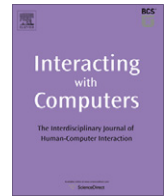




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## Feminist HCI meets facebook: Performativity and social networking sites

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### ABSTRACT

In this paper, I reflect on a specific product of interaction design, social networking sites. The goals of this paper are twofold. One is to bring a feminist reflexivity, to HCI, drawing on the work of Judith Butler and her concepts of performativity, citationality, and interpellation. Her approach is, I argue, highly relevant to issues of identity and self-representation on social networking sites; and to the co-constitution of the subject and technology. A critical, feminist HCI must ask how social media and other HCI institutions, practices, and discourses are part of the processes by which sociotechnical configurations are constructed. My second goal is to examine the implications of such an approach by applying it to social networking sites (SNSs) drawing the empirical research literature on SNSs, to show how SNS structures and policies help shape the subject and hide the contingency of subject categories.

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#### Epigram:

We are responsible for the world in which we live not because it is an arbitrary construction of our choosing, but because it is sedimented out of particular practices that we have a role in shaping (Barad, 1998, p. 102).

### 1. Introduction

Human–computer interaction (HCI), broadly speaking, is concerned with the design of tools that support human activity and interaction in a variety of ways: not just the interaction between humans and computers, but computer-mediated interaction among individuals and groups, and various forms of computer-assisted human activity. As technology has permeated more parts of our lives, HCI has moved away from its roots in cognitive science and cognitive psychology to a more all-embracing notion of human activity. Recent developments in HCI have brought a more critical, social theoretic approach to issues of interaction design. One such move has been labeled critical or reflective HCI (Sengers et al., 2006). Its proponents have sought to question the assumptions, values, and traditions of HCI and its research agendas. This special issue can be placed within this move toward a more expansive and reflective approach to HCI.

In writing this article, I was inspired by two pieces<sup>1</sup> by Suchman (2009, n.d.). She identifies feminist research as being “distinguished by the joining of rigorous critique with a commitment to transformative engagement” (Suchman, n.d., p. 1). She introduces her paper:

I consider some new resources for thinking about how capacities for action are configured at the human–machine interface, informed by developments in feminist science and technology studies [which include] a commitment to critical, but also reconstructive engagement with received conceptions of the human, the technological and the relations between them. Based on my own experience of the worlds of technology research and development, I argue that these reconceptualisations have implications for everyday practices of technology design (Suchman, n.d., p. 1).

The goals of this paper are twofold. One is to bring a feminist reflexivity to HCI. I draw in particular on Lucy Suchman’s reflections on STS, feminist theory, and technology, and on the approach of feminist theorist Judith Butler.

My second goal is to make this reflexive encounter concrete in terms of social networking sites (SNSs). A major concern of HCI is human action and interaction moderated by technology. One of the most widely-used recent interactive technologies is social

<sup>1</sup> This paper is available in two versions. The shorter one was published as (Suchman, 2009) L. Suchman, Agencies in technology design: feminist reconfigurations (shorter), Online Proceedings of the 5th European Symposium on Gender & ICT, 2009, The longer one is online as (Suchman, 2011) L. Suchman, n.d. Agencies in technology design: feminist reconfigurations (longer) <<http://www.lancs.ac.uk/fass/sociology/papers/suchman-agenciessotechnodesign.pdf>>. Consulted 16 March 2011.

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networking sites (SNSs) such as Facebook, Twitter, and Flickr. Specifically I address Suchman's topic of "how capacities for action are configured at the human-machine interface" with reference to SNSs. This paper is not an in-depth study of SNSs. I use SNSs as examples of how in how design decisions constrain and encourage users' activities, in particular, their constructions of identity. I conclude by addressing the significance of the argument of this paper for HCI research and design.

I draw on the empirical research literature on SNSs, and my own research on Flickr and related photo-sharing sites (Davis et al., 2005; Van House et al., 2005; Van House, 2007, 2009; Ames et al., 2010). This paper is not intended to be an exhaustive account of either my research or of social networking, but rather an investigation of how feminist theorizing can help HCI be more accountable for the sociotechnical assemblages that it helps to create and its role in the configuration of identities.

## 2. Feminist theory and HCI

One common misconception about feminist theory is that it is entirely about issues of gender. Suchman (2009, n.d.) identifies the commitments of feminist research as including, first, a questioning of categories such as male and female, but also subject and object, nature and culture, and even people and technology. These boundaries, it is argued, are not pre-given but are constructed, and so can be questioned and the processes of their construction examined. Second is a commitment to knowledge as situated and embodied, rather than abstract and objective, or the "view from nowhere." Third, feminist theories of technology stress the on-going construction of sociotechnical assemblages, the work of which is often invisible. Finally, feminist theory questions assumptions about agency: where it resides and whose matters. Suchman notes that feminist theories of technology, along with science and technology studies (STS), see agency as residing, not in the individual, but in sociomaterial networks of people and things.

