 2007-2009, and a study of privacy and teenagers conducted in 2010 in three different metropolitan areas in the Southeast United States, for a total of 106 in-depth interviews.³ Both groups demonstrate heavy use of social media and integration of technologies like Facebook and Twitter into everyday life. The quotes used in this paper are representative of attitudes and practices among group members; in highly technologically-mediated social lives, using social media to investigate others, and monitoring one's digital impression, is widespread. Note that because privacy practices are highly contextual, we cannot assume that the conclusions in this paper apply to users outside the United States. The goal of this paper is to theorize a new type of surveillance that is increasingly common in contexts where social media plays a significant role in relationships and interaction.

Part II: Theories

Social Surveillance

Social surveillance is the ongoing eavesdropping, investigation, gossip and inquiry that constitutes information gathering by people about their peers, made salient by the social digitization normalized by social media. It encompasses using social media sites to broadcast information, survey content created by others, and regulating one's own content based on perceptions of the audience. It can exist either within a particular social media site (e.g. Facebook) or across a variety of sites (e.g. Twitter, YouTube, and Foursquare). Social surveillance can be distinguished from other types of surveillance by the following characteristics:

- Power: Social surveillance assumes a model of power flowing through all social relationships.
- *Hierarchy:* Social surveillance takes place between individuals, rather than between structural entities and individuals.
- Reciprocity: People who engage in social surveillance also produce online content that is surveilled by others.

Power

In dualistic, judicial, or modernist notions of power, a large entity such as a government or corporation acts on a less-powerful actor. This hierarchical model of power is modeled after the right of the sovereign to impose his will onto his subjects, specifically the right to live or die (Foucault 1990; Gerrie 2007). In this concept, power is something possessed by an authority that is "exerted over things" which can "modify, use, consume, or destroy" (Foucault 1982, 786). Michel Foucault proposed an alternate model of power as micro-level, decentralized and present in all human relationships. He theorized "capillaries of power" that flow between networks and individuals. In this model, power is ever-present, fluid, and at work in the mundane day-to-day activities that make up human life (Foucault 1977; Foucault 1982). For

³ For detailed explanations of the methods of each study, please see boyd & Marwick 2011; Marwick 2010.

example, gender norms are determined not by a patriarchy seated around a table, but through millions of interpersonal moments in which "masculinity" or "femininity" is reinforced, policed, or resisted (Butler 1990). In this model, the individual is part of a push-pull interaction in which power is negotiated.

In traditional models of surveillance, power flows from the surveyors (government or corporate actors) to the surveyed. For instance, David Lyon writes:

Whatever the purpose of surveillance, to influence, manage, protect or direct, some kind of power relations are involved. Those who establish surveillance systems generally have access to the means of including the surveilled in their line of vision, whether that vision is literal or metaphorical. It is they who keep the records, hold the tapes, maintain the databases, have the software to do the mining and the capacity to classify and categorize subjects. Whether it is the massive Department of Homeland Security in the USA or some rural school board with cameras in buses, power is generated and expressed by surveillance (2007: 23).

Clearly this concept does not wholly capture the dynamic in situations where individuals both have access to the same tools and are able to mutually watch each other, as in two "friends" on Facebook or Foursquare. Nathan Jurgenson and George Ritzer refer to this type of power as the "omniopticon," in which "the many watch the many"(Jurgenson 2011). In social surveillance, social media sites are a type of capillary through which power flows not only from the site to users, but between users and across networks. Thus, while both forms of surveillance are intrinsically dependent on power relations, social surveillance incorporates the power differentials inherent in individual relationships.

Hierarchy

Surveillance in its most commonly used form implies a significant power imbalance between the group gathering information and the group being watched. Typically, the group gathering information has *structural* or systemic power (boyd 2011). This notion of extreme asymmetry does not capture the case of social surveillance, which is typically between peers of similar social status. However, Foucault's model of "capillaries of power" implies that power is constantly in flux between individuals. For instance, while we may idealize romantic relationships as egalitarian partnerships, at any one time one member of a couple may be wealthier, better looking, more or less jealous, in a bad mood, or far away—which can all affect the balance of power within a relationship. Although the consequences of these ebbs and flows are not the same as those between a corporation and an individual, or the state and an individual, they are no less significant to the individual. Indeed, individuals may care more about their relationships with romantic partners, family members, and close friends than they do about a nebulous corporate entity collecting personal information. Moreover, the use of the term "friends" to define connections on many social network sites flattens what may be very real power differentials based on social roles, such as boss/employee, teacher/student, or parent/child (boyd 2006).

While traditional models of surveillance include individuals surveilled by hegemonic power structures or individuals surveilling structural entities in order to resist hegemonic power, social surveillance conceptualizes both sets of actors as individuals. This echoes the way social software flattens all relationships into a single category, and distinguishes social surveillance from other forms of surveillance that utilize social media. For instance, a Farmville-like game launched by a corporation in order to systemically gather information about people who play it does not constitute social surveillance, although the data-gathering takes place within Facebook. Rather, it falls into the category of "dataveillance" in that the corporation is an entity gathering information on individuals. Similarly, a government agent impersonating a Twitter user to investigate a drug deal does not constitute social surveillance, as the agent represents the state: the Federal Bureau of Investigation.

