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ORIGINAL ARTICLE



From usernames to profiles: the development of pseudonymity in Internet communication

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ABSTRACT

This article traces the development of Internet communication by examining online names and pseudonyms. I argue that choosing a username, as the first interaction a person has with a platform, sets the tone for how communication and content flows through platforms. By focusing on pseudonymity as an enduring, if contested, affordance of online communication, I consider the sociocultural conventions of naming in early computer terminals and operating systems, email, bulletin boards, chatrooms, chat programs and social networking. In doing so, I demonstrate that pseudonymity remains a way to deliberately compartmentalise identities, and therefore audiences. I map two broad shifts in online communication: from people who belonged to institutions reaching each other in the 1970s and 1980s, to usernames and channels on bulletin boards and chatrooms in the 1990s, and networked profiles on social media in the 2000s. While recognising cultural and socioeconomic factors influence engagement in online communication, I argue that we are moving towards increasing use of multiple accounts and platforms.

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Introduction

The names people choose on communication platforms signal information about them, what they say, and to who they intend to say it. This article argues that as the first interaction a person has with a platform, choosing a username sets the tone for the communication and content that flows through that platform. I draw on platform studies and affordance theory to suggest that platforms encourage particular kinds of engagement through framing the identity information that people input in particular ways, while social contexts influence the kind of self-presentation desired. Through considering email, bulletin boards, chatrooms and social networking sites, I argue for the enduring importance of pseudonymity online. Within surveillance culture and the commodification of personal data, as well as growing understandings of the communication platforms and social dynamics that influence identity presentation, one potential outcome that emphasises individual agency and control is a shift towards multiple account and platform use to more consciously compartmentalise different identity facets.

Usernames began as a way of identifying an individual using a computer system, and have since taken on social conventions that vary based on context and platform: different facets of an identity are on display when someone makes an email account, changes their chatroom name, enters their first and last name on Facebook or accepts a system-generated email account for work. Norms, sensibilities and conventions of platforms for communication technologies are reflected in usernames. By focusing specifically on online names, I draw attention to an overlooked area of Internet history: the point at which people begin to interact with a communication platform. Rintel, Mulholland, and Pittam (2001) have examined conversation openings on Internet Relay Chat (IRC) because they argue that what happens first in an interaction is critical to establishing a relationship, and I take that focus back a step to the first time a person engages with a platform, when they enter their username into a box.

In this way, I focus on the intersection of platform affordances and user practices that shape online naming. Logging in to communication platforms with a username and password has been a constant throughout Internet history, since the UNIX system began requiring usernames to distinguish between people in the 1970s. This article pays attention to broader developments in online communication by tracing the history of this feature, especially the implications of it shifting. Since the 2000s, when Web 2.0 became a dominant paradigm of the Internet, profiles have become an increasingly common way of signing up to communication platforms: a collection of information about an individual, including images, locations, occupations and links to others. According to Alice Marwick (2013), the profile is the key unit of Web 2.0, as it reifies people into a neoliberalist version of the Internet in which they are producers and consumers of content. But the profile's ascension must be understood within a broader history of online communication that includes other shifts: from email as a one-to-one communication system between people who belonged to institutions, to mostly pseudonymous people discussing certain topics in channels, to people communicating from profiles in networks. While recognising cultural and socioeconomic factors influence engagement in online communication, mapping these shifts lets me argue that we are approaching a social media culture in which multiple platforms, and multiple accounts on the same platform, are becoming strategies for segmenting identities, and therefore audiences.

I begin by turning to literature on platform studies and affordance theory to recognise the body of work around how platforms and people influence each other. I then present various iterations of usernames and profiles to map their development from systems that relied on unique numerical codes, to text-based, username-centred communication channels, to the image-rich, multimedia-enabled, profile-based social media platforms that followed. I understand pseudonymity as a conscious engagement with platforms that seeks to compartmentalise aspects of the self in order to communicate with particular audiences in an environment of context collapse (Marwick & Boyd, 2011; Wesch, 2009) and persistent content.

Understanding the relationship between platforms and people: platform studies and affordances

An enduring theme in the study of communication technologies is the way culture and technology shape one another, or as MacKenzie and Wajcman (1999, p. 23) argue,

“technology and society are mutually constitutive”. When Judith Donath (2014) applies the idea of mutual shaping to online communication, she argues that these interfaces create environments that encourage certain kinds of actions, activities and experiences, but they do not control users in a straightforward way. One approach to studying how platforms and people interact is platform studies, which Bogost and Montfort (2007) and Montfort and Bogost (2009) articulate as a way to investigate relationships between the design of computing systems and the work, or content, produced on them. Interfaces are not just transparent windows into computers, Manovich (2001) argues, but are laden with messages, assumptions and inferences of their own.