Suchman concludes her discussion of feminist approaches to technology by saying:

Brought back into the world of technology design, this intimate co-constitution of configured materialities with configuring agencies clearly implies a very different understanding of the 'human-machine interface'. ... '[T]he interface' on the one hand becomes the name for a category of contingently enacted 'cuts' occurring always *within* sociomaterial practices, that effect 'persons' and 'machines' as distinct entities, and that in turn enable particular forms of subject/object intra-actions. At the same time, the singularity of 'the interface' explodes into a multiplicity of more and less closely aligned, dynamically configured moments of encounter between other sociomaterial configurations, objectified as persons and machines (Suchman, n.d., p. 1, 6).

In short, Suchman argues that, in technology design, the line between human and machine is constructed, not natural or inevitable; that what may appear to be a singular interface is instead a multiplicity of encounters and interactions, not identical to one another; and that both design and interaction take place within a set of practices embedded in the social and material world.

She goes on to say:

Judith Butler's argument that sexed and gendered bodies are materialized over time through the reiteration of norms is suggestive for a view of technology construction as a process of materialization through a reiteration of forms. Butler argues that 'sex' is a dynamic materialization of always contested gender norms: similarly, we might understand 'technologies' as materializations of more and less contested sociotechnical configurations (Suchman, n.d., p. 9).

As I'll discuss further below, Butler argues that social reproduction and subject formation take place through (largely unquestioned, but not necessarily faithful) reiterations of existing forms. I take Suchman to mean that technology, too, is largely the reiteration (again, largely unquestioned but not without variation) of prior assemblages of social and technical elements. However, in both technology design and social reproduction, these 'natural' configurations may be challenged.

On a very practical level, this means that, for example, the sociotechnical system of highways, cars, gas stations, drivers' licenses, rules of the road, and local practices both reflect and shape certain kinds of activities, relationships, and entities (e.g., "commuters") that may appear to be inevitable – until, say, a Westerner travels to a developing country with a very different infrastructure and practices.

Of course, HCI is not singular. One of the important developments in HCI in recent years has been critical or reflective HCI (Sengers et al., 2006; Dourish et al., 2004) (beginning with Agre's (Agre, 1997) insightful critique of Artificial Intelligence). The challenge, for critical HCI, as other forms of critique, this special issue, and this paper, is to engage constructively with the domain in question.

## 3. Related research on social networking sites

SNSs have been the subjects of considerable of research in HCI and related fields (for an extensive bibliography, see (Boyd, 2010). Boyd and Ellison define social networking sites as "web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system" (Boyd and Ellison, 2007, p. 1). In the US, between 2009 and 2010 the proportion of all adults using social networking sites increased from 46% to 61%. In the 18–29 age group, use increased from 76% to 86% Madden (Madden, 2010). As of July, 2010, Facebook had 500 million users, an increase of 25% from February, 2010 (Facebook, 2010a).

The major purposes for which people use SNSs are, not surprisingly, clearly social: primarily to stay in touch with nearby and distant friends first developed offline (Van House, 2007; Ames et al., 2010; Ellison et al., 2006, 2007; Lampe et al., 2007, 2008; Steinfield et al., 2008; Joinson, 2008; DiMicco and Millen, 2007).

A frequent topic of research on SNSs is the creation and maintenance of online identities. Most research emphasizes the participants' agency in self-presentation. Not surprisingly, people tend to present themselves with a deliberately positive spin (Krämer and Winter, 2008; Grasmuck et al., 2009; Hancock et al., 2007; Gibbs et al., 2006). People with differing offline traits including race and personality make different choices about online self-presentation (Krämer and Winter, 2008; Grasmuck et al., 2009). SNS users vary their language, tone, and editing behavior depending on audience (Walther, 2007). Not only one's own representation but that of one's friends may influence an audience's perceptions (Utz, 2010). In a series of studies tracking activity and attitudes among college students over time, Lampe et al. (2008) found Facebook attitudes and use changing only slightly over time.

Much the research on SNSs has studied young adults, who have been the earliest and heaviest users. Three small but intriguing studies addressed how young people construct identity online. In an early study of users of Friendster, Orkut, and MySpace, Marwick (2005) argued that the structure of these sites and the constraints on profiles diminished user agency in self-representation, but that users deployed a variety of strategies to circumvent these limits, such as satiric or ironic profiles.