Social surveillance thus recognizes models of hierarchy that incorporate very real power differentials that exist beyond state/subject or corporation/consumer, based on social status, race, class, gender, social roles and so forth. While social surveillance exists between individuals, these individuals are not necessarily "equal" although they do not represent structural entities. Moreover, there are moments of slippage where a person's social role—as a parent, employee, or romantic partner—comes into unanticipated play. For instance, a Facebook user may complain about his work, forgetting that his boss is a "friend." This suggests that the division between "individual" and "entity" is not as distinct as traditional models of surveillance might have us believe. Taking social, rather than structural, hierarchy into account allows to account for such complexity.

Reciprocity

Social surveillance takes place between members of social media sites. People who use applications like Twitter and Facebook become part of a networked audience where participants both send and receive social information (Marwick and boyd 2011). As a user skims her Facebook feed, she may simultaneously read her friends' content, comment on it, and broadcast her own content to other people's feeds, using this information to improve her mental model of other people's identities, actions and relationships. Social surveillance thus indicates that those who practice it are simultaneously surveilled by others. This differs from the asymmetry present in social media sites when users are watched by powers that they cannot watch back, such as marketers or data-miners.

Although sharing information with others through social media is often framed as a form of exhibitionism, in reality, it is often motivated by trust and intimacy. Studies show that electronic communication is primarily used to reinforce pre-existing relationships, especially by young people (Boneva and Quinn 2006; Gross 2004; Subrahmanyam and Greenfield 2008). Social network sites, which require personal information, facilitate the maintenance of weak ties, strengthen friendships, and increase social capital and popularity (Christofides, Muise, and Desmarais 2009; Ellison, Steinfield, and Lampe 2007; Joinson 2008; Livingstone 2008). Many technologies, including social media, mobile phones, and instant messenger, are crucial to strengthening both individual and peer group relationships. Similarly, micro-blogging sites like Twitter encourage "digital intimacy" (Thompson 2008), reinforcing connections and maintaining social bonds (Crawford 2009). Unlike user-generated content sites like YouTube or Wikipedia, where a small percentage of users create the majority of the content, social network users do not just watch: they broadcast.

Again returning to Foucault's model of *capillaries of power*, social surveillance explains how power is internalized and used for self-discipline and impression management. In social media sites, users monitor each other by consuming user-generated content, and in doing so formulate a view of what is normal, accepted, or unaccepted in the community, creating an internalized gaze that *contextualizes* appropriate behavior (Trottier 2011). Facebook users, for instance, imagine how readers will view their profile pictures and Wall posts and alter them accordingly. For example, Abigail, a sixteen-year-old girl from North Carolina, says:

Interviewer: Will your mother ever misunderstand something that you post on Facebook?

Abigail: Yeah for example my friend Matt, he's really good in chemistry and we were joking [on the Wall] that he was going to secretly make a meth lab. I explained it to my mom and my mom is like "What are you talking about, Matt making a meth lab?" He's a really science-y kid. He's not going to—He'd be the least person you'd expect to do drugs or whatever. And I was like, "it's an inside joke," and I would explain it to her. And oh, that's the kind of thing I would delete if it's an inside joke that I think other people wouldn't understand it, it might make me look bad then I would delete it.

Abigail evaluates both what she and others post on her wall to ensure its appropriateness. She may delete a comment if "it makes her look bad" or hide it from her mother if she suspects she will overreact. Both broadcasting and monitoring are expected and normative parts of social media, and these processes reinforce each other. By looking at other people's content, people edit their own self-presentation accordingly.

Part III: Case Studies

Social Surveillance as Social Practice

Social surveillance is an essential part of social media use. The Facebook News Feed or Twitter stream is comprised of information about what friends and contacts are doing. Music-sharing sites like Rdio and Last.fm work from the premise that it is interesting and useful to see what friends are listening to. Colors, which aggregates user photographs by location, does not even presume a pre-defined social network; "everyone using the service" is limited enough. Within Facebook, it is simple to browse the pages and walls of people you do not know, provided their privacy settings allow for it. These practices have become normal in many social contexts, to the point where it is expected to view your friends' digital content: after all, it is produced *to be seen*. Alicia, 17, from North Carolina, explains:

I've grown up with technology so I don't know how it was before this boom of social networking. But it just seems like instead of spending all of our time talking to other individual people and sharing things that would seem private, we just spend all of our time putting it in one module of communication where people can go and access it if they want to. So it's just more convenient.