As platform studies expanded from game design into social media, Tarleton Gillespie (2010) examined the term “platform”, revealing it to be a discursive construct that allows online content providers like YouTube to offer themselves to audiences as a raised, accessible, progressive infrastructure to facilitate activity. Gillespie revealed that the discourse of “platform” deliberately evokes a comforting sense of neutrality, while downplaying the way these social media companies remain profit-driven cultural intermediaries. Platforms work to enable certain kinds of engagement, a key insight for this work on how platforms give people options for their username or profile. One productive avenue of platform studies is a focus on *affordances*, or the dynamics and conditions enabled by the materiality of a platform. This concept was coined by psychologist Gibson (1979/2014), who argued affordances are not inherent properties of objects, such as their colour, texture, size and shape, but the potential actions they offer. Communication platforms provide certain options through their material features: boxes, buttons and menus. Affordances are possibilities for action, argue Evans, Pearce, Vitak, and Treem (2017). Pseudonymity is an affordance of a communication platform, as it is neither a feature nor an outcome of a technology, but part of the relationship between a platform and a person that enables or constrains potential outcomes. Evans et al. (2017) note that some platforms afford pseudonymity, while others encourage or require the use of real names, but people still negotiate these constraints.

Staying in control of social media performances is challenging when multiple audiences are present: on Facebook, people may be connected to friends, friends of friends, family, colleagues, lovers and acquaintances. Choosing information relevant to these multiple audiences, or collapsed contexts (Marwick & Boyd, 2011; Wesch, 2009) can result in incoherent performances or compromising a sense of self (Papacharissi, 2014). Audiences are immensely influential to how people portray themselves within online communication and what they post. Eden Litt (2012) argues that, in the absence of knowing exactly who sees each post or comment, people attend to an imagined audience that becomes their guide for how to present themselves and what to say or share. Audiences make communication meaningful, and people manage multiple audiences by drawing on the affordances of particular platforms to best communicate. For example, someone with a full name on LinkedIn, a first and middle name on Facebook, and a pseudonym on Reddit might only have their professional life surfaced when someone searches for them online. Understanding the affordances and constraints of online communication means people are better able to strategically self-present through the platforms they choose.

I now move to examining various iterations of online communication, each involving specific naming conventions and pseudonymity practices that reflect the context the medium provides, as well as a glimpse into the sociocultural identification strategies of

the time. In doing so, I do not aim to give a comprehensive overview of every kind of online communication – for example, there also exists a rich body of work on identities and naming in online games.¹ Instead, my focus is on whether specific platforms throughout Internet history afford pseudonymity, how the design of these platforms encourages particular forms of self-expression in the form of usernames or profiles, and how people negotiate these platforms to present themselves in ways that are meaningful and reach their intended audiences. I begin with one early form of username: the user number that distinguished between different people using operating system UNIX on the same computer.

Precursors to communication platforms: ARPANET, UNIX and email

The earliest usernames on digitally networked communication systems were user numbers. Unique identification codes distinguished between different people using the same computer. This was necessary because computers were so rare: only businesses, governments and universities-owned computers, and these had to be shared. User numbers let people access and work with the UNIX operating system, which provided the basic tools needed to share information between computers, a key component in the development of the Internet (Hauben & Hauben, 1997). These user numbers meant people did not have to individually own their own computer terminal, a screen that allowed input from a keyboard, as these were also prohibitively expensive. System administrators assigned the first unique identification numbers on UNIX, which could not then be changed (Levine & Levine Young, 2011).

After someone had logged into a computer system, the next major application they would need a unique username for was email, which in 1973 comprised three-quarters of all Internet traffic (Whittaker, 2002). Although ARPANET was designed for resource sharing, its success was largely due to the demand for electronic mail (Milne, 2010). Creating an email address meant choosing a name that would represent them to others. Unlike giving out a home telephone number or street address from which a household could be contacted, an email address reached an individual: on the early Internet, it would reach an individual at a particular institution. An email address identifies a mailbox and a domain name, a system that originated in 1984 to distinguish between seven “top-level” domains: university (edu), government (gov), company (com), military (mil), non-profit organisation (org), network service provider (net) or international treaty entity (int) (Hafner & Lyon, 1996), although top-level domain name options have since expanded to include domain names like .aero, .biz, .info, .museum and .travel, and there are around 250 two-letter country codes which further identify a country or territory, like .jp for Japan and .eu for the European Union (ICANN, 2009). These are separated by the @ symbol, chosen by engineer Ray Tomlinson, who wanted a character that would not be found in any person’s name, to avoid confusion. The character also had the advantage of meaning “at” the designated domain (Hafner & Lyon, 1996).

Early email addresses in the 1970s and 1980s were from institutional accounts, and they were usually generated by the institution and contained full names. In the mid-1990s, a gradual shift in online communication occurred, as service providers like CompuServe or America Online (AOL) made it possible to create personal email addresses for a fee. These were shortly followed by free email services Hotmail and Yahoo, which were

not affiliated with an institution or paid provider. These options meant more people could access email services and bulletin boards, as will be discussed in the next section. Because many people had more than one email address, “freemail” services were seen as less formal than the institutional or paid kinds, and it was common to use a nickname as a result (Utz, 2004). This resulted in a hierarchy of trust: having an institutional email address meant being able to post on bulletin boards like Usenet with a degree of authority, as Judith Donath (1999) has documented. A post about oceanography on a bulletin board had more authority if it came from someone with an email address indicating they belong to *whoi.edu* (Woods Hole Oceanographic Institute), and there was initial resistance to people posting from what she calls “consumer-oriented services”, as exclusivity and accountability was threatened as more people came online.

The usernames people chose as their email address within free services did not come with the context of an institution, and were often laden with meaning, as people played with numbers, nicknames, interests, in-jokes and cultural references – partly because these systems did not allow more than one person to have the same email address, but also as a form of self-expression. Further information about a person was sometimes available within the email signature, a few lines of automated text appended to a message. This was initially done because some remailers stripped header information, including return addresses, from emails, so the signature was meant to function as an online business card (Hambridge, 1995), but again, people would often insert quotes, song lyrics, emoticon and other forms of identity information.