Based on a series of interviews with British teen-agers, (Livingstone, 2008) distinguished between young adults focused on social networking and identity as display versus others focused on identity as connection. Those prioritizing display were primarily concerned with the content and design of their sites; the other group was more interested in online interaction and/or the visible representation of their friendship network. It seems reasonable to conjecture this distinction as one dimension of SNS use, and a continuum, not a dichotomy.

Manago et al. (2008) examined SNSs' contributions to young people's identity development. They grounded their work in the psychological literature on development, which "conceptualize[s] identity as an ongoing process of exploration by which young people to create coherent, stable personal identities." They examined SNSs' contributions to identity development in three areas: personal, social, and gender identities. Their data came from six focus groups with 23 undergraduates, "adolescents and emerging adults" (p. 449), all active users of MySpace.

In the first category, personal identity development, Manago et al. described SNSs as supporting "reification of self through public performance" (Manago et al., 2008, p. 450). The SNS is a place to publicly but relatively safely perform aspects of oneself that one might not otherwise. These authors described such online performances as both promoting desirable social impressions, and "incarnating an idea of who one wants to be, including incipient aspects of personal identity that users want to cultivate" (Manago et al., 2008, p. 451) that "might be inhibited in the off-line world" (p. 452). Viewer feedback, they say, provides "social verification" or "social legitimacy." These authors cite research in developmental psychology (Hardin and Higgins, 1996) as theorizing that "the more one shares certain features of the self with others, the more these features become a foundation of reality in the experience of the self and the more they become resistant to change" (Manago et al., 2008, p. 455). Viewing others' online self-representations is also important in this process. Part of identity development, they say, is social comparison.

Manago et al.'s second category of development is social identity: being in relationship to others, part of a group. SNSs allow a person to interact with others and to see one another as embedded in social networks; and to track the group(s) to which they belong (or wish to be a part of) – including who knows whom, who is doing what with whom, and what people are doing and talking about.

Their third category is gender identity. Their participants, male and female, described young women's self-representations, in particular, as conforming to gender stereotypes. Lenhart et al. (2010) reported that, in focus groups of teens and young adults, girls were described as less likely than boys to post last names online, but more likely to post photos. One reason for this may be the greater pressure on young women to present themselves as physically attractive (Livingstone, 2008). Lampe et al. (2008) referred to photos as "hard-to-fake signals." Among Manago et al.'s college-aged MySpace users, both men and women perceived that many women on MySpace present themselves in sexualized ways. The authors argued that, while this situation is not new, it may be intensified on SNSs "because more is communicated about the self through photos. Sexualized photos are especially rewarded for women through public comments on MySpace, in the same breath that negative notions about female promiscuity are endorsed" (Manago et al., 2008, p. 454).

#### 4. SNSs and self-representation

If, as Suchman says, "capacities for action are configured at the human-machine interface," then we need to turn the question of

self-presentation around and ask, not just how people use SNSs, but how the design of SNSs configure members' capacities for action. To do this we need to describe some of the ways in which SNSs' designs encourage or constrain certain forms of self-representation. My point is not a complete description or critique of SNSs, but examples of how the choices made in SNS design, along with user practices, interact with members' self-representational choices.<sup>2</sup> Later, I look at some theoretical challenges to user agency in self-representation.

Facebook is by far the gorilla among SNSs – 500 million active users, half of whom log on any given day (Facebook, 2011), the third most active website after Google and Yahoo (Compe, 2011), so Facebook's design is influential not only in people's use of Facebook but in the design of its competitors. Facebook is also increasingly integrated with other sites, allowing users to recommend, share or comment on a site's content and see their friends' and others' activity in relation to those same sites. This activity is visible on Facebook and also on the associated site so that, for example, a member of both Facebook and the *New York Times* site can see his or her Facebook friends' comments, "likes," and repostings from the *New York Times* on both sites. This brief introduction cannot begin to convey the complexity and, most of all, the pervasiveness of Facebook as it is increasingly integrated with a wide range of other sites. The point is that, both on Facebook and on sites integrated with it, people can both post information and opinions and see others' to an unprecedented extent; and that the design of the sites shapes what people do and see.

SNSs generally emphasize currency and transience. Most are optimized for short, episodic postings organized chronologically with the most recent first, quickly superseded by more recent ones. Facebook's core content has historically consisted of short status updates, a maximum of 420 characters. Members post their activities, opinions, whatever they want to say to their audiences, which consist mostly of friends and (sometimes distant) acquaintances with whom they have mutually agreed to "friend." Members also comment on one another's postings, re-post others' entries, link to online content, and post photos. Twitter postings are perhaps the most immediate and transitory, among the major SNSs. On Flickr, half of a photo's views, on average, are generated within its first two days online (Zwol, 2007).