A teen might ask, "did you see what I posted on Facebook last night?" or "did you see my Twitter post?" Many people use social media to easily announce significant events like births or engagements to a broad audience. In some social contexts, people will post content targeted to another with the goal of eliciting a certain reaction. Moreover, social media sites work on a network effect—they have greater utility the more people the user connects to. Taking full advantage of an application like Foursquare requires having a social network that also participates on the site.

In the following case studies, we explore the interplay of users, social software, and power through three different case studies: social roles on Facebook, Facebook stalking, and lifestreaming.

Case Study: Social Roles

Although we distinguish social surveillance (between individuals) from traditional models of surveillance (between organizational entities and individuals), power and hierarchy exist between people and they are always in flux. One way to understand this is by examining social roles (Goffman 1959; Mead 1934). Role theory argues that people behave in different, but predictable ways, depending on their social identities and situations (Biddle 1986). For example, Carol plays roles as an academic and as a daughter: the obligations, social expectations, and accepted script, or language and etiquette, differ for each. Users frequently "friend" people in social networks that retain legitimate social power over them in certain social roles such as boss or parent. While much social media creates a flat hierarchy, or sense of equivalence, across users, the dynamism of social roles creates problems when these roles are re-asserted. Social surveillance explains both the self-management that takes place in order to prevent these conflicts and the careful monitoring of others which facilitates them.

Many social media sites exhibit a phenomenon known as "context collapse," in which contacts from different facets of a person's life, such as friends, family members, and co-workers, are lumped together under the rubric of "friends." In face-to-face interaction, people vary how they present themselves based

on context and audience, a function that is complicated in social media sites like Twitter and Facebook when the context is unclear and the audience contains a wide variety of people (boyd 2008). Despite this, on many social sites there is pressure to "friend" any acquaintance (boyd 2006; Fono and Raynes-Goldie 2005). As a result, one's social media friends may have wildly variant social norms and a range of ages, occupations, and expectations. Social surveillance brings these differences into sharp relief when content is differently interpreted or reveals a side of a person that was previously hidden to a specific context.

Different social contexts are typically socially or temporally bounded, making the expected social role quite obvious. Consider the workplace. Perhaps employees consider themselves to be "at work" once they punch the clock, enter a particular building, or fill out a time sheet. Perhaps the telecommuter considers herself to be "at work" once the clock strikes 9 AM. A work laptop that can be taken home, but is still equipped with Internet tracking software, indicates that when using it, a person is expected to adhere to her role as an employee. When socializing with one's boss, one is still careful about his or her language. In these situations, the boundary between "work" and "not work" is clear.

However, technology blurs the boundaries between formerly strict categories. Christena Nippert-Eng writes that cellular phones, pagers, and email have muddled contexts so that people may find themselves "required to instantly transform [their] current frame of mind in order to accommodate whatever mentality is mandated by a newly appearing request" (2010, 175). Getting a call from one's boss while on a date, for example, requires a quick switch of self-presentation and social role to suit the occasion. This requires sophisticated abilities to prioritize, code-switch, segment, and compartmentalize, and is not always easy to anticipate.

Similarly, social media creates a false sense of equivalence between users through flattening social relationships and eliminating context. The term "friend" or "follower" can cover a broad array of people, from celebrities to family members to friends from years ago. The Facebook user is visible to a broad audience which they often conceptualize quite differently from the people who actually view their content (Marwick and boyd 2011). This technical "flattening" brings to mind modern discourses of critical pedagogy, non-hierarchical office design, and attachment parenting which seek to eliminate hierarchies of power based on social roles (Bernstein and Triger 2011). In fact, the use of social technologies is often described as "democratizing," to suggest that greater access to social media breaks down traditional boundaries. For instance, the rise of news blogging was labeled "citizen journalism" and framed as a non-hierarchical revolution in information-sharing (Hindman 2009). However, clearly not all social media users *are* equal, and the "democratizing" possibilities of social media are severely limited by economics, citizenship, gender, censorship, and the same processes that limit participation *off*line. One reason for this is that roles such as employer/employee and teacher/student reassert themselves at moments of rupture, often to the detriment of the person lower on the social hierarchy. Facebook can label all contacts as "friends," but they clearly are not all the same.

Web 2.0 strategist Ariel Waldman strongly believes in the egalitarian myth of social media, but ran into trouble with a client who did not understand why her Twitter stream mixed personal and professional content:

In their world, like you have, you know, your professional presence and then if you do anything personal, it's purely personal and you wouldn't ever mix them and they could not understand that I would have like my title on my Twitter page, like I'm, you know, so and so for NASA and do this for Pownce [a social networking site], you know, I write for [gadget blog] Engadget or something. They could not understand why you would have, why you would list your professional title but then be Twittering about I don't know, a cute cat on the street, and then say oh there's awesome robots at NASA.

Waldman's ethic is shared by many Twitter users, who share personal opinions and experiences to appear authentic (Marwick and boyd 2011). She viewed her client as simply another Twitter connection. The client, though, saw Waldman's mixing of social roles as unprofessional, and asked her to restrict her Twitter account to work-related content. She refused, and severed the professional relationship.