Creative email addresses as a way of performing the self may also have been a way to distinguish an email address as one that existed outside of work. In the 1990s and early 2000s, home and work computers often resided in different, fixed locations, and email domain names could signal the difference between a work or leisure context. In the 2010s, people are likely to have portable computers and smartphones that blur these boundaries (Gregg, 2011), but work and leisure email addresses persist. Most schools, workplaces and other institutions rely on automated systems to generate usernames and email addresses, leading to account names like *evandernagel*, *van005*, *emilyv1*, *emily.vandernagel* and *evan1988*, all of which draw on data from human resource departments in order to provide students, employees or clients with generic-looking identifications.

In the 2010s, email addresses are still a central point of communication, and are still the way people sign up to most Internet services, including social media sites. The idea that *ceci tuera cela* (this will kill that) is a common theme of discussion around technology: that the computer will kill the book, or that social media will kill email (Nunberg, 1996). But instead, this is an example of how these phases of usernames and pseudonyms do not occur in a linear fashion, with one replacing another. Instead, they make up a rich communicative environment. Bulletin boards, online forums that allow people to sign in with a username and post messages to topic threads, are enduring sources of news and chat. While email allowed for conversations between people who were mostly already known to each other, bulletin boards became a popular resource for those seeking discussions around particular topics. According to Esther Milne (2010), what unites them is the notion of audience: unlike private emails, mailing lists and bulletin boards involve messages exchanged in public.

Bulletin boards: the EIES, Usenet, the WELL and 4chan

Writing about the Electronic Information Exchange System, a computer conferencing bulletin board system used in the 1970s, [Hiltz and Turoff \(1978/1993\)](#) identified a number of reasons why people used pseudonyms: to play a role in particular conferences, have the freedom to say things they would not want attributed to them or their organisation, signal that the discussion was not to be taken too seriously, and let newcomers experiment with sending messages on the board without fear of revealing their lack of skill in the medium.

Another reason for pseudonym use on early bulletin boards stemmed from the dominance of the American Standard Code for Information Interchange (ASCII), an encoding standard that only contained English characters. People with names in languages other than English suffered from “ASCII imperialism” ([Pargman & Palme, 2009](#)), the built-in bias of this character set that made it difficult to sign up for, and communicate with, bulletin boards in languages other than English. These language obstacles made names difficult to express. Because the distinctive vowel sounds in Scandinavian names (\emptyset , æ , å) were not available in ASCII coding, Scandinavian researchers had to rewrite their own names in order for their work to become globally visible ([Ess, 2017](#)). Before the Unicode standard that allowed for all kinds of languages appeared in 1995 ([Jo, 2017](#)), pseudonyms were a necessity for people with characters outside the ASCII framework in their name. But language constraints also allowed for play. At National Taiwan University in 2000, a Nickname program was introduced to the university’s bulletin board system that allowed for the use of Chinese characters, unlike the Latin alphabet that had to constitute login names ([Liang, Yi-Ren, & Huang, 2017](#)). Students used the changeable Nickname field to provide additional information about themselves, much like a Facebook status update. Nickname was shut down when some students began using it to look for sex partners by posting inviting messages: “users’ creativity always goes beyond the intention of the design” ([Liang et al., 2017](#), p. 186).

An enthusiasm for pseudonymity was a theme in Howard Rheingold’s work on the Whole Earth ‘Lectronic Link, an early bulletin board. Rheingold claimed the WELL was a platform upon which people connected with each other and developed their sense of self through experimenting with their identity. He argued that communication on the WELL “involves a syntax of identity play: new identities, false identities, multiple identities, exploratory identities, are available” ([Rheingold, 1993/2000](#), p. 152). Rheingold’s work was emblematic of an optimistic era in 1990s Internet scholarship in which academics claimed that text-based communication platforms like bulletin boards had the potential to let people talk about their interests without being constrained by material attributes like gender, age, ethnicity and class. For example, [Hauben and Hauben \(1997\)](#) called bulletin board Usenet a democratic and technological breakthrough, as it introduced a variety of people to Internet communication; [Paul Baker \(2006\)](#) documented a trend in which people took advantage of the anonymity and lack of physicality on Usenet to create fake personae for themselves; and [Haya Bechar-Israeli \(1995\)](#) claimed people could “create a new self in cyberspace”.

Psychologist Sherry Turkle spoke to people who regarded online communication as a complete escape, or considered life to be “one more IRC channel” ([Turkle, 1995](#), p. 179). She considered online identities to be especially fluid, commenting that people reconstruct their identities when they step through the screen into virtual communities. But



Name	Anonymous
Options	
Subject	
Comment	
Verification	<input type="checkbox"/> I'm not a robot  reCAPTCHA Privacy - Terms
File	<input type="button" value="Choose file"/> No file chosen

• Please read the Rules and FAQ before posting.