Sites other than Facebook are often more focused in their content and functionality and/or membership. Flickr, of course, is about photos, but includes text and comments from both the image owner and viewers. Most of the activity on Twitter is around short postings, which may be grouped by topic via common tags or hashtags, and can include images.

Social networking sites are explicitly designed on the notion of social connections as a network. Most sites have some version of Facebook's "friends." Relationships are generally simplified to a handful of categories. Relationships on Facebook are symmetrical: both parties have to agree for the connection to be made. Not so on Flickr and Twitter, where reciprocity is not required. (Most sites have some way of banning stalkers or other unwanted followers.) Many sites allow some version of a "friend of a friend," meaning that people who don't know one another are occasionally connected. Facebook suggests possible friends, based on common friends. On many sites, one's entire friendship network is made visible, unlike offline life where people often maintain non-overlapping sets of relationships.

Different sites attract different (though likely overlapping) groups of users, though, again, Facebook's rapid growth means that it is extending rapidly into many social groups. Facebook and MySpace are effectively segregated by classes and race, at least among

<sup>2</sup> Most sites are continually tweaking their design. Sometimes changes are minor, sometimes major. These descriptions are as of March, 2011.

young people (boyd, 2011). Some social networks seek to connect people who share characteristics such as religion or sexual orientation.

The different sites have clearly different discourses and esthetics. Our photographer interviewees made careful decisions about which pictures they posted on which site based on the expected audience and the practices and esthetics of each site. MySpace is seen as having an edgier and less sophisticated esthetic than either Facebook or Flickr. Images on Christian social networking sites are less provocative than on many other sites. Twitter posts, limited to 140 characters, are of necessity pithy, favoring episodic reports and the *bon mot*. National Public Radio Media correspondent David Folkenflik describes new reporting via Twitter as requiring “clear thinking and elegant, taut writing. . . . Evocative writing” (Tenore, 2011).

Central to each SNS user’s initial self-definition is his or her “profile.” Most sites offer a profile template. The designers of these sites have to decide what kind of information about one another members will find relevant. While much of this information is optional, the template shapes the kinds of information people might provide, how they might categorize themselves, and what they will learn about others. These too differ across sites. For example, Facebook’s gender choices are simply male and female, while Flickr includes “other” and “rather not say.”

Many sites (including Facebook) at least began as explicitly or implicitly about dating relationships, and their profile designs still reflect this. Facebook’s profile options include sexual orientation. Facebook’s “relationship status” choices include “looking for” and “in an open relationship,” as well as “in a relationship with,” “engaged to,” and “married to,” each with a space for the name and thumbnail photo of one’s partner (presumably also a Facebook member). Changes in relationship status – along with the name and image of the person with whom one is in a relationship – appear in one’s friends’ feeds as news. Facebook allows users to list family members and their relationships, sticking with simple descriptors like “sister,” not, for example, “half-sister” or “step-sister.”

MySpace allows a member to specify why he or she belongs to the site, including looking for friends, networking, dating, or serious relationships. Its relationship status options includes “Swinger.” MySpace asks body type. It also asks “Children?” with a drop-down menu of responses including “I don’t want kids,” “love kids, but not for me,” “someday,” “expecting,” and “proud parent.” Oddly, Flickr, a photo site, includes a category named “Singleness,” with the choices being single, taken, open, and rather not say.

Other profile elements also vary across sites. Where one is employed and/or occupation appear in most SNS profile templates. A person’s interests, opinions, and group identifications can also be visible on SNSs. Facebook and MySpace’s options include religion. MySpace asks ethnicity (a drop-down list with no choice for mixed ethnicity), smoking and drinking habits, education, and income. Various sites ask about political views, heroes, books, movies, television, music, and other interests. Facebook, in keeping with its origins as a school-based site, displays one’s college as basic information, and also asks high school, with spaces for graduating class and names of fellow-students.

For most sites, the user may post an optional profile image, which appears next to posting and comments. On Facebook, profile images are nearly universal. Also visible on Facebook are memberships in special interest groups, participation in games, and self-representation via various applications (for example, one shows all the countries the member has visited).

The most direct and visible way of representing oneself online is via periodic postings. The kinds of topics a member posts on, what she or he says, the language used, even how often a person posts may all be considered important information. People post their

own words, repost others, link to content elsewhere, and post images.

Even though photographs are optional – even on Flickr which is primarily a photo site – they are an important feature. Three billion photos are uploaded to Facebook each month (Garvey, 2010), making it one of the largest, perhaps the largest, photo site in the world. Facebook increased the quality of image presentation and its emphasis on photos with its December, 2010, profile changes:

Give a more complete picture of how you spend your time, including your projects at work, the classes you take and other activities you enjoy (like hiking or reading). You can even include the friends who share your experiences. . . . Showcase the things you care about most and connect with friends who share the same interests, including sports teams, the people who inspire you and more. Your top interests now appear as a row of images – just drag and drop to put your favorites first (Facebook, 2010b).