On the other hand, Abigail is deeply aware of the power differentials obscured by the "friends" label:

I'm friends with my mom. Occasionally I'll hide things from her like if my friend, if somebody comments on something that I feel like she would be "That's inappropriate" or something or like making a joke but my mom wouldn't understand that that's an inside joke, I would hide that or delete so my mom doesn't be like "What are you doing?" or something.

Moments of rupture when social roles collide demonstrate that power flows not only top-down from authoritarian entities, but between individuals. Despite the technological affordances that purport to erase power differentials between individuals, hierarchies represented by social roles are constantly reestablished and reinforced through social interaction. The nature of "surveillance" dynamically changes based on the social role played by observer and observant.

Case Study: Facebook Stalking

Facebook stalking is a slang term, defined on Urbandictionary.com with the following example:

Person A: I was Facebook stalking Jennifer for two hours last night.

Person B: Oh really?

Person A: Yeah, Amber added photos from her birthday party and Jennifer was tagged in one of them. However two weeks ago Jennifer RSVPed 'attending' on the guest list for Jack's birthday party which was the same night as Amber's. Then she updated her status to: "Jennifer is going on a date tonight" but according to her relationship status, she's not single! (Urban Dictionary 2011).

In this hypothetical account, Person A is trying to formulate a picture of Jennifer's actions based on bits of information that Jennifer posted to Facebook. Facebook stalking, more generally, is simply *using Facebook* – browsing other people's walls, pictures, and status updates to learn about them. But it also functions as social surveillance. In using social software to systematically learn information about others, Facebook stalking enables users to assert power over others by gaining a greater picture of their actions and identities—even if this information is inaccurate. On the other hand, by paying attention to people's social media contributions, users acknowledge the importance and visibility of their peers.

In some cases, people react to feelings of weakness or loss of power by attempting to gather information about others. This "leveling up" through creating assemblages of information allows the "stalker" to maintain a feeling of power. For instance, Serena, 16, from North Carolina, says:

Serena: I generally, I always look at Ashley's page, that's the person that my exboyfriend's dating, I don't know why, I don't know why I always do, I'm just interested.

Interviewer: Just curious?

Serena: Yeah, I'm just curious.

Interviewer: How does it make you feel to look at her page?

Serena: It makes me feel good because I don't think she's very pretty. That's why I look at her pictures and I'm like, that's okay.

Serena was deeply hurt when her boyfriend left her for Ashley and the two began dating. She "stalks" Ashley on Facebook to reassure herself that she is better looking. While Serena finds it so painful to see Ashley and her ex interact on Facebook that she briefly de-friended both of them, she says, "I still want to know what she's saying." The ability to monitor Ashley's actions is important enough to Serena that she will put up with momentarily painful moments in order to continue doing it. Serena relies on the information gathered through social surveillance to regain a sense of agency over a disempowering situation. She reacts to the changes in power between her and Ashley by using Facebook to reassure herself that she is better looking, thus reasserting her value on the high school dating market.

Similarly, Madison, a 15-year-old sophomore girl from North Carolina, uses Facebook to "stalk" the popular senior girls:

Interviewer: What do you think about stalking people over Facebook?

Madison: I don't know, that group of really pretty senior girls, me and my friends, we always talk about their pictures and how pretty they are and all that and being jealous of them, but--

Interviewer: You kind of look up to them a little bit?

Madison: Yeah, yeah. But it's kind of weird because none of us are really good friends with them.

Madison and her friends admire the popular, pretty older girls, although they are not friends outside of Facebook. Facebook creates a space for Madison and her friends to maintain an (imaginary) relationship with the popular, older girls, demonstrating the power differential between the groups. Madison's attention validates the popular girls as high-status and interesting, and the fact that this interest is not reciprocated implies that Madison's group is relatively lower-status. While the girls are seemingly peers, the difference in power relations creates different expectations of content consumption. Madison and her friends, on the other hand, are very close. She responds quickly to their text messages, looks through their Facebook photographs, and comments on status updates. Through this attention, Madison demonstrates the importance of these friendships.

While neither Serena nor Madison's actions could be explained through traditional models of surveillance, their eagerness to watch demonstrates the integration of surveillance practices into every day practice. Social surveillance both reinforces and compensates for the ebb and flow of power between individuals.

Case Study: Lifestreaming and Social Digitization

In pre-digital eras, it was normal to snoop, eavesdrop, gossip, and otherwise furtively gather information about people one was interested in. In John Locke's *Eavesdropping: An Intimate History*, he chronicles countless examples of people overhearing others, peering through keyholes or over ladders, and snapping photographs on the street, all part of what he calls "the lifelong quest for all humans to know what is going on in the personal and private lives of others" (Locke 2010: 6). But he also says:

Eavesdropping is communication, and it has two features that make it unusually interesting. The first is that it feeds on activity that is inherently *intimate*, and is so because the actors are unaware of the receiver, therefore feel free to be 'themselves.' The second feature that makes eavesdropping so interesting relates to the way the information travels. It is not *donated* by the sender. It is *stolen* by the receiver (2010: 3).