Figure 1. 4chan start new thread boxes. Screenshot by author.

these ideas were challenged by scholars like Joseph Kayany (1998), who argued that instead of text-based, pseudonymous online interactions levelling out differences, participants brought their social norms and cultural affinities with them when they logged on. Mehta and Plaza (1997) speculated that the cultural dominance of men on Usenet created an environment that was less friendly for women, non-white and older people. It also meant that a lack of cues about physical attributes in a username would lead to the assumption that someone was part of this group. It seemed predictions that the text-based bulletin board would facilitate an uninhibited communicative space were quickly dashed by observations that socioeconomic factors can be communicated through pseudonyms and language.

Bulletin boards are set up to emphasise interests over identities. On 4chan, in which people post under the generic pseudonym “Anonymous”, this has resulted in a common language of in-jokes, cultural references and memes being developed, rather than certain people on the boards becoming particularly well known.

No registration is required to enter 4chan or read posts. Clicking “Start a New Thread” makes a dialogue box appear, with a text field for Name that comes with a pre-filled answer in grey: Anonymous, as seen in Figure 1. This automatically allocated pseudonym has been claimed by the dispersed activist group Anonymous that Gabriella Coleman has studied extensively. She argues anonymity is essential to 4chan: “one might call anonymity both its ground rule and its dominant cultural aspect” (Coleman, 2014, p. 45). Presenting people with a box that asks for their name while simultaneously providing “Anonymous” as the answer encourages and underscores the ephemeral, playful, raw conversation space that 4chan founder Chris Poole venerates, claiming that this mode of engagement “provides an accurate representation of who we are: flawed, imperfect. I see beauty in that, and something worthy of continued exploration” (Poole, 2014).

Studying 4chan means stepping back from usernames and profiles to discover how people communicate without these identity signals, something that elucidates their importance. There is no reputation or personal history possible when people are anonymous, argues Judith Donath (1999). But people without names still create and communicate identity signals. One creative way of telling stories on 4chan is the

greentext: a genre of folklore in which details about the narrator are established as part of the story. Greentexts get their name from their formatting: on 4chan, text beginning with an angled bracket > appears in the colour green. These stories often begin by listing personal information about someone to set the scene: “be 3 years old”, “be in the third grade at a school assembly, feeling ill and feverish”; “be 15 in a bible camp”; “be a single father.” This convention reveals there are still assumptions that the dominant group is white, middle-class, young and male, as well as functioning as a way to quickly establish context in the absence of identifying information. It is a way to include aspects of an identity without revealing a name. Greentexts originated in 2010, a time when many other ways of communicating identity and context were available, including photos, links and memes, perhaps in part as a step away from the real-name web. The stories often have unexpected endings, or a confessional tone, as they recount embarrassing moments from the narrator’s life:

Anonymous 03/24/13 (Sun) 19:45:21 No.6215899
 >be eating sandwich at the beach
 >skipping stones
 >watching the sunset and thinking about life
 >throw sandwich into ocean
 >bite rock
 People saw
 (Nikkanen, 2015).

The narrative structure of the greentext provides details that orient a person to the story. This structure is often drawn on to evoke humour, as a popular genre of greentext stories involves introducing a character and setting up a scene, only to have the greentext end with a punchline that is a cultural reference like a song lyric or popular saying. Even on 4chan, with an automated username that does not give any personal details, people still reveal personal information through this narrative form. The contexts shift again when joining a platform that focuses on personal connections and phatic chat rather than topics of interest. While bulletin boards host one-to-many, asynchronous posts, chatrooms are typically ephemeral, synchronous and more intimate.

Chatrooms: IRC

Logging on to IRC involved entering a full name and email address, but “these do not have to be your real full name and email address”, advises a Getting Started page (mIRC, 2016). Instead, people were asked to select a nickname that matched their “virtual self” (van Doorn, Wyatt, & van Zoonen, 2008). Since 1988, IRC has allowed people to exchange text-based messages in dedicated channels modelled after citizens’ band radio, first within Finland, then across the global Internet (Campbell, 2004).

As seen in [Figure 2](#), IRC’s signup page asks people to input a nickname, an optional alternative nickname, a name and an email address, although both these last two fields are pre-filled with grey text reading “(optional).” When logging back into mIRC, the nickname field automatically displays the last username that was entered, although a different username can be entered before progressing to the chat channels. In this way, IRC affords pseudonymity.

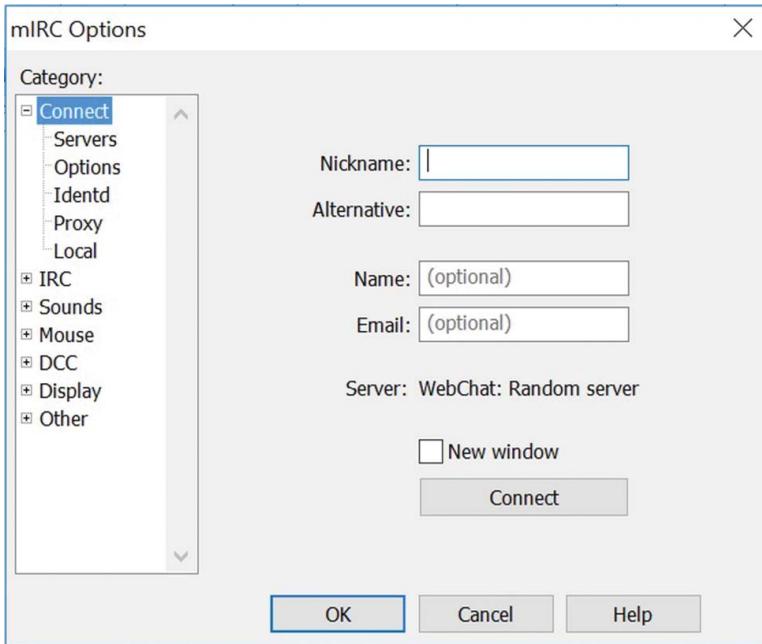


Figure 2. IRC signup page. Screenshot by author.