Images can tell the viewer not only what the member looks like but where the member has been, what they’ve been doing, what they consider photo-worthy, and what their friends say about their images; and may show their friends, their pets, their cars and other possessions, living space, work space – a wide range of topics. Photos are especially fraught. A recurring theme in the literature of photography is the power of the image, especially images of people. For the person portrayed, the photo, Barthes says, “is the advent of myself as other. . . . Photography transformed the subject into object” (Barthes, 1981, p. 12–13). In front of the lens, he says, he is at one and the same time the person he thinks he is; the one he wants others to think he is; the one the photographer thinks he is; and the one the photographer makes use of to exhibit his or her art.

In my own empirical research on personal photography and on Flickr, I have discussed how people use photographs – of themselves and their belongings and so forth, and taken by themselves – for self-representation and to learn about their contacts (Van House et al., 2005; Van House, 2007, 2009; Ames et al., 2010). Interviewees often spoke of images as “more real” than text (Van House, 2011). Photos were also described as saying more than the photographer may have intended. Some thought that images, especially a stream of images such as on Flickr, said more about the photographer’s state of mind than he or she might realize or intend.

Not just the images but the associated descriptions, tags and groupings may situate one’s work and implicitly oneself in a larger network of people, topics, concerns, and attitudes. For example, some Flickr images of a protest march in Oakland, California, after a controversial verdict in the trial of a police officer who shot a civilian were tagged with terms such as “pigs kill,” “police kill citizen,” “the system,” and “power to the people.”

A SNS member’s representation is not entirely under his or her control. Friends and even strangers, depending on privacy settings, may post on someone’s “wall” or comment on postings. Flickr allows contacts to add tags, or keywords, to an image. Facebook and Flickr allow people to be “tagged” in photos, regardless of whose site the image is on. While we all hypothesize how others see us, with SNSs we have explicit access to what others are saying about us and the photos they make of us. (In a concession to subjects’ lack of agency, Facebook allows people to remove their own name from photos and videos posted by others, but not remove the media.)

The visibility and persistence of activity on SNSs makes the actions and practices of other people apparent. This visibility supports social comparison and makes practices and norms (and departures from them) highly visible.



In sum, the structure and policies of social networking sites, along with user practices and norms, support and even encourage certain kinds of self-representation, relationships, and even subjects or selves, while discouraging or making difficult others. On these sites, the nature and content of member's postings, and therefore of their presentation of self, are influenced by both the design and the norms of the site and the practices of one's social group. The implication is that certain kinds of information are of interest to one's contacts, certain categories are "normal," and certain activities are acceptable.

The ways that people and their activities are categorized are neither natural nor neutral. Bowker and Star (1999) elegantly demonstrate the social and moral order created by classification, especially of people, and the ways that lives are "torqued" (p. 27), especially for cases that do not. Even what may seem to be basic demographic information is contestable. Categories act as invisible forces that valorize some points of view, actions, characteristics, and ways of describing people and their actions, and ignore or suppress others.

These constructed self-representations are part of a complex interplay among the offline self, with its complexity, contingency, and dynamicism; one's (often multiple) online representation(s); the subject's aspirations; his or her assumptions about others' expectations; social comparisons; actual and desired group membership and social connections; gender roles and other normative influences; historical and cultural situatedness; and feedback from viewers; as well as (our primary interest here) the intended and emergent design and practices of a site. This description is a simplification; the point is to highlight the recursiveness of a complex sociotechnical network. My argument here is twofold. First, on SNSs, agency is complex and contestable. Second, participants are not simply representing but constructing themselves. In the next section I address these issues in detail, in the context of emerging social theory that questions, as Suchman says, "received conceptions of the human, the technological and the relations between them."

## 5. Performance, performativity, and SNSs

Two topics questioned by feminist theory (and other contemporary social theoretic approaches) that are relevant to social networking sites and self-presentation are agency and categories. We've already noted that categories and boundaries that appear to be "natural" may be constructed and performed, not essential or pre-given, and so we must consider "social and moral order created by these invisible, potent entities" (Bowker and Star, 1999, p. 3). Feminist theory is of course particularly interested in gender. Another, less obviously constructed, boundary is that between human and machine (see, for example, Haraway, 1991, 1997). Feminist studies of technology as well as STS conceptualize the "user" as "configured," which includes who the users are and their characteristics, but also the boundary between the user and the technology (Woolgar and Law, 1991; Oudshoorn and Pinch, 2003).