In social network sites, microblogging services, and so forth the information *is* 'donated' by the sender. There is an explicit decision to make a piece of information available to friends, even if it is done in a passive sense (every piece of music I stream on my computer, no matter how embarrassing, is logged and

made public on http://www.last.fm/user/alicetiara). This information is provided to others *to be seen*, with the hope that people will pay attention.

This "donating" of information from the individual to the network can be conceptualized as *lifestreaming* (Marwick 2010; Mullen 2010). Lifestreaming is comprised of two processes: tracking personal information and broadcasting it to a network. While self-tracking is not new, digital tools make measuring, quantifying and recording personal information much easier. For example, the Withings scale tweets its user's weight once a week, while the FitBit pedometer uses a sensor to track a person's caloric burn, sleep cycle and steps walked. These technologies digitize previously ephemeral information, making it easier to replicate, scale, and find. The broadcasting element is enabled by Internet technologies which give individuals potential access to an audience of millions, although most users share this information with only a sub-set of friends. The combination of tracking and broadcasting that characterizes social media use produces a stream of information about the individual. Thus, the term "lifestream" refers to the assemblage of information produced from the totality of social media technologies across the ecosystem. It is at this lifestream that would-be eavesdroppers often look when attempting to discern social information. The lifestream is the subject of social surveillance.

People expose themselves to this type of social surveillance so that people will look. For many, attention and visibility is a goal in itself, especially when it is connected to social status. For instance, Matthew (16, male, North Carolina) describes girls who post controversial statements on the question-and-answer site Formspring:

The people who do it, it's the attention [they] crave, for sure... So it's like those girls who love a little drama in their life or something. I don't know it also kind of— it's a good way for things to get around too. So if there's a rumor they can confirm or deny it on there. And depending on that how they answer it you have yourself— there's this big new piece of news about so-and-so that you can spread around which, I think, is kind of cool.

Matthew recognizes that information functions as currency in the popularity-driven world of high school. His classmates seek visibility by posting information online, and use sites like Facebook and Formspring to learn about others, which in turn is converted into social capital. Josh, a 17-year-old boy from Nashville, identifies a number of things teens might do on Facebook to make someone look:

Interviewer: Do you feel like people put stuff on Facebook trying to elicit a type of reaction from other people?

Josh: Definitely.

Interviewer: Like what?

Josh: Like insulting other people. Posting pictures that they've taken of themselves. Just trying to get other people angry or trying to get other people to like them.

Although Josh focuses on negative attention-seeking content, such as risqué or revealing pictures, gossip, trash-talking or overtly performing relationships, other people seek positive affirmation and feedback. Social media users may explicitly ask for support, post creative work for feedback, or share useful information with others; both positive and negative behavior is motivated by visibility.

Among Web 2.0 workers in San Francisco, people aimed to create content that they thought their audience would read, often informative, witty, or intelligent. Adam Jackson, a young technology worker, told me:

There is a reason why I can post 150 times a day and still have 2,000 followers. People seem really interested in what I am saying. I get more replies than most of the tech experts, because my things are very, they make you want to stick to them and reply. I

happen to have a knack for it I guess. I spent a year and a half changing the way I tweet, on a monthly basis, to find that algorithm of success.

Jackson tailored his content to appeal to his audience with the goal of increasing his numbers of Twitter followers. But appealing to a specific audience often requires self-censorship. Caroline McCarthy, a New York-based tech journalist, opened a Twitter account to chat with peers. But with 6,000 followers, she is careful to post tweets only that she finds appropriate for a work audience.

But, I think about two years ago, shortly after I first started using Twitter, I live-Twittered the aftermath of a wild party at my apartment, like, "OMG! Guess who we found in the bathtub!" Now I would not do that. I would not do that because first - it would be imagebad. Second - how many of those 6000 people actually want to know that I found my drunk friend in my bathtub? No, none of them.

For McCarthy, attention-seeking content is not appropriate if it is not professional. She crafts tweets that are in keeping with her professional persona and that she thinks her followers will find interesting. As Daniel Trottier writes, "interpersonal scrutiny becomes professionalized in recognition that professionals are watching" (2011).

Social surveillance is reciprocal. People create content with the expectation that other people will view it, whether that means editing their own self-presentation to appeal to an audience, or doing something controversial to gain attention. But in order to best be seen, the users in this section must monitor the information of others to create the right context. By understanding her 6,000 Twitter followers, McCarthy can decide whether or not they want to know about her "drunk friend in her bathtub." The more that Jackson learns about his audience, the more likely he is to achieve the visibility he craves. Matthew's classmates stalk their peers in order to boost their own social status. The reciprocity of social surveillance engenders both disclosure and concealment.