Writing in 1995, Bechar-Israeli describes IRC as an electronic environment in which people interact with others from around the world “at any hour of the day or night” (Bechar-Israeli, 1995). This phrasing is especially important, as it foregrounds the strangeness of the online by emphasising the novelty of having a communication channel that is always on. Don Slater (1998) notes that IRC is similar to older experiences of disembodied communication, like pen pal relationships or phone chats. In another perspective from the 1990s, before images were commonly available online, when digital cameras were rare, and dial-up connections made exchanging photographs slow and cumbersome, Slater says: “IRC participants are intensely and incessantly aware of the fact that all on-line identities are textual performances: this is indeed the common sense of on-line life” (Slater, 1998, p. 98). For Slater, the textual nature of IRC meant that any identity could be performed, but as a result, no identity could be taken seriously, as there was always the potential for someone to misrepresent facts about themselves. But for Danet, Ruedenberg-Wright, and Rosenbaum-Tamari (2006), the absence of visual cues to identity freed chat participants to either be someone other than themselves, or to be more of themselves than they normally express. They refer to IRC’s ephemerality, speed, interactivity and freedom from the material world to explain why chatters are often playful. Bechar-Israeli agrees, arguing that it is the pseudonymity of IRC that invites creative playfulness and experimentation with identity. His study saw just 18 people out of 260 using their real name when chatting on IRC, with the other 93 per cent of the group using pseudonyms. Choosing a nickname was often the result of a careful and creative process, since these nicknames are the first impression chatters gave to others online, and it comes to represent the person chatting:

Just as we dress, put on make-up, or move in certain ways to display an attractive image of our bodily selves, participants choose screen names to create an “appearance” that will attract other participants to chat with them (Del-Teso-Craviotto, 2008, p. 257).

Liz Byrne (1994) gives some examples of these nicknames: first names like Andrew or Lisa, characters or cultural references like MMouse, Pooky or IndyJones, or what she calls “inventive and unusual” ones like PlayDough, StYvain, Prism or Uneak. Usernames on IRC give one picture of what a person is like, Byrne argues. Although chatters were free to choose any nickname they liked on IRC, and change it as often as they liked (providing it was not already being used by someone else), they were hardly free from social norms around interaction. People were sensitive to nicknames as devices to indicate presence and form impressions of people (Rintel, Pittam, & Mulholland, 2003), and in larger IRC channels, or when someone was greeting a chatter they did not know, asking “a/s/l?” was common, meaning they were asking for the other person’s age, sex and location. As with greentext stories, a/s/l satisfies a person’s desire to gain personal details about someone when beginning an interaction. This convention made van Doorn et al. sceptical that people could transcend materiality through text-based chat, as a/s/l made physical location a point of reference for the conversation that unfolded. While textual communication contained the aspiration to leave the body behind, it is still haunted by the “specter of embodiment” (2008, p. 372). Slater argued that people on IRC go to great lengths to make things material, and points out that although chatters do not always know who they are talking to, they do know they are talking to *someone*. There is “an absolute certainty of a material body out there”, he says (Slater, 2002, p. 232).

A/s/l is a process by which people present themselves as gendered beings through linguistic performances that are informed by social and cultural discourses, argues Marisol Del-Teso-Craviotto (2008). Some people include gender information in their IRC nicknames – a study by Danet (1998) revealed about one-fifth of the 260 nicknames she surveyed contained a reference to gender. In the following encounter, however, this signal is enough to raise a potential sex partner’s suspicion that they are too upfront about their identity to be genuine:

```
<AnGeLcAkE-14fFA> wanna cyber?
<shiroi> sure
<AnGeLcAkE-14fFA> ok, i move close to u
<AnGeLcAkE-14fFA> i start rubbin your chest and unbutton your pants
<AnGeLcAkE-14fFA> ..
<AnGeLcAkE-14fFA> hello?
<shiroi> hmm? oh..er. Yea cool.
<AnGeLcAkE-14fFA> u suck at this
<shiroi> I suck? You're the one signing on to irc with your asl in your nick looking for a love-life. You suck at life.
<shiroi> You're probably not even a girl.
AnGeLcAkE-14fFA has quit IRC. (Quit)
(QDB, n.d.a).
```

In this encounter, we see the veracity of the performance being challenged, and AnGeLcAkE-14fFA terminating the interaction in order to save face. Quitting IRC in this instance can be interpreted as an admission of guilt: they have failed to deceive their chat partner about their identity. The limitations of IRC led to humorous situations and identity play.