The interface, Suchman (n.d.) argues, the point of connection between human and computer, is not a thing or a place but a set of activities, a "multiplicity of dynamically configured moments of encounter" between the "sociomaterial configurations" we generally see as distinct, as persons and machines. This is not a statement of ontology. It suggests a way of understanding both people and machines as sociotechnical networks; and as performances rather than objects. Speaking from the perspective of STS, John Law has said:

[A]nalytically, what counts as a person is an effect generated by a network of heterogeneous, interacting, materials... If you

took away my computer, my colleagues, my office, my books, my desk, my telephone I wouldn't be a sociologist writing papers, delivering lectures, and producing "knowledge". I'd be something quite other – and the same is true for all of us. (Law, 2001)

From this perspective, agency adheres less to the individual than the sociotechnical system.

Goffman's (1995, 1974) influential work is frequently cited in HCI research on self-representation (e.g., Van House, 2009; Krämer and Winter, 2008; Grasmuck et al., 2009; Gibbs et al., 2006; Walther, 2007; Marwick, 2005; Bellotti et al., 2002; Ducheneaut and Watts, 2005; Miller, 1995; Robinson, 2007; Vaida et al., 2005; Wadley et al., 2009). Goffman takes a dramaturgical approach to impression management that grants considerable agency to the individual. Goffman's subject is a stable, pre-existing self who makes conscious choices about what to reveal and how to present himself or herself depending on the audience, and the subject's relationship to them and goals; the frames of reference in which they are operating; and his or her expectations of the audience's responses. Goffman posits that these self-presentations are not just for others, but part of how one develops a sense of self for themselves via the impressions they create for others.

More recently, feminist theorist Judith Butler's (Butler, 1990, 1993) quite different approach to performance and agency has been highly influential in social theory though not in HCI. In this paper I argue that Butler's approach offers a useful alternative for SNSs and HCI. My point is not to argue for or against Goffman or Butler, but to present an alternative way of understanding the processes of self-representation, especially online.

Butler<sup>3</sup> is concerned with the formation of the sexed and gendered subject within a power structure, primarily through language and discourse. Her approach can be seen as relevant to subject formation more generally. Along with other feminist theorists, she argues that identity does not inhere in the body, but is performed; its construction is ongoing. This is not to say that the body is not a material reality. Nor is it to say that, as Butler explains in the opening pages of *Bodies that Matter* (Butler, 1993), a person can wake up in the morning and select a gender from the closet, as it were. Rather, Butler's argument is that:

[T]here is no subject who decides on its gender...gender is part of what decides the subject...gender is constructed through relations of power and, specifically, normative constraints that not only produce but regulate various bodily beings...gender [is] the effect of productive constraints (Butler, 1993, p. X).

Salih (2002) describes Butler's approach as genealogical in the Foucauldian sense:

[G]enealogy investigates the political stakes in designating as an *origin* and *cause* those identity categories that are in fact the *effects* of institutions, practices, discourses, with multiple and diffused points of origin... [T]he idea that the subject is an *effect* rather than a *cause* is the key to Butler's theories of performative identity (Salih, 2002, p. 48, emphasis in the original).

Three key concepts for Butler are performativity, citation, and interpellation. Unlike performance, performativity is not the intentional act of the aware, thinking, planning subject. "[P]erformativity must be understood not as a singular or deliberate 'act,' but, rather, as the reiterative and citational practice by which discourse produces the effects it names" (Butler, 1993, p. 2). If the concept of lack of a subject is too metaphysical for some readers, the lack of (entirely) conscious intention and the unconscious "citation" or

<sup>3</sup> Butler's thought is complex and has developed over time, and her writing is often obscure, so for this discussion I rely heavily on (Salih, 2002) S. Salih, Judith Butler, Routledge, London, 2002.

repetition of existing forms and norms may be more palatable – and still in keeping with Butler's approach. We are never fully unconstrained in our actions because we are never outside of our cultural context. We can only reiterate or "cite" norms, that is, act in accord with our cultural experience.

There are 'good' (subversive) citations and 'bad' (forced) citations, and the task will be to distinguish between them – which is not always easy...discourse and the law operate by concealing their citationality and genealogy, presenting themselves as timeless and singular, while performativity similarly "conceals or dissimulates the conventions of which it is a repetition" (Butler, 1993, p. 12)... [I]t will be necessary to distinguish between those performatives which consolidate the heterosexual norm and those that work to reveal its contingency, instability and citationality (Salih, 2002, p. 95).

Another key term, "interpellation," Butler borrows from Althusser to describe how identities are both ascribed to and assumed by people as they are "hailed into their subject positions." To be "hailed" is to be called something, to have an identity attributed to oneself by others: gender, race, class, and so forth. But a person must accept this interpellation for it to constitute their identity.