Conclusion

Social surveillance is the process by which social technologies like Facebook, Foursquare and Twitter let users gather social information about their friends and acquaintances. As Nippert-Eng writes, "Humans are constantly scanning, constantly receptive to and looking for whatever they can perceive about each other, for whatever is put out there" (2010: 8). People are very resourceful at combining information from disparate digital sources to create a "bigger picture" of social activities. The human impulse to eavesdrop or overhear is augmented by information provided by those they survey on Twitter or Flickr.

There are some positive effects of social surveillance. One of the most important is ambient awareness of others or the development of "digital intimacy" (Thompson 2008). While chat on Facebook or Twitter is frequently characterized as irrelevant prattle, these pieces of information, like gossip, small talk, and trivia, serve to create and maintain emotional connections between members of the community, who make up the networked audience. Similarly, Mei Xing (female, 18, Nashville) says:

Mei Xing: I guess we just get really happy when we talk about Facebook because it is probably the greatest invention ever.

Interviewer: Yeah.

Mei Xing: Yeah, because before Facebook when we would go home everyone would be— you don't know what other kids are doing at their houses. It's just basically you're like in your own little world and you don't know what's happening in other people's households and stuff. But with Facebook you know that at that moment that at least a portion of your friends are doing the same thing that you are.

To Mei Xing, seeing her friends on Facebook chat or looking at their Wall conversations makes her feel connected to a larger community of friends.

Making information public can also have positive, supportive social effects. Jeff Jarvis argues that using the Internet publically affords "meeting people, collaborating with them, gathering the wisdom of our crowd, and holding the powerful to public account" (Jarvis 2010). Ellison *et al.*'s work on social capital shows that increased use of Facebook correlates to stronger, more supportive relational ties (Ellison, Steinfield, and Lampe 2011). Beyond simply asking for help from friends and family, blogging about problems with work or children can open up a world of helpful advice and support. Furthermore, making information public increases one's attention and visibility, which correlates with higher social status in many social contexts. This can be helpful for people in career paths like journalism or entrepreneurship that depend on networking and publicity for success. It can also be stifling for people who feel that they must publicize themselves in order to be noticed.

Foucault advocated that people focus on "the media through which power is generated and transmitted" (Gerrie 2007). This paper has updated the model of *social surveillance* to account for different forms of social power and how they can be expressed through social media technologies. I use Foucault's concept of "capillaries of power," in which power flows through all interpersonal relationships, to demonstrate that social surveillance accounts for the power differentials evident in everyday interactions, rather than the hierarchical models of power in traditional understandings of surveillance. Social surveillance exists along three axes, power, hierarchy, and reciprocity, which are constantly shifting and changing. The case studies demonstrate how our understandings of social roles, disclosure, and publicity are altered through the lens of social surveillance. Individuals strategically reveal, disclose and conceal personal information to create connections with others and protect social boundaries. These processes become normal parts of day-to-day life in communities that are highly connected through social media.

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References

Albrechtslund, Anders. 2008. "Online Social Networking as Participatory Surveillance." *First Monday* 13 (3). http://www.uic.edu/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/2142/1949.

Andrejevic, Mark. 2005. "The Work of Watching One Another: Lateral Surveillance, Risk, and Governance." Surveillance & Society 2 (4): 479-497.

Bernstein, Gaia, and Zvi H. Triger. 2011. "Over-Parenting." *UC Davis Law Review*. Seton Hall Public Law Research Paper No 1588246. http://papers.csm.com/sol3/papers.cfm?abstract_id=1588246.

Biddle, Bruce. J. 1986. "Recent Development in Role Theory." Annual Review of Sociology 12 (January 1): 67-92.

Boneva, Bonka. S, and Amy Quinn. 2006. "Teenage Communication in the Instant Messaging Era." In *Computers, Phones, and the Internet: Domesticating Information Technology*, ed. Robert. E Kraut, Sara Kiesler, and Irinia Shklovski, 201–218. Oxford, England: Oxford University Press.

boyd, danah. 2006. "Friends, Friendsters, and MySpace Top 8: Writing Community Into Being on Social Network Sites." *First Monday* 11 (12). http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/1418/1336.

boyd, danah. 2008. "Taken Out of Context: American Teen Sociality in Networked Publics". PhD Dissertation, School of Information, University of California, Berkeley. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1344756.

boyd, danah. 2010. "Social Network Sites as Networked Publics: Affordances, Dynamics, and Implications." In A Networked Self: Identity, Community, and Culture on Social Network Sites, ed. Zizi Papacharissi. New York: Routledge.

boyd, danah. 2011. "Dear Voyeur, Meet Flâneur... Sincerely, Social Media." Surveillance & Society 8 (4) (March 24): 505-507.

boyd, danah, and Alice Marwick. 2011. "Social Privacy in Networked Publics: Teens' Attitudes, Practices, and Strategies." Presented at the Privacy Law Scholar's Conference, Berkeley, CA.