Quote Database (QDB) is a resource for IRC quotes apparently submitted by chat participants – while it is certainly possible that the submitted quotes are made up for the purpose of Internet humour, they still draw on popular forms of expression to illustrate the boundaries and limitations of IRC as a communication medium. For example, one quote documents a case of mistaken identity, with one chatter assuming their desired chat partner is present:

```
<Jeedo> hey baby, whats up?  
<Indidge> umm... .nothing?  
<Jeedo> So... .want me to like come over today so we can fuck?  
<Indidge> Wait... .did you want to speak to my daughter?  
<Jeedo> Yes Mrs.Miller..:-/  
(QDB, n.d.b).
```

Changing usernames sometimes meant adding extra information about a person. Here, a misunderstanding occurs when Porter decides to make it clear that he is in a relationship by appending “with girlfriend, who is hot” to his username. However, the IRC system not allowing spaces in usernames makes this difficult for a chat partner to decipher:

```
* Porter is now known as PorterWITHGIRLFRIENDWHOISHOT  
<Strayed> he shot his girlfriend?  
(QDB, n.d.c).
```

These quotes, which involve challenging someone’s identity, initiating a conversation with the wrong person, and adding confusing detail to a username, all led to unexpected situations. People on IRC navigate the affordances and social conventions of the platform while expressing aspects of themselves through the username. Soon, platforms emerged that gave more personal information along with the username, including profile photos and status updates, first seen on chat programs like AOL Instant Messenger or Microsoft Network Messenger. These features became the building blocks of social media profiles, as new platforms took advantage of the cultural shift and platform capabilities emblematic of Web 2.0.

Social networking: Facebook, Friendster and Renren

Facebook commands much popular and scholarly attention: in an article titled “Facebook is Eating the Internet”, journalist Adrienne LaFrance calls it “the dominant force in American media” (LaFrance, 2015), and Ralf Caers et al. describe Facebook as “one of the most important social trends of the past decade” (Caers et al., 2013, p. 983). But while Facebook looms large in the public imagination, customisable, personalised web pages have been available since at least 1996, when Geocities released browser-based tools and templates for networked personal websites that could be listed in directories (Stryker, 2012). In 1997, Six Degrees introduced profiles and friend lists, and in 2002, Friendster became a social network that established certain social networking site conventions, such as having people create profiles.

Charting the rise of social networking services in 2005, Alice Marwick identifies connections between profiles as key to social networking, while advancing a critical view of profiles, arguing they limit people to an identity presentation that is rigidly pre-structured and singular. For Marwick, Friendster and MySpace profiles fit people into categories that

define them as consumers, not citizens. For Danah Boyd (2007), Friendster flattens social networks, collapsing different relationships and contexts into a type of connection called “Friend”. Both criticisms acknowledge that social media platforms exist as sites of context collapse and digital traces; understandings that lead to strategic use of these platforms, including pseudonymity. Social networking sites asked people for their real first and last name instead of a username, with their unique login determined by their email address. This took some adjustment, as it marked a departure from communication services like bulletin boards and chatrooms: having multiple John Smiths on the same platform was initially confusing. While Marwick (2005) identified a large proportion of “Fakesters”, or Friendster profiles using sarcasm, irony or fake information as resistance strategies, there were enough people using their real names on Friendster for blogger Alan to get frustrated when searching for his friends, writing in a post titled, “What the hell is up with Friendster?”:

if your friends are stupid A-Holes, they didn't upload a picture of themselves. so, when you search for them, all you know is their name. So, you can search for John Smith, get 200 hits, but you don't know which one is your John Smith (Alan 2004).

As non-unique usernames were the norm on Friendster, other details became more important: someone's photograph, their location, their place in a larger network of friends. Not knowing which John Smith was “yours” is presented here as a difficulty to overcome, but non-unique usernames were about to become a feature of a host of other social media platforms, including LinkedIn, which was created in 2003, Facebook in 2004 and Twitter in 2006. This did not mean that usernames disappeared in favour of profiles. Although Facebook let people be found only by their first and last name from 2004 to

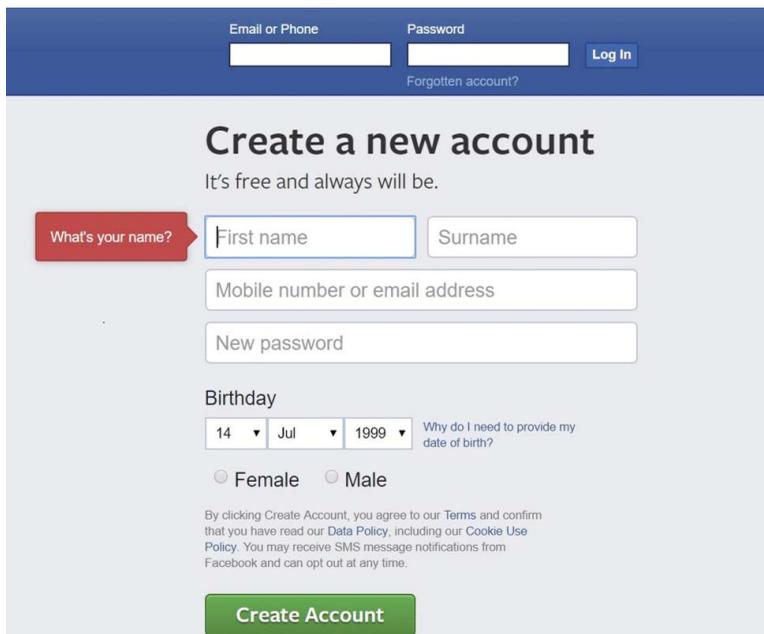


Figure 3. Facebook signup page. Screenshot by author.