As "linguistic beings," we are interpellated (or called) into existence by socially sanctioned forms of address that put us in our place even as they make us feel at home.... [Butler] argues that such forms of address as "girl" or "delinquent" do more than designate persons and bodies; they establish "a practical sense for the body, not only a sense of what the body is, but how it can or cannot negotiate space, its 'location' in terms of prevailing cultural coordinates" (Butler, 1997, p. 159–160). Whether they be names, innocuous categories, or patently derogatory terms, such calls enable agency and foreclose "in a single stroke... the possibility of radical autonomy" (Butler, 1997, p. 26, cited by Disch, 1999, p. 546).

In Butler's terms, then, we could expand on John Law's description of himself as a sociologist by saying that, by accepting the label "sociologist," Law has accepted a sense of who he is and where he fits in his culture – very different than if his professional label were, say, "manicurist."

Butler is interested in issues of power, that is, of how these relationships, identities, and norms are constructed and perpetuated, not as a result of some deliberate imposition by an outside force, but by cultural norms and discourse, and how individuals' unexamined acceptance of these in ways that enable certain identifications but not others.

Butler herself put it this way:

At stake in such a reformulation of the materiality of bodies will be the following: (1) a recasting of the matter of bodies as the effect of the dynamic of power, such that the matter of bodies will be indissociable from the regulatory norms that govern their materialization and the signification of those material effects; (2) the understanding of performativity not as the act by which a subject brings into being what she/he names, but, rather, as that reiterative power of discourse to produce the phenomena that it regulates and constrains; (3) the construal of 'sex' no longer as a bodily given on which the construct of gender is artificially imposed, but as a cultural norm which governs the materialization of bodies; (4) a rethinking of the process by which a bodily norm is assumed, appropriated, taken on as not, strictly speaking, undergone by a subject, but rather the subject, the speaking "I", is formed by virtue of having gone through such a process of "assuming a sex" and (5) a linking of this process of "assuming" a sex with the question of identification, and with the discursive means by which the heterosexual

imperative enables certain sexed identifications and forecloses and/or disavows other identifications (Butler, 1993, pp. 2–3).

While Butler's primary interest is gender, her approach has been used to explain how people enact other social categories, such as space (Gregson and Rose, 2000) and tourists and tourist sites (Larsen, 2005).

So are people, in Garfinkel's (1967) famous phrase, "cultural dopes"? Like other theorists concerned with social reproduction and construction of the subject, Butler has to deal with determinism and agency. In her extensive treatment of Butler's thought, Salih (2002) is clearly disappointed in Butler's attempts to explain how the subject, who cannot step entirely outside of discourse, can engage in resistance and subversion.

Pragmatically, however, feminist technology theorists like Haraway and Suchman argue that awareness of the constructed, contingent nature of categories and conventions that seem natural and inevitable allows the subject to exercise (limited, perhaps, and constrained) agency.

## 6. Implications, not exactly for design: performativity and SNSs

It is not my intention here to explain and defend Butler's complex and ever-developing philosophical work, which goes well beyond what I have described here. Furthermore, while much of Butler's work, and feminist theory more generally, is concerned with gender, that is not my primary interest here. My point is to ask how Butler's approach to subject formation and her notions of performativity, citationality, and interpellation can be useful in understanding social networking sites; and, more generally, as part of a feminist critique of some of the unexamined assumptions of HCI design and research.

I argue that SNSs are examples of what Suchman means when she says "we might understand 'technologies' as materializations of more and less contested sociotechnical configurations" (Suchman, n.d., p. 9). SNSs variously support – and valorize – certain activities and ways of categorizing oneself, and not others. They may seem to close down arguments and contestation by means of the kinds of self-descriptions and activities they support. A few examples: SNSs display the number, as well as names and icons, of one's contacts. Facebook treats changes in relationship status as newsworthy, and publishes the name and picture of romantic partners. MySpace's category "Swinger" would not appear on, say, a Christian social networking site. Flickr allows gender to be "other." Facebook categorizes people by the college they attended. MySpace asks one's body type and preferences for parenthood. Match.com asks one's exercise habits. These questions may be optional, but the very fact that the site poses them (and reveals the answers to one's contacts) implies that someone considers them salient, and the category choices offered as "normal."

To describe oneself in these terms is to engage in citation and accept interpellation. To refuse is to resist. At the very least, confronted with these choices, the member has to make an explicit choice to either participate or refuse.