Butler, Judith. 1990. Gender Trouble: Feminism and the Subversion of Identity. New York: Routledge.

Christofides, Emily, Amy Muise, and Serge Desmarais. 2009. "Information Disclosure and Control on Facebook: Are They Two Sides of the Same Coin or Two Different Processes?" *CyberPsychology & Behavior* 12 (3) (June): 341–345.

Clarke, Roger. 1997. "Introduction to Dataveillance and Information Privacy, and Definitions of Term." *Rogerclarke.com*. http://www.rogerclarke.com/DV/Intro.html.

Crawford, Kate. 2009. "These Foolish Things: On Intimacy and Insignificance in Mobile Media." In *Mobile Technologies: From Telecommunications to Media*, ed. Gerard Goggin and Larissa Hjorth, 252–266. New York: Routledge.

Dwyer, Jim. 2008. "When Official Truth Collides With Cheap Digital Technology." *The New York Times*, July 30, sec. New York Region. http://www.nytimes.com/2008/07/30/nyregion/30about.html.

Ellison, Nicole, Rebecca D. Heino, and Jennifer L. Gibbs. 2006. "Managing Impressions Online: Self-presentation Processes in the Online Dating Environment." *Journal of Computer-Mediated Communication* 11 (2): article 2.

Ellison, Nicole, Charles Steinfield, and Cliff Lampe. 2007. "The Benefits of Facebook 'Friends:' Social Capital and College Students' Use of Online Social Network Sites." *Journal of Computer-Mediated Communication* 12 (4): 1143.

Ellison, Nicole, Charles Steinfield, and Cliff Lampe. 2011. "Connection Strategies: Social Capital Implications of Facebookenabled Communication Practices." New Media & Society 13 (6): 873-892.

Facebook. 2011a. "About Facebook." Facebook.com. http://www.facebook.com/facebook.

Facebook, 2011b. "Statistics." Facebook Statistics. http://www.facebook.com/press/info.php?statistics.

Fono, David, and Kate Raynes-Goldie. 2005. "Hyperfriendship and Beyond: Friendship and Social Norms on Livejournal." In Internet Research Annual Volume 4: Selected Papers from the Association of Internet Researchers Conference. New York: Peter Lang.

Foucault, Michel. 1977. Discipline & Punish. New York: Knopf Doubleday Publishing Group.

Foucault, Michel. 1982. "The Subject and Power." Critical Inquiry 8 (4): 777-795.

Foucault, Michel. 1990. The History of Sexuality, Vol. 1: An Introduction. New York: Vintage.

Gandy, Oscar H. 1993. The Panoptic Sort: A Political Economy of Personal Information. Boulder, CO: Westview.

Gerrie, Jim. 2007. "Was Foucault a Philosopher of Technology." *Techné: Research in Philosophy and Technology* 11 (1). http://scholar.lib.vt.edu/ejournals/SPT/v7n2/gerrie.html.

Gershon, Ilana. 2010. The Breakup 2.0: Disconnecting Over New Media. Cornell University Press.

Giddens, Anthony. 1982. "Power, the Dialectic of Control and Class Structuration." Social Class and the Division of Labour: 29–45

Goffman, Erving. 1959. The Presentation of Self in Everyday Life. New York: Doubleday.

Grimmelmann, James. 2009. "Saving Facebook." Iowa L. Rev. 94: 1137.

Gross, Elisheva. F. 2004. "Adolescent Internet Use: What We Expect, What Teens Report." *Journal of Applied Developmental Psychology* 25 (6): 633–649.

Hindman, Matthew Scott. 2009. The Myth of Digital Democracy. Princeton, NJ: Princeton University Press.

Hodkinson, Paul, and Sian Lincoln. 2008. "Online Journals as Virtual Bedrooms?: Young People, Identity and Personal Space." *Young* 16 (1): 27–46.

Hull, Gordon, Heather Lipford, and Celine Latulipe. 2010. "Contextual Gaps: Privacy Issues on Facebook." *Ethics and Information Technology* (April 29): 1–14.

Jarvis, Jeff. 2010. "Public Parts". Blog post. Buzzmachine. http://www.buzzmachine.com/2010/05/20/public-parts/.

Joinson, Adam N. 2008. "Looking at, Looking up or Keeping up with People?: Motives and Use of Facebook." In *Proceeding of the Twenty-sixth Annual SIGCHI Conference on Human Factors in Computing Systems*, 1027–1036.

Jurgenson, Nathan. 2011. "Ondi Timoner (2009) We Live in Public." Surveillance & Society 8 (3): 375.

Kennedy, Mary Catherine. 2009. "Facebook and Panopticism: Healthy Curiosity or Stalking?" Thesis, Athens, OH: Ohio University. http://etd.ohiolink.edu/view.cgi/Kennedy%20Mary.pdf?ohiou1258038346.