2009, Facebook usernames were introduced in 2010, which assigned a unique username as part of the web address of a Facebook page, in order to make it easier to find friends with common names (Chan, 2009).

Social networking platforms are designed as profiles, although usernames still form the central point for other identity information to be connected. Facebook began as a closed system that only offered membership to people with Harvard University email addresses (Boyd & Ellison, 2007), an online version of Harvard's face books: directories of students with their names and photographs, designed to facilitate social interactions between students. Facebook gradually became less exclusive over 2005, expanding to other universities, high schools, corporate networks, and finally becoming open to anyone with an email address (Boyd & Ellison, 2007). While these origins explain Facebook's decision to instigate a real-name policy, it is less appropriate for an open system with over a billion people registered. Instead of only having other university students in the audience on Facebook, from late 2005, a Facebook audience may consist of friends from different parts of someone's life, friends of friends, acquaintances, family and colleagues. This context collapse makes it more difficult to effectively engage in self-presentation.

On Facebook, there are two separate boxes for a name: first name, and surname, as seen in [Figure 3](#). This already marks a shift in thinking about names from platforms like 4chan and IRC, and is reinforced by Facebook's real name policy: "The name on your profile should be the name that your friends call you in everyday life. This name should also appear on an ID" (Facebook, 2017). As a platform on which people communicate in networked profiles, rather pseudonymously in channels, there are expectations around naming that are conveyed through the interface. Although there is a dearth of evidence around people who flout the real name policy, one notable controversy arose in 2014, when a number of drag performers and queer people had their Facebook profile suspended as their names did not conform (Lingel & Gillespie, 2014; Lingel & Golub, 2015; Niedt, 2016; Vara, 2014).

Zhao, Grasmuck, and Martin (2008) have studied identity construction on Facebook, which they describe as a "nonymous", or non-anonymous, platform, because people tend to use their real names on it and communicate with people with whom they have "anchored" or offline relationships. This nonymity means people are more likely to present idealised selves by emphasising socially desirable qualities like being popular, well-rounded and thoughtful, while downplaying aspects of the self they regard as less socially desirable, such as pessimism. Identity is thus socially constructed, they argue, and performed differently in different contexts. On a nonymous platform like Facebook, people present their identity in line with normative expectations, which leads Zhao et al. (2008) to conclude that in an anonymous environment, people are more likely to ignore these restrictions. Of course, social expectations and naming practices play out differently when audiences and presentations of the self come from varied cultural contexts.

As Hinton and Hjorth (2013) argue, social media is a global phenomenon, and considering a variety of platforms can be a helpful way of rendering familiar social media practices unfamiliar. Global social networking platforms are often directly compared to Facebook or Twitter: Weiyu Zhang describes Chinese social networking site Renren as "a Facebook-type SNS" (Zhang, 2016, p. 89), although he also argues that our understanding of the cultural diversity and complexity within social media is hindered by reducing the phenomenon to a small number of successful platforms. Renren has followed a similar trajectory to

Facebook. It was launched in China in 2005 under the name Xiaonei, meaning “on campus”, because membership was restricted to college students, and rebranded to Renren, meaning “everyone” (Zhang, 2016). Like Facebook, Renren requires people to use their real names, but unlike Facebook, certain words and phrases are censored by the Chinese government, which has prompted people to develop Renren-specific practices like using homophones and other codes to avoid being censored (Fossati, 2014). Even within Facebook, culturally specific practices around naming emerge. Ming-Shian Wu (2016) has observed four distinct types of Facebook naming practices in Taiwan: someone might have their official name in Chinese, their Romanised official name (he gives the example of Shu-Hao Lin), an English first name with a Romanised surname (Jeremy Lin), or a nickname (Lintendo). These practices exist within the bounded context of Facebook, in which a real-name policy formally forbids these kinds of names being used. Cultural contexts influence how “real” a name is, argues Wu (2016).

This section underlines that any understanding of social media is necessarily context-specific. As Hinton and Hjorth (2013) suggest, it is important to develop an understanding of social media that goes beyond the stereotyped notion of being an Anglophonic domain populated by young people engaging in banal conversations. There are myriad factors that influence self-presentation on social media, including nationality, culture, age, gender, occupation, socioeconomic status, attitude towards technology, level of digital literacy, access to devices and interest in online communication. What is common to all these platforms and contexts is the desire for connection, either to familiar people or topics, and the ongoing negotiations between people and platforms that ensure these connections are desirable and meaningful.

The importance of pseudonymity and the shift towards multiple account use

Due to the shift to profiles, linked with Web 2.0 technologies and discourses along with the rise of data mining and the surveillance economy, real names are now emphasised over pseudonyms within platforms like Facebook. Even Twitter, which has no real-name policy and upon which pseudonymous accounts thrive, has since mid-2016 allowed people to apply for a verified account (Bhatnagar, 2016) by providing their name, phone number, birthdate and government-issued photo identification. When the Pew Research Centre asked technology experts and scholars about the future of online identity, some expected to see a rise in “registered pseudonyms” like on Twitter, predicting that once a company begins offering internal registrations, platforms will begin to ban the “unvouched anonymous” (Rainie, Anderson, & Albright, 2017). Reputation is a new currency, argues Alison Hearn (2010): she considers our self-representations on social media, which include quantified measures of attention and affect within profiles such as followers, favourites, and likes, to be part of the digital reputation economy. Hearn sees platforms directing identity practices in ways that are profitable for them. This is a concern for Robert Gehl (2014), who urges a deliberate move away from what he considers to be the reduction of individuals to data profiles within surveillance systems. To do this, we need to actively push for a culture of fluid identities, pseudonymity, identity shifts and play, he argues. Gehl’s primary way of resisting unitary identities and data mining is by eschewing corporate platforms in favour of building and using new ones: he calls this technique critically reverse-engineering platforms (Gehl, 2015).