The short, episodic, and transient nature of postings stringently limits conversations on the site, which are generally widely visible. Of course people engage in conversations in a variety of media, but these are probably the conversations that are the most widely visible to one's friends and acquaintances. The pithy, quotable epigram gets wider attention than a lengthy, thoughtful reflection.

The posting and reposting of content demonstrates one's media habits, interests, opinions, taste, and sense of humor. Friends may see that a member posts serious articles about the economy from *The Economist* and the latest celebrity gossip from *Entertainment Tonight*. If a person discovers, via a SNS, that his or her one's friends are following celebrity gossip, it doesn't need to be a guilty secret.

From Butler, we can conclude that the design, norms, and practices around SNSs do not simply shape how people present themselves, but that they discursively *produce* the subject by means of the identifications that are enabled versus those foreclosed. Social networking sites, given their popularity and availability across space, time, and social and other boundaries, may be particularly powerful sites of performativity – or of awareness and resistance. By describing and categorizing oneself, explicitly (via profile choices, group membership, and the like) or implicitly (by content and contacts); in posting content; even in the choice of SNS(s), a member engages in citation and accepts interpellation. SNS membership and use are part of how people engage in subject formation. Members may also engage in resistance and subversion but, Butler argues, can never step completely outside of social conventions.

Of course I am not saying that social networking sites themselves have such power. Rather, I argue here for HCI's responsibility to "uncongeal" the sociotechnical configurations that, as Suchman notes, tend to get materialized in design, to remember that such categories and activities are not natural, but constructed and contestable. My focus here is to examine identity categories, in particular, as they are used in social media, and make visible both their contingency and their power in reiteration of social formations, including but certainly not limited to gender.

If technologies are, as Suchman says, materializations of sometimes-contested sociotechnical configurations, we need to ask how this takes place, what configurations are being materialized, and which alternatives are not available, or at least not easy, with current technological configurations. We need to ask, in Suchman's terms, what "capacities for action are configured at the human-machine interface" and, by implication, what other capacities for action might be configured and how. Bringing Butler's notions into this mix adds, I argue, another level of reflexivity. Both the design of technology and the ways that users engage with it, then, can be seen as the reiteration of social formations in the construction of sociotechnical configurations. This is not to say that no change is possible – in Butler's approach, change is both unconscious and conscious (often in the form of resistance). But this change is in the face of momentum, so to speak.

Dourish (2006) argues that the expectation that social science research papers present implications for design often reflects a misunderstanding of the analytical and the empirical contributions of social science research.

What matters is not simply what those implications are; what matters is why, and how they were arrived at, and what kinds of intellectual (and moral and political) commitments they embody, and what kinds of models they reflect. It is not that these do not have profound implications for design, because they do; indeed, often more profound than a laundry list of facts and features. Their impact, however, is frequently more diffuse. They provide us with new ways of imagining the relationship between people and technology. (Dourish, 2006, p. 547–8)

A feminist, critical, reflective HCI asks what assumptions about subjects, agency, the relations between subjects and technology are being instantiated in both HCI technologies and HCI research. Ideally it offers new ways of, as Dourish says, imagining the relationship between people and technology.

We may reconsider how with think of technology and the processes of design. Suchman argues that the interface is not a thing or a place but a category of activities, a "multiplicity of dynamically configured moments of encounter" between the "sociomaterial configurations" we speak of as persons and machines. Similarly, the process of design is an on-going dynamic of encounter among a variety of participants, technologies, and sociomaterial configurations.

From the perspective of reflective and feminist HCI, Dourish (2006) and Suchman (2001), among others, variously argue for implementing design processes that incorporate multiple viewpoints; understanding the on-going nature of design-in-use, as technologies are incorporated into everyday activity; remembering the role of context, and the contingent nature of technologies and their use; valuing heterogeneity in technologies; accepting responsibility for our roles in these processes; and, perhaps most of all, eschewing the traditional split between users and designers. I concur with all of these recommendations.

My point is not to make design recommendations *per se*; my recommendation is to question the prevailing metaphors, categories, and design choices and methods. More generally, my primary recommendation is for interaction designers, researchers, and others to continually notice and question the ways in which design is based on repetition of social forms, and to take responsibility for the way that these may shape participants' choices and even their development as subjects, their selves.

A recurring problem from a Butlerian perspective is agency in the face of our inability to step outside of our cultural and discursive contexts. Salih argues there even Butler has difficulty with this. The designers of social networking sites would probably argue that their choices are expressions of users' interests and wants. This presents critical HCI with a conundrum: do we bow to the wishes and practices of the user, however constrained by conventional understandings and behavior; or do we try to say that we know better? How can we argue that we are somehow less constrained by citationality than are the users?

Either way, "here be dragons," as the old maps used to say. However, refusing to acknowledge the presence of dragons does not make them disappear.

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