Lampe, Cliff, Nicole Ellison, and Charles Steinfield. 2006. "A Face (book) in the Crowd: Social Searching Vs. Social Browsing." In Proceedings of the 2006 20th Anniversary Conference on Computer Supported Cooperative Work, 167–170.

Liu, Hugo. 2007. "Social Network Profiles as Taste Performances." *Journal of Computer-Mediated Communication* 13 (1): article 13.

Livingstone, Sonia. 2008. "Taking Risky Opportunities in Youthful Content Creation: Teenagers' Use of Social Networking Sites for Intimacy, Privacy and Self-expression." *New Media & Society* 10 (3) (June 1): 393–411.

Locke, John L. 2010. Eavesdropping: An Intimate History. New York: Oxford University Press, USA.

Lotan, Gilad, Erhardt Graeff, Mike Ananny, Devin Gaffney, Ian Pearce, and danah boyd. 2011. "The Revolutions Were Tweeted: Information Flows During the 2011 Tunisian and Egyptian Revolutions." *International Journal of Communication* 5. http://ijoc.org/ojs/index.php/ijoc/article/view/1246

Lyon, David. 2007. Surveillance Studies: An Overview. Cambridge, UK: Polity.

Mann, Steve, Jason Nolan, and Barry Wellman. 2003. "Sousveillance: Inventing and Using Wearable Computing Devices for Data Collection in Surveillance Environments." *Surveillance and Society* 1 (3): 331–355.

Marwick, Alice. 2010. "Status Update: Celebrity, Publicity and Self-Branding in Web 2.0". Dissertation, New York: New York University.

Marwick, Alice, and danah boyd. 2011. "I Tweet Honestly, I Tweet Passionately: Twitter Users, Context Collapse, and the Imagined Audience." *New Media & Society* 13 (1): 114–133.

Mead, George H. 1934. Mind, Self, and Society: From the Standpoint of a Social Behaviorist. Ed. C. W Morris. Chicago, IL: University of Chicago Press.

Muise, Amy, Emily Christofides, and Serge Desmarais. 2009. "More Information Than You Ever Wanted: Does Facebook Bring Out the Green-eyed Monster of Jealousy?" *CyberPsychology & Behavior* 12 (4): 441–444.

- Mullen, Jessica. 2010. "Lifestreaming as a Life Design Methodology". Master of Fine Arts, Austin, TX: University of Texas at Austin.
 - $http://posterous.com/getfile/files.posterous.com/jessicamullenmfa/565wvEahvgLsUh7oaSQeOHkhcqIOn08SFEUB5TM5cN5dC3uHcr8zS5BhOQs9/jmullen_thesis_final.pdf.$
- Nippert-Eng, Christena E. 2010. Islands of Privacy. Chicago: University of Chicago Press.
- Nissenbaum, Helen F. 2010. Privacy in Context: Technology, Policy, and the Integrity of Social Life. Stanford, CA: Stanford University Press.
- Ogura, Toshimaru. 2006. "Electronic Government and Surveillance-oriented Society." In *Theorizing Surveillance: The Panopticon and Beyond*, ed. David Lyon, 270–295. Cullompton, UK: Willan.
- Papacharissi, Zizi. 2002. "The Presentation of Self in Virtual Life: Characteristics of Personal Home Pages." *Journalism and Mass Communication Quarterly* 79 (3): 643–660.
- Phillips, David J. 2010. "Identity and Surveillance Play in Hybrid Space." In *Online Territories: Mediated Practice and Social Space*, ed. Miyase Christensen, Andre Jansson, and Christian Christensen. New York: Peter Lang.
- Senft, Theresa. 2008. Camgirls: Celebrity and Community in the Age of Social Networks. Digital Formations. New York: Peter Lang.
- Strandburg, Katherine J. 2011. "Home, Home on the Web: The Fourth Amendment and Technosocial Change." *Maryland Law Review*. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1808071.
- Subrahmanyam, Kaveri, and Patricia Greenfield. 2008. "Online Communication and Adolescent Relationships." *Children and Electronic Media* 18 (1): 119–146.
- Thompson, Clive. 2008. "Brave New World of Digital Intimacy." *The New York Times*, September 7, sec. Magazine. http://www.nytimes.com/2008/09/07/magazine/07awareness-t.html.
- Tokunaga, Robert S. 2011. "Social Networking Site or Social Surveillance Site? Understanding the Use of Interpersonal Electronic Surveillance in Romantic Relationships." *Computers in Human Behavior* 27 (2) (March): 705–713.
- Trottier, Daniel. 2011. "A Research Agenda for Social Media Surveillance." Fast Capitalism 8 (1) (October).
- Turow, Joseph. 2006. Niche Envy: Marketing Discrimination in the Digital Age. Cambridge, MA: MIT Press.
- Urban Dictionary. 2011. "Facebook Stalking." *Urban Dictionary*. http://www.urbandictionary.com/define.php?term=facebook%20stalking.