But pseudonyms still have important functions within this paradigm of online communication, as this article has sought to demonstrate. Aside from moving to non-commercial platforms, another intervention into surveillance culture involves a shift towards normalising multiple account and platform use. Through considering the identity affordances and practices of different iterations of communication platforms, I have reinforced that there are ways to exist online other than a Facebook profile with a real name and photograph – indeed, at 10 years old, Facebook is a relatively new addition to the Internet. Our identities are not stable or fixed, and by presenting email, bulletin boards, chatrooms and social networking sites, I have mapped out the shifts in online self-representation that unfolded along with the integration of Web 2.0 technologies, discourses and expectations. In doing so, I have also emphasised that platforms have not neatly preceded one another in a straightforward way, with one replacing the next, but continue to offer potential ways of constructing and presenting the self in order to facilitate communication between people who wish to be connected based on existing relationships, kinships, geographies, institutions or interests.

The mix of platforms within Web 2.0 allows for an opportunity to compartmentalise facets of identities by taking advantage of a number of platforms. Rather than abandoning bulletin boards in favour of Facebook profiles, a growing awareness of surveillance culture and data economies may lead to a third shift in online communication: from usernames to profiles to multiple accounts and platforms. Compartmentalising online identities for specific audiences is nothing new, and it does not exempt us from capitalist flows of data and profit. Theresa Senft (2013) argues that the careful management of a number of personas across social media actually borrows from cultural notions of the branded self and celebrity, as the labour of choosing usernames, profile elements, and content to share closely resembles what in a professional arena would be an audience segmentation strategy. Nevertheless, a way to consciously engage in these platforms in a way that claims some agency and control, as well as evidences an understanding of networked communication, might involve having family updates on Facebook, a Harry Potter fan account on Reddit, a stream of cooking photos on Instagram, a main account for work on Twitter as well as a locked alternative account to share mental health updates with a small number of close followers, and a handle on a chatroom dedicated to sexting.

Conclusion

Platforms articulate expectations of names and identities, and therefore content and conversations, through their affordances. In asking people to identify themselves in particular ways, and by either affording or restricting pseudonymity, platforms express ideal forms of engagement. Of course, people actively negotiate the material features, or boxes, buttons, and menus, of platforms: someone could enter their first and last name as a username on Reddit, or use a pseudonym on Facebook. But this pushback exists within platforms that are designed for particular kinds of audiences and uses.

No cultural shift is straightforward, and there is much overlap and blur between the two shifts in online communication I have identified in this paper. Profiles still involve usernames, even if they are non-unique, and social networking sites have not replaced email, chatrooms and bulletin boards, as can be seen from signup pages that still ask for an

email address. But in identifying these shifts, I mean to restate the importance of pseudonymity practices, even within profile-based platforms, and argue that as more platforms make their way into the everyday lives of many Internet users, strategies to self-present and communicate through them become more worthy of scrutiny and critique.

This article has studied usernames and profiles to argue that as more communication platforms have become more embedded into the everyday life of Internet users, richer in multimedia content, and increasingly commercialised, pseudonymity practices remain a way to negotiate platform expectations and segment audiences. I have charted two broad shifts in online communication, beginning with the institutional access that few people had to the Internet in the 1970s and 1980s, seeing this gradually overtaken by a culture of mostly pseudonymous people discussing specific topics in the 1990s, to people communicating and sharing in networks from profiles within the Web 2.0 paradigm of the 2000s. Looking to the end of the 2010s, the next shift I anticipate is a greater recognition and uptake of multiple platform use, as well as people who have multiple accounts on the same platform. This is an area for future research. Although a Pew Internet study noted that multi-platform use is on the rise, with 52 per cent of online adults using two or more social media sites, with Facebook as their “home base” (Duggan, Ellison, Lampe, Lenhart, & Madden, 2015), much more work could be done to explore the dynamics of this phenomenon.

Throughout the history of Internet communication, people have navigated naming practices to establish interactions and sociality. Pseudonyms are an essential part of these practices, in which people seek context when grappling with the multiple audiences often present on communication platforms. Focusing on the development of online names, from user numbers to institutionally generated accounts to usernames to profiles has demonstrated the many uses of pseudonyms, but it has also shed light on the development of communication platforms. Usernames have the capacity to signal identities and institutional affiliations with email addresses; demonstrate expertise with numbers of posts, comments, and votes on bulletin boards; display points of interest when engaging strangers in conversation on chatrooms; and identify someone as part of a network on a social media profile.

Note

1. For scholarship concerning text-based identities in multi-user domains, see Dibbell (1994), Kendall (2002), Rheingold (1993/2000) and Turkle (1995); for an account of avatars in virtual world Second Life, see Boellstorff (2008); for work on naming practices for multimedia avatars in the massively multiplayer online role-playing game World of Warcraft, see Hagström (2008).

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Notes on contributor